

# **OTRS 3.1 - Admin Manual**

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# Preface

This book is intended for use by OTRS administrators. It also serves as a good reference for OTRS newbies.

The following chapters describe the installation, configuration and administration of the OTRS software. The first third of the text describes key functionality of the software, while the remainder serves as a reference to the full set of configurable parameters.

This book continues to be a work in progress, given a moving target on new releases. We need your feedback in order to make this a high quality reference document, one that is usable, accurate and complete. Please write to us if you find content missing in this book, if things are not explained well enough or even if you see spelling mistakes, grammatical errors or typos. Any kind of feedback is highly appreciated and should be made via our bug tracking system on <http://bugs.otrs.org> [<http://bugs.otrs.org>]. Thanks in advance for your contributions!

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# Chapter 1. Trouble Ticket Systems - The Basics

This chapter offers a brief introduction to trouble ticket systems, along with explaining the core concept of a trouble ticket. A quick example demonstrates the advantages of using such a system.

## What is a trouble ticket system, and why do you need one?

The following example describes what a trouble ticket system is, and how you might benefit from using such a system at your company.

Let's imagine that Max is a manufacturer of video recorders. Max receives many mails from customers needing help with the devices. Some days, he is unable to respond promptly or even acknowledge the mails. Some customers get impatient and write a second mail with the same question. All mails containing support requests are stored in a single inbox file. The requests are not sorted, and Max answers the mails using a regular email program.

Since Max cannot reply fast enough to all the messages, he is assisted by the developers Joe and John in this. Joe and John use the same mail system, accessing the same inbox file. They don't know that Max often gets two identical requests from a desperate customer. Sometimes they both end up responding separately to the same request, with the customer receiving two different answers. Further, Max is unaware of the details of their responses. He is also unaware of the details of customer problems and their resolution, such as which problems occur with high frequency, or how much time and money he has to spend on customer support.

At a meeting, a colleague tells Max about trouble ticket systems and how they can solve Max's problems with customer support. After looking for information on the Internet, Max decides to install the Open Ticket Request System (OTRS) on a computer that is accessible from the web by both his customers and his employees. Now, the customer requests are no longer sent to Max's private inbox but to the mail account that is used for OTRS. The ticket system is connected to this mailbox and saves all requests in its database. For every new request, the system generates an auto-answer and sends it to the customer so that the customer knows that his request has arrived and will be answered soon. OTRS generates an explicit reference, the ticket number, for every single request. Customers are now happy because they receive an acknowledgement to their requests and it is not necessary to send a second message with the same question. Max, John and Joe can now login into OTRS with a simple web browser and answer the requests. Since the system locks a ticket that is answered, no message is edited twice.

Let's imagine that Mr. Smith makes a request to Max's company, and his message is processed by OTRS. John gives a brief reply to his question. But Mr. Smith has a follow-up question, which he posts via a reply to John's mail. Since John is busy, Max now answers Mr. Smith's message. The history function of OTRS allows Max to see the full sequence of communications on this request, and he responds with a more detailed reply. Mr. Smith does not know that multiple service representatives were involved in resolving his request, and he is happy with the details that arrived in Max's last reply.

Of course, this is only a short preview of the possibilities and features of trouble ticket systems. But if your company has to attend to a high volume of customer requests through mails and phone calls, and if different service representatives need to respond at different times, a ticket system

can be of great help. It can help streamline work flow processes, add efficiencies and improve your overall productivity. A ticket system helps you to flexibly structure your Support or Help Desk environment. Communications between customers and service staff become more transparent. The net result is an increase in service effectiveness. And no doubt, satisfied customers will translate into better financial results for your company.

## What is a trouble ticket?

A trouble ticket is similar to a medical report created for a hospital patient. When a patient first visits the hospital, a medical report is created to hold all necessary personal and medical information on him. Over multiple visits, as he is attended to by the same or additional doctors, the attending doctor updates the report by adding new information on the patient's health and the ongoing treatment. This allows any other doctors or the nursing staff to get a complete picture on the case at hand. When the patient recovers and leaves the hospital, all information from the medical report is archived and the report is closed.

Trouble ticket systems such as OTRS handle trouble tickets like normal email. The messages are saved in the system. When a customer sends a request, a new ticket is generated by the system which is comparable to a new medical report being created. The response to this new ticket is comparable to a doctor's entry in the medical report. A ticket is closed if an answer is sent back to the customer, or if the ticket is separately closed by the system. If a customer responds again on an already closed ticket, the ticket is reopened with the new information added. Every ticket is stored and archived with complete information. Since tickets are handled like normal emails, attachments and contextual annotations will be stored too with every email. Also, information on relevant dates, employees involved, working time needed for ticket resolution etc. are also saved. At any later stage, tickets can be sorted, and it is possible to search through and analyze all information using different filtering mechanisms.

---

# Chapter 2. OTRS Help Desk

This chapter describes the features of OTRS Help Desk (OTRS). You will find information about the hardware and software requirements for OTRS. Additionally, this chapter tells you how to get commercial support for OTRS, should you require it, and how to contact the community.

## Basics

OTRS Help Desk (OTRS) is a web application which is installed on a web server and can be used with a web browser.

OTRS is separated into several components. The basic component is the OTRS framework that contains all central functions for the application and the ticket system. Via the web interface of the OTRS framework, it is possible to install additional applications such as ITSM modules, integrations with Network Monitoring solutions, a knowledge base (FAQ), et cetera.

## Features

OTRS has many features. The following list gives an overview of the features included in the central framework.

### The features of OTRS

- Web interface:
  - Easy and initial handling with any modern web browser, even with mobile phones or other mobile computers.
  - A web interface to administer the system via the web is available.
  - A web interface to handle customer requests by employees/agents via the web is integrated.
  - A web interface for customers is available to write new tickets, check the state and answer old tickets and search through their own tickets.
  - The web interface can be customized with different themes; own themes can be integrated.
  - Support for many languages.
  - The appearance of output templates can be customized (dtl).
  - Mails from and into the system can contain multiple attachments.
- Mail interface:
  - Support for mail attachments (MIME support).
  - Automatic conversion of HTML into plain text messages (more security for dangerous content and enables faster searching).
  - Mail can be filtered with the X-OTRS headers of the system or via mail addresses, e.g. for spam messages.

- PGP support, creation and import of own keys, signing and encrypting outgoing mail, signed and encrypted messages can be displayed.
- Support for viewing and encrypting S/MIME messages, handling of S/MIME certificates.
- Auto answers for customers, configurable for every queue.
- Email notifications for agents about new tickets, follow-ups or unlocked tickets.
- Follow-ups by references or In-Reply-To header entries.
- Tickets:
  - Expanded queue view, fast overview of new requests in a queue.
  - Tickets can be locked.
  - Creation of own auto answer templates.
  - Creation of own auto responders, configurable for every queue.
  - Ticket history, overview of all events for a ticket (changes of ticket states, replies, notes, etc.).
  - Print view for tickets.
  - Adding own (internal or external) notes to a ticket (text and attachments).
  - Ticket zooming.
  - Access control lists for tickets can be defined.
  - Forwarding or bouncing tickets to other mail addresses.
  - Moving tickets between queues.
  - Changing/setting the priority of a ticket.
  - The working time for every ticket can be counted.
  - Up-coming tasks for a ticket can be defined (pending features).
  - Bulk actions on tickets are possible.
  - Automatic and timed actions on tickets are possible with the "GenericAgent".
  - Full text search on all tickets is possible.
- System:
  - OTRS runs on many operating systems (Linux, Solaris, AIX, FreeBSD, OpenBSD, Mac OS 10.x, Microsoft Windows).
  - ASP support (active service providing).
  - Linking several objects is possible, e.g. tickets and FAQ entries.
  - Integration of external back-ends for the customer data, e.g. via AD, eDirectory or OpenLDAP.

- Setting up an own ticket identifier, e.g. Call#, Ticket# or Request#.
- The integration of your own ticket counter is possible.
- Support of several database systems for the central OTRS back-end, e.g. MySQL, PostgreSQL, Oracle, MSSQL).
- Framework to create stats.
- utf-8 support for the front- and back-end.
- Authentication for customers via database, LDAP, HTTPAuth or Radius.
- Support of user accounts, user groups and roles.
- Support of different access levels for several systems components or queues.
- Integration of standard answer texts.
- Support of sub queues.
- Different salutations and signatures can be defined for every queue.
- Email notifications for admins.
- Information on updates via mail or the web interface.
- Escalation for tickets.
- Support for different time zones.
- Simple integration of own add-ons or applications with the OTRS API.
- Simple creation of own front-ends, e.g. for X11, console.

## New features of OTRS 3.1

### 1 GENERIC INTERFACE - A Web Service Framework

- GI is a flexible framework to allow web service interconnections of OTRS with third party applications.
- OTRS can act in both ways - as a provider (server, requested from remote) or requester (client, requesting remotely).
- Simple web service connections can be created without programming by configuring the Generic Interface.
- Complex scenarios can be realized by plugging in custom OTRS extensions that add perl code to the GI infrastructure on different architectural layers.
- *Connectors* expose parts of OTRS to Generic Interface web services. For example, a ticket connector exposes the ticket create/update function, so that they can be used in a web service regardless which network transport is used.
- A scheduler daemon process supports asynchronous event handling. This is useful to asynchronously start web service requests from OTRS to another system, after the agents

request has been answered (e.g. when a ticket has been created). Otherwise, it might block the response, resulting in increased response times for the agent.

With the Generic Interface new web services can be configured easily by using existing OTRS modules, without additional code. They can be combined to create a new web service. When configuring a new web service connection, the administrator has to add:

- A new web service in the admin GUI
- The basic meta data (Transport type (SOAP), URL etc.) and
- Existing operations (part of a connector) and specify for each operation how the data must be mapped (inbound and outbound)

A Generic Interface Debugger will help the OTRS administrator to check how requests are coming in and how they are handled through the different layers.

## 1.1 Current Features

- Network transports: SOAP/HTTP. Others like REST and JSON are scheduled to be added in the future depending on customers demand.
- Configurable data mapping Graphical User Interface for key/value transformations with respect to incoming and outgoing data.
- Graphical debugger to check the configuration and flow of information of configured web services.
- A ticket connector allowing the use of OTRS as a web service for ticket handling.

## 1.2 Future Features

- Additional network transports (REST, JSON).
- The GI will replace the iPhoneHandle as the backend for mobile apps.
- Additional connectors will be added to provide more parts of OTRS for use with web services (e.g. to allow the creation, update or deletion of agents, users, services or CIs).

## 2 DYNAMIC FIELDS

The DynamicFields Feature replaces the existing ticket and article FreeText and FreeTime fields with a dynamic structure that will also allow to create custom forms in OTRS.

- An unlimited amount of fields can be configured using an own graphical user interface for administration.
- The fields can have different types that can be used for both, tickets and articles. Available by default are:
  - Text
  - Multiline text
  - Checkbox
  - Dropdown

- Multi-select
- Date
- Date and time
- New custom field types (e.g. custom field type dropdown with an external data source) can be added with small effort as the fields are created in a modular, pluggable way.
- A future scenario is, that DynamicFields can be used for objects other than tickets or in custom modules. For example, a custom module adding objects to handle "orders" in OTRS could use the DynamicFields to attach properties/data to these orders.
- A database update script will transform historic FreeText fields and related configuration settings into the new structure.

## 3 TICKET MANAGEMENT IMPROVEMENTS

### 3.1 Ticket creation improved

- Multiple email addresses can now be specified as 'To:', 'CC:' or 'BCC:' when creating a new phone or email ticket.

### 3.2 Inbound phone call support

- Inbound phone calls can now be registered within an existing ticket (until now, only outbound calls were registered).

### 3.3 Ticket overview preview improved

- It is now possible to exclude articles of certain sender types (e.g. articles from internal agents) in the SysConfig from being displayed in the overview preview mode.
- A certain article type can be configured which will display articles of that type as expanded by default when the view is accessed.

### 3.4 Ticket move improved

- The screen shown after moving a ticket is now configurable. Options are the ticket zoom view (LastScreenView) or the ticket list (LastScreenOverview).

### 3.5 Bulk action improved

- With the new bulk action, outbound emails can now be sent from multiple tickets at the same time. As tickets can have different queues, and these queues each can have different templates, salutations and signatures, these are not used in the Bulk Action email.
- An additional bulk action allows configuring the ticket type for selected tickets.

### 3.6 Configurable Reject Sender Email Address

- The feature allows configuring an email address instead of the administrator address to reject the creation of new tickets by email. This feature can be used in all cases where customers are not allowed to create new tickets by email.

## 4 PROCESS AUTOMATION

### 4.1 Escalation events added

- OTRS will now create events for each of the available escalation types (response, update and resolution). This allows performing actions (such as notifications) before the escalation occurs, in the moment it occurs and in the moment that the escalation ends.

### 4.2 Notification mechanism improved

- A new generic agent notification module allows the OTRS administrator to define messages that will be shown in the agent web front-end when agents log into the system.

### 4.3 Time calculation improved

- All kind of times are from now on calculated by and based on the application server only solving the issues that were caused by variances between the clock times of application and data base servers.

### 4.4 GenericAgent improved

- The GenericAgent can now filter for tickets change time.
- In addition, the GenericAgent can set the ticket responsible for matched tickets.

## 5 USER INTERFACE, RICH TEXT EDITOR, CHARSET

### 5.1 User interface performance improved

- The speed for rendering and article display was improved, thanks to Stelios Gikas <stelios.gikas@noris.net>!

### 5.2 Rich Text Editor Update

- iOS5 support added.
- Block quotes can be left with the enter key.
- Update from CKEditor 3.4 to CKEditor 3.6, so improvements refer to the releases of CKEditor 3.5 [[http://ckeditor.com/blog/CKEditor\\_3.5\\_released](http://ckeditor.com/blog/CKEditor_3.5_released)] and CKEditor 3.6 [[http://ckeditor.com/blog/CKEditor\\_3.6\\_released](http://ckeditor.com/blog/CKEditor_3.6_released)].
- IE9 support improved.
- Resizable dialogs.

### 5.3 Unicode Support - Non-UTF-8 Internal Encodings Dropped

- UTF-8 is now the only allowed internal charset of OTRS.
- All language files are now formatted in UTF-8, which simplifies their handling and future improvements of the translation mechanism.

## 6 DATABASE DRIVER SUPPORT

### 6.1 PostgreSQL DRIVER compatibility improved

- PostgreSQL 9.1 support added.

- A new legacy driver is now available for PostgreSQL 8.1 or earlier versions.

## 6.2 MS SQL DRIVER compatibility improved

- The MS SQL driver now stores binary data in VARBINARY rather than deprecated type TEXT as well as NVARCHAR to store text strings rather than VARCHAR (for improved Unicode support).

# 7 MAIL INTEGRATION

## 7.1 Mail handling improved

- When connecting to IMAP mail accounts, it is now possible to handle emails from a specific email folder, other than the INBOX folder.
- OTRS can now also connect to IMAP servers using Transport Layer Security (TLS), useful for modern restricted environments.

# Top new features of OTRS 3.0

## Context

- User Centered redesign of the Graphical User Interface which results in a dramatic shift from a comprehensive but static to a more powerful and dynamic application using state-of-the art technologies like Ajax, xHTML and optimized CSS.

## New Ticket and Article Indicator

- This new feature has been implemented on both ticket and article level. It allows an agent at a glance to check for any updates within a ticket or on the article level to check for new and unread articles. You benefit from increased transparency and decreased response times.

## Optimized Fulltext Search

- The new search feature allows you to flexibly customize the way you browse the information base. Options the new search feature provides range from single search-string searches to complex multi-string boolean search operations including various operators. You benefit from fully customizable searches according to your needs.

## New Ticket Zoom View

- The redesign based on Ajax technology allows agents to display complex and linked information structures in real-time while keeping the agents' current working environment. The agent will benefit from increased orientation and increased workflow efficiency.

## Global Ticket Overviews

- Well known from OTRS 2.4 the global ticket overviews have been optimized to achieve increased inter-activity. Depending on the use case and preferences of your agents they can easily change the ticket overviews layout according to their special needs. Options are small, medium and large, each providing a different degree of information details.

## Accessibility

- The redesign includes common accessibility standards WCAG and WAI-ARIA which also allows disabled users to better interact with OTRS Help Desk. The US Rehabilitation Acts Section 508 has been fulfilled.

## New Customer Interface

- The customer web front-end can be integrated to your organizations intranet and is fully integrated into the redesigned help desk system.

## Archive Feature

- OTRS 3.0 now offers a new archiving feature. With a separated archive you'll benefit from a reduced time spent for searches and increased display of results.

# New features of OTRS 2.4

## Licensing changed to AGPL Version 3

- Why AGPL instead of GPL? - AGPL and GPL are identical, with one exception: For software used in an SaaS environment Copyleft is effective in AGPL - which is not the case when using GPL. Keeping in mind the growing world of SaaS, ((otrs)) wants to ensure that future developments continue to return to the OTRS community. This is the reason for the switch to AGPL.

Why v3 instead of v2? - GPL v2 is getting older and has, especially in the USA, various legal uncertainties. In the opinion of ((otrs)) GPL v3 is keeping the spirit of GPL v2, and at the same time has been tailored to new needs. ((otrs)) views GPLv3, more specifically AGPLv3, as being the best balanced Copyleft Open Source License available today, offering Protection for copyright owners and users and providing the best security under the law.

## New Management Dashboard

- The need for a system-spanning, next to real-time, and personalized presentation of useful information led to an integrated Management Dashboard. It is possible to create plug-ins to display content from individual extensions alongside the standard content. Standard plug-ins are:
  - Ticket volume (new & open) from the last 24h, 48h and 72h
  - Calendar including an overview of upcoming events (escalations, auto-unlocks, etc.)
  - System-wide overview of ticket distribution within the queues
  - First Response Time/Solution Time of Queues
  - Integration of RSS

## New Standard Reports

- The new reports provided with OTRS 2.4 are:
  - Created Tickets

- Closed Tickets
- SLA Analysis
- Required working time per customer / per queue
- Solution time analysis per customer / per queue
- Answer time analysis per customer / per queue

## New Master/Slave Ticket Feature

- With the Master/Slave Ticket, it is possible to link multiple tickets of a similar nature, and handle them collectively. As soon as the problem is solved, only the master ticket must be closed. All other tickets will be closed automatically, and the solution text for the master ticket will be sent to all customers of slave tickets.

A new link type 'Slave' will be available. All tickets with this Type of link will inherit the following actions from their Master ticket:

- Status change
- Email answers
- Change in FreeText fields
- Notes
- Pending time changes
- Priority changes
- Owner changes
- Responsibility changes

## New Rich-Text/HTML E-Mail Support (WYSIWYG)

- With this feature, it is now possible to write e-mails, notes, and notifications in rich text format (HTML format). Using a WYSIWYG editor (What You See Is What You Get), it is possible to comfortably write using formatted text and even include in-line pictures.

## New Out-Of-Office Feature

- With this new feature it is possible for all users to activate "out-of-office" to notify colleagues and OTRS of the period of their absence. The out-of-office feature is active for a time frame set by the user. Activation of this feature has the following effects:

In the lists in which an agent can be selected as owner or responsible (i.e. Ticket creation or changing ownership), the period of absence and the time till return will be shown behind the user's name. This will help making the absence of the user more transparent.

If an agent receives a follow-up during a period of absence, the ticket is automatically unlocked and a notification is sent to all agents in the queue. This allows immediate reaction to the customer follow-up by another service employee.

## New Ticket Overviews and global Bulk Action

- Flexibility of presentation within the ticket overview is a must. Based on the "S/M/L" (Small/Medium/Large) Ticket View every agent has the possibility to change the view for each type of overview (Queue View, Status View, etc) on-the-fly with a simple mouse click on the appropriate icon. This allows for the highest possible level of individualization and adjustment to any operational situation.

Additionally, decentralization of the Bulk Action feature integrated the Bulk Action in all ticket overviews (Bulk Action allows processing of multiple tickets at a time).

## Postmaster Filter recognizes Follow-Ups to internal forwarded messages

- Currently, e-mail replies to forwarded articles arrive in OTRS as email-external. The problem is that the answers to these forwarded articles can be seen by the customer in the web-interface. Although it is possible to classify e-mails of an entire domain as email-internal, this only shifts the problem. Also, such step makes it impossible to properly service customers in the domain, as the customer would not be able to track tickets in the customer web-interface any more. With this new feature, e-mail replies can be traced back, and email-internal or email-external will be set based upon the original Forward-Article type.

## Configurable event based notifications

- Until now, a very inflexible notification could be sent to an agents and customers, for example Agent: New Ticket or Customer: Status Change. In order to make the notification system more flexible, a complete overhaul was performed on the messaging mechanism. The new system allows messaging to agents, customers, or a dedicated email address, based on the event taking place.

With this, it is now possible to just inform the customer when the ticket has been closed. Or, for example, when a VIP customer creates a ticket, a message can be sent to a specific address. Events (i.e. TicketCreate, TicketStateUpdate, TicketPriorityUpdate, ArticleCreate), and all known message variables (i.e. <OTRS\_TICKET\_TicketNumber> <OTRS\_TICKET\_Priority>), are freely selectable for creating triggered messages via the web interface.

## READ-ONLY Permissions and Notifications with watched Tickets

- In the current release of OTRS it is possible for a user to maintain a Watched Tickets List. This feature is dealing with tickets marked as "subscribed" by a user. It has the advantage that users no longer lose track of tickets marked as "subscribed", and are able to view them on an individual list. The "Read-Only" Feature - Up to now, tickets marked as "subscribed" were shown in a list, however, the agent could only actually view them if they were in a queue for which the agent had read permissions. With the "Read-Only" Feature, agents subscribed to a ticket always have read permissions on the ticket, even if the ticket is moved to a queue where the agent has no permissions. "Notify" Feature - Via a personalized setting, every agent can define whether or not to receive notifications about tickets, just as the owner and responsible of a ticket would receive. This allows for active tracking of watched tickets.

## Secure SMTP

- OTRS can receive and send mails in multiple ways. All currently available methods for receiving emails have been implemented within OTRS 2.3 (POP3, POP3S, IMAP, IMAPS). Until now, there were two options for sending emails: using a local MTA (Sendmail, Postfix, etc.) or per SMTP. In OTRS 2.4.x, SMTPTS (Secure SMTP) has been implemented in order to keep up to the growing security standards.

# Hardware and software requirements

OTRS can be installed on many different operating systems. OTRS can run on linux and on other unix derivates (e.g. OpenBSD or FreeBSD). You can also deploy it on Microsoft Windows. OTRS does not have excessive hardware requirements. We recommend using a machine with at least a 2 GHz Xeon or comparable CPU, 2 GB RAM and a 160 GB hard drive for a small setup.

To run OTRS you'll also need to use a web server and a database server. Apart from that, on the OTRS machine, you should install perl and/or install some additional perl modules. The web server and Perl have to be installed on the same machine as OTRS. The database back-end can be installed locally or on another host.

For the web server we recommend using the Apache HTTP Server, because its module mod\_perl improves greatly the performance of OTRS. Apart from that, OTRS should run on any web server that can execute Perl scripts.

You can deploy OTRS on different databases. You can choose between MySQL, PostgreSQL, Oracle, or Microsoft SQL Server. If you use MySQL you have the advantage that the database and some system settings can be configured during the installation, through a web front-end.

For Perl, we recommend using at least version 5.8.8. You need some additional modules which can be installed either with the Perl shell and CPAN or via the package manager of your operating system (rpm, yast, apt-get).

Software requirements

## Perl support

- Perl 5.8.8 or higher

## Web server support

- Apache2 + mod\_perl2 or higher (recommended, mod\_perl is really fast!)
- Webserver with CGI support (CGI is not recommended)
- Microsoft Internet Information Server (IIS) 6 or higher

## Database support

- MySQL 4.1 or higher
- PostgreSQL 7.0 or higher (8.2 or higher recommended)
- Oracle 10g or higher
- Microsoft SQL Server 2005 or higher

The section in the manual about installation of Perl modules describes in more detail how you can set up those which are needed for OTRS.

If you install a binary package of OTRS, which was built for your operating system (rpm, Windows-Installer), either the package contains all Perl modules needed or the package manager of your system should take care of the dependencies of the Perl modules needed.

## Web browser support

For the Agent interface of OTRS, you'll be OK if you use a modern browser with JavaScript support enabled. We support the following browsers:

- Internet Explorer 8.0 or higher
- Mozilla Firefox 3.6 or higher
- Google Chrome
- Opera 10 or higher
- Safari 4 or higher

We recommend to always use the latest version of your browser, because it has the best JavaScript and rendering performance. Dramatical performance varieties between the used browsers can occur with big data or big systems. We are happy to consult you on that matter.

For the OTRS Customer Interface, in addition to the browsers listed above, you can also use Internet Explorer versions 6 or 7, and we do not require JavaScript either.

## Community

OTRS has a large user community. Users and developers discuss about OTRS and interchange information on related issues through the mailing-lists. You can use the mailing lists to discuss installation, configuration, usage, localization and development of OTRS. You can report software bugs in our bug tracking system.

The homepage of the OTRS community is: <http://www.otrs.com/open-source/>.

## Commercial Support and Services for OTRS

Commercial support for OTRS is also available. You can find the available options on the website of OTRS Group, the company behind OTRS: <http://www.otrs.com/>.

OTRS Group provides subscription support services, customization, consulting and training for *OTRS Help Desk* [<http://www.otrs.com/products/otrs-help-desk/>] and *OTRS ITSM* [<http://www.otrs.com/en/products/otrs-itsm/>]. It also provides *Best Practice Product Editions* [<http://www.otrs.com/solutions/>]. With these Editions, OTRS Group helps organizations to design, deploy and optimize OTRS for each unique environment. Additionally, OTRS Group provides hosted versions including *OTRS OnDemand* [<http://www.otrs.com/en/solutions/ondemand/>] and *Managed OTRS* [<http://www.otrs.com/en/solutions/managed-otrs/>].

You can find more detailed information about OTRS Group on <http://www.otrs.com> and you can contact us via email on *sales at otrs.com* [<mailto:sales@otrs.com>].

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# Chapter 3. Installation

This chapter describes the installation and basic configuration of the central OTRS framework. It covers information on installing OTRS from source, or with a binary package such as an RPM or a Windows executable.

Topics covered here include configuration of the web and database servers, the interface between OTRS and the database, the installation of additional Perl modules, setting proper access rights for OTRS, setting up the cron jobs for OTRS, and some basic settings in the OTRS configuration files.

Follow the detailed steps in this chapter to install OTRS on your server. You can then use its web interface to login and administer the system.

## The simple way - Installation of pre-built packages

You should use pre-built packages to install OTRS, since it is the simplest and most convenient method. You can find them in the download area at <http://www.otrs.org> [<http://www.otrs.org>]. The following sections describe the installation of OTRS with a pre-built or binary package on SUSE, Debian and Microsoft Windows systems. Only if you are unable to use the pre-built packages for some reason should you follow the manual process.

### Installing the RPM on a SUSE Linux server

This section demonstrates the installation of a pre-built RPM package on a SUSE Linux distro. We have tested against all recent SLES and openSUSE versions. Before you start the installation, please have a look at <http://www.otrs.org/downloads> [<http://www.otrs.org/downloads>] and check if a newer OTRS RPM package is available. Always use the latest RPM package.

Install OTRS with **yast** (**yast2**) or via the command line and **rpm**. OTRS needs some Perl modules which are not installed on a SUSE system by default, and so we recommend using **yast**, since it addresses the package dependencies automatically.

If you decide to install OTRS via the command line and **rpm**, first you have to manually install the needed Perl modules. Assuming you saved the file `otrs.rpm` in the directory `/tmp`, you can execute the command specified in the following script to install OTRS.

```
linux:~ # rpm -i /tmp/otrs-xxx.rpm
otrs
#####
Check OTRS user (/etc/passwd)... otrs exists.
```

Next steps:

```
[SuSEconfig]
Execute 'SuSEconfig' to configure the web server.
```

```
[start Apache and MySQL]
Execute 'rcapache restart' and 'rcmysql start' in case they don't
run.
```

```
[install the OTRS database]
Use a web browser and open this link:
http://localhost/otrs/installer.pl

[OTRS services]
Start OTRS 'rcotrs start-force' (rcotrs {start|stop|status|restart|
start-force|stop-force}).
```

Have fun!

Your OTRS Team  
http://otrs.org/

linux:~ #

*Script: Command to install OTRS.*

After the installation of the OTRS RPM package, you have to run SuSEconfig, as shown in the following script.

```
linux:~ # SuSEconfig
Starting SuSEconfig, the SuSE Configuration Tool...
Running in full featured mode.
Reading /etc/sysconfig and updating the system...
Executing /sbin/conf.d/SuSEconfig.aaa_at_first...
Executing /sbin/conf.d/SuSEconfig.apache...
Including /opt/otrs/scripts/apache-httdp.include.conf
Executing /sbin/conf.d/SuSEconfig.bootsplash...
Executing /sbin/conf.d/SuSEconfig.doublecheck...
Executing /sbin/conf.d/SuSEconfig.guile...
Executing /sbin/conf.d/SuSEconfig.hostname...
Executing /sbin/conf.d/SuSEconfig.ispell...
Executing /sbin/conf.d/SuSEconfig.perl...
Executing /sbin/conf.d/SuSEconfig.permissions...
Executing /sbin/conf.d/SuSEconfig.postfix...
Setting up postfix local as MDA...
Setting SPAM protection to "off"...
Executing /sbin/conf.d/SuSEconfig.profiles...
Finished.
linux:~ #
```

*Script: Running the SuSEconfig command.*

The OTRS installation is done. Restart your web server to load the OTRS specific changes in its configuration, as shown in the script below.

```
linux:~ # rcapache restart
Shutting down httpd
Starting httpd [ PERL ]
linux:~ #
```

done  
done

*Script: Restarting the web server.*

The next step is to setup the OTRS database, as described at section 3.2.4.

## Installing OTRS on a CentOS system

On the OTRS Wiki you can find detailed instructions for setting up OTRS on a CentOS system. Please note that these instructions will also apply to Red Hat Linux systems since they use the same source: [http://wiki.otrs.org/index.php?title=Installation\\_of\\_OTRS\\_3.0b1\\_on\\_CentOS\\_5.5](http://wiki.otrs.org/index.php?title=Installation_of_OTRS_3.0b1_on_CentOS_5.5) [[http://wiki.otrs.org/index.php?title=Installation\\_of\\_OTRS\\_3.0b1\\_on\\_CentOS\\_5.5](http://wiki.otrs.org/index.php?title=Installation_of_OTRS_3.0b1_on_CentOS_5.5)].

## Installing OTRS on a Debian system

On the OTRS Wiki you can find detailed instructions for setting up OTRS on a Debian system: [http://wiki.otrs.org/index.php?title=Installation\\_on\\_Debian\\_5.04\\_lenny](http://wiki.otrs.org/index.php?title=Installation_on_Debian_5.04_lenny) [[http://wiki.otrs.org/index.php?title=Installation\\_on\\_Debian\\_5.04\\_lenny](http://wiki.otrs.org/index.php?title=Installation_on_Debian_5.04_lenny)].

## Installing OTRS on a Ubuntu system

On the OTRS Wiki you can find detailed instructions for setting up OTRS on an Ubuntu system: [http://wiki.otrs.org/index.php?title=Installation\\_on\\_Ubuntu\\_Lucid\\_Lynx\\_\(10.4\)](http://wiki.otrs.org/index.php?title=Installation_on_Ubuntu_Lucid_Lynx_(10.4)) [[http://wiki.otrs.org/index.php?title=Installation\\_on\\_Ubuntu\\_Lucid\\_Lynx\\_\(10.4\)](http://wiki.otrs.org/index.php?title=Installation_on_Ubuntu_Lucid_Lynx_(10.4))].

## Installing OTRS on Microsoft Windows systems

Installing OTRS on a Microsoft Windows system is very easy. Download the latest installer for Win32 from <http://www.otrs.org/downloads/> [<http://www.otrs.org/downloads/>] and save the file to your local file system. Then simply double-click on the file to execute the installer, and follow the few installation steps to setup the system. After that you will be able to login as OTRS administrator and configure the system according to your needs. To log in as OTRS administrator use the username 'root@localhost' and the default password 'root'.

### Warning

Please change the password for the 'root@localhost' account as soon as possible.

### Important

The Win32 installer for OTRS contains all needed components for OTRS, i.e. the Apache web server, the MySQL database server, Perl (with all needed modules) and Cron for Windows. For that reason you should only install OTRS on Windows systems that don't already have an installation of Apache or another web server, or MySQL.

## Installation from source (Linux, Unix)

### Preparing the installation from source

If you want to install OTRS from source, first download the source archive as .tar.gz, .tar.bz2, or .zip file from <http://www.otrs.org/downloads/> [<http://www.otrs.org/downloads/>]

Unpack the archive (for example, using **tar**) into the directory `/opt`, and rename the directory from otrs-3.1.x to otrs (see Script below).

```
linux:/opt# tar xf /tmp/otrs-3.1.tar.gz
linux:/opt# mv otrs-3.1 otrs
linux:/opt# ls
otrs
linux:/opt#
```

*Script: First steps to install OTRS.*

OTRS should NOT be run with root rights. You should add a new user for OTRS as the next step. The home directory of this new user should be `/opt/otrs`. If your web server is not running with the same user rights as the new 'otrs' user, which is the case on most systems, you have to add the new 'otrs' user to the group of the web server user (see Script below).

```
linux:/opt# useradd -r -d /opt/otrs/ -c 'OTRS user' otrs
linux:/opt# usermod -G nogroup otrs
linux:/opt#
```

*Script: Adding a new user 'otrs', and adding it to a group.*

Next, you have to copy some sample configuration files. The system will later use the copied files. The files are located in `/opt/otrs/Kernel` and `/opt/otrs/Kernel/Config` and have the suffix `.dist` (see Script below).

```
linux:/opt# cd otrs/Kernel/
linux:/opt/otrs/Kernel# cp Config.pm.dist Config.pm
linux:/opt/otrs/Kernel# cd Config
linux:/opt/otrs/Kernel/Config# cp GenericAgent.pm.dist GenericAgent.pm
```

*Script: Copying some sample files.*

The last step to prepare the installation of OTRS is to set the proper access rights for the files. You can use the script **otrs.SetPermissions.pl**, which is located in the `bin` directory, in the home directory of the 'otrs' user. You can execute the script with the following parameters:

```
otrs.SetPermissions.pl {Home directory of the OTRS user} {--otrs-user= OTRS user} {--web-user= Web server user} [ --otrs-group= Group of the OTRS user] [ --web-group= Group of the web server user]
```

If your web server is running with the same user rights as user 'otrs', the command to set the proper access rights is **otrs.SetPermissions.pl /opt/otrs --otrs-user=otrs --web-user=otrs**. On SUSE systems the web server is running with the user rights of 'wwwrun'. On Debian-based systems this is 'www-data'. You would use the command **otrs.SetPermissions.pl /opt/otrs --otrs-user=otrs --web-user=wwwrun --otrs-group=nogroup --web-group=www** to set the proper access rights.

## Installation of Perl modules

OTRS needs some additional Perl modules, as described in Table 3-1. If you install OTRS from source, you will have to install these modules manually. This can be done either with the package manager of your Linux distribution (yast, apt-get) or, as described in this section, through the Perl shell and CPAN. If you're using ActiveState Perl, for instance on Windows, you could use PPM, the built-in Perl Package Manager. We recommend using your package manager if possible.

**Table 3.1. Needed Perl modules for OTRS**

Name	Description
DBI	Establishes a connection to the database back-end.
DBD::mysql	Contains special functions to connect to the MySQL database back-end (only required if MySQL is used).
DBD::pg	Contains special functions to connect to the PostgreSQL database back-end (only required if PostgreSQL is used).
Digest::MD5	Allows the use of the md5 algorithm.
CSS::Minifier	Minifies a CSS file and writes the output directly to another file.
Crypt::PasswdMD5	Provides interoperable MD5-based crypt functions.
MIME::Base64	Encodes / decodes Base64 strings, e.g. for mail attachments.
JavaScript::Minifier	Minifies a JavaScript file and writes the output directly to another file.
Net::DNS	Perl interface to the domain name system.
LWP::UserAgent	Processes HTTP requests.
Net::LDAP	Perl interface to a LDAP directory (only required if an LDAP back-end is used).
GD	Interface to the GD graphics library (only required if the OTRS stats module is used).
GD::Text, GD::Graph, GD::Graph::lines, GD::Text::Align	Some more text and graphic tools for the GD graphics library (only required if the OTRS stats module is used).
PDF::API2, Compress::Zlib	Needed to generate the PDF output for reports, search results and for the ticket print view.

You can verify which modules you need to install with **otrs.CheckModules.pl**. This script is located in the `bin` directory, in the home directory of the 'otrs' user (see Script below).

Please note that some modules are optional.

```
linux:~# cd /opt/otrs/bin/
linux:/opt/otrs/bin# ./otrs.CheckModules.pl
  o CGI.............................ok (v3.49)
  o Crypt::PasswdMD5............ok (v1.3)
  o CSS::Minifier................ok (v0.01)
  o Date::Format................ok (v2.24)
  o Date::Pcalc................ok (v1.2)
  o DBI...........................ok (v1.609)
  o DBD::mysql..................ok (v4.013)
  o Digest::MD5................ok (v2.36_01)
  o Encode::HanExtra...........ok (v0.23)
```

```
o GD.....ok (v2.44)
  o GD::Text.....ok (v0.86)
  o GD::Graph.....ok (v1.44)
  o GD::Graph::lines.....ok (v1.15)
  o GD::Text::Align.....ok (v1.18)
o IO::Scalar.....ok (v2.110)
o IO::Wrap.....ok (v2.110)
o JavaScript::Minifier.....ok (v1.05)
o JSON.....ok (v2.21)
  o JSON::PP.....ok (v2.27003)
  o JSON::XS.....Not installed! (Optional - Install
it for faster AJAX/JavaScript handling.)
o LWP::UserAgent.....ok (v5.829)
o Mail::Internet.....ok (v2.06)
o Mail::POP3Client.....ok (v2.18 )
  o IO::Socket::SSL.....ok (v1.31)
o MIME::Base64.....ok (v3.07_01)
o MIME::Tools.....ok (v5.428)
o Net::DNS.....ok (v0.65)
o Net::POP3.....ok (v2.29)
o Net::IMAP::Simple.....ok (v1.1916)
  o Net::IMAP::Simple::SSL.....ok (v1.3)
o Net::SMTP.....ok (v2.31)
  o Authen::SASL.....ok (v2.15)
  o Net::SMTP::SSL.....ok (v1.01)
o Net::LDAP.....ok (v0.4001)
o PDF::API2.....ok (v0.73)
  o Compress::Zlib.....ok (v2.008)
o SOAP::Lite.....ok (v0.712)
o Text::CSV.....ok (v1.18)
  o Text::CSV_PP.....ok (v1.26)
  o Text::CSV_XS.....Not installed! (Optional -
Optional, install it for faster CSV handling.)
  o XML::Parser.....ok (v2.36)
linux:/opt/otrs/bin#
```

*Script: Checking needed modules.*

You should strive to install the missing modules from your Linux distribution's package management system. In that way, the packages will be automatically updated when new versions are available or when security issues are found. Please refer to your distribution's documentation on how to install additional packages. If the (correct version of) the module is not available from the package repositories, you can also install from CPAN, the Comprehensive Perl Archive Network.

To install one of the modules from above via CPAN, you have to execute the command **perl -e shell -MCPAN**. The Perl shell will be started in interactive mode and the CPAN module will be loaded. If CPAN is already configured, you can install the modules with the command **install** followed by the name of the module. CPAN takes care of the dependencies of a module to other Perl modules and will let you know if other modules are needed.

Execute also the commands **perl -cw bin/cgi-bin/index.pl** **perl -cw bin/cgi-bin/customer.pl** and **perl -cw bin/otrs.PostMaster.pl** after changing into the directory `/opt/otrs`. If the output of both commands is "syntax OK", your Perl is properly set up (see Script below).

```
linux:~# cd /opt/otrs
linux:/opt/otrs# perl -cw bin/cgi-bin/index.pl
cgi-bin/installer.pl syntax OK
linux:/opt/otrs# perl -cw bin/cgi-bin/customer.pl
cgi-bin/customer.pl syntax OK
linux:/opt/otrs# perl -cw bin/otrs.PostMaster.pl
bin/otrs.PostMaster.pl syntax OK
linux:/opt/otrs#
```

*Script: Syntax check.*

## Configuring the Apache web server

This section describes the basic configuration of the Apache web server with mod\_cgi for OTRS. The web server should be able to execute CGI scripts. OTRS won't work if the Perl scripts cannot be parsed. Check the configuration files of your web server, and search for the line that loads the CGI module. If you see something like the following, the CGI module should already be in use.

```
LoadModule cgi_module /usr/lib/apache2/modules/mod_cgi.so
```

To access the web interface of OTRS conveniently via a short address, Alias and ScriptAlias entries are needed. Most Apache installations have a `conf.d` directory included. On Linux systems you can find this directory very often under `/etc/apache` or `/etc/apache2`. Log in as root, change to the `conf.d` directory and copy the appropriate template in `/opt/otrs/scripts/apache2-httdp.include.conf` to a file called `otrs.conf` in the Apache configuration directory.

Restart your web server to load the new configuration settings. On most systems you can start/restart your web server with the command **/etc/init.d/apache2 restart** (see Script below).

```
linux:/etc/apache2/conf.d# /etc/init.d/apache2 restart
Forcing reload of web server: Apache2.
linux:/etc/apache2/conf.d#
```

*Script: Restarting the web server.*

Now your web server should be configured for OTRS.

If you choose to increase performance and you can install mod\_perl, then you can leave mod\_cgi off, and configure the Apache web server for use with mod\_perl, in the following manner:

Please ensure that mod\_perl is installed and loaded, in order to take advantage of this feature. Due to the nature of the start-up script, your server will not fail to start if mod\_perl is not properly loaded or compiled in your apache web server, unless mod\_cgi is also on. Technically speaking you can leave mod\_cgi on as well, but you should not.

Search your `/etc/apache*` directory for `mod_perl.so` (see Script below) to see if the module is already loaded.

```
#:/ grep -Rn mod_perl.so /etc/apache*
```

*Script: Searching for mod\_perl.*

When you use the appropriate start script listed above and the module is loaded, the script (when commented in) `/opt/otrs/scripts/apache2-perl-startup.pl` can be used to load the perl modules into memory one time, saving on load times and increasing performance.

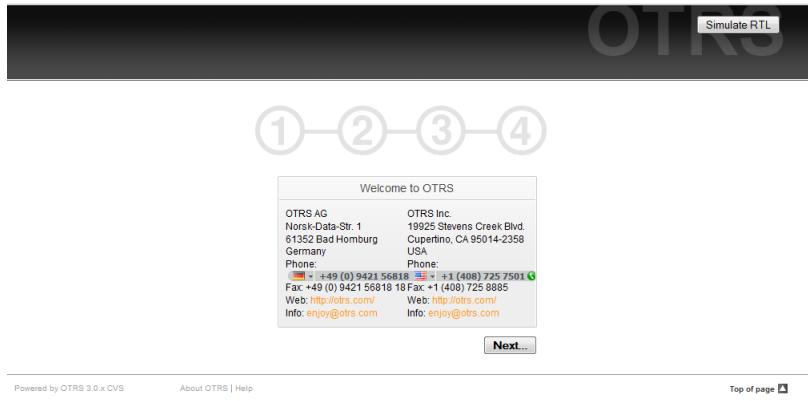
## Configuring the database

### The simple way - Using the web installer (works only with MySQL)

If you use MySQL as the database back-end, you can use the OTRS web installer: <http://localhost/otrs/installer.pl> [<http://localhost/otrs/installer.pl>].

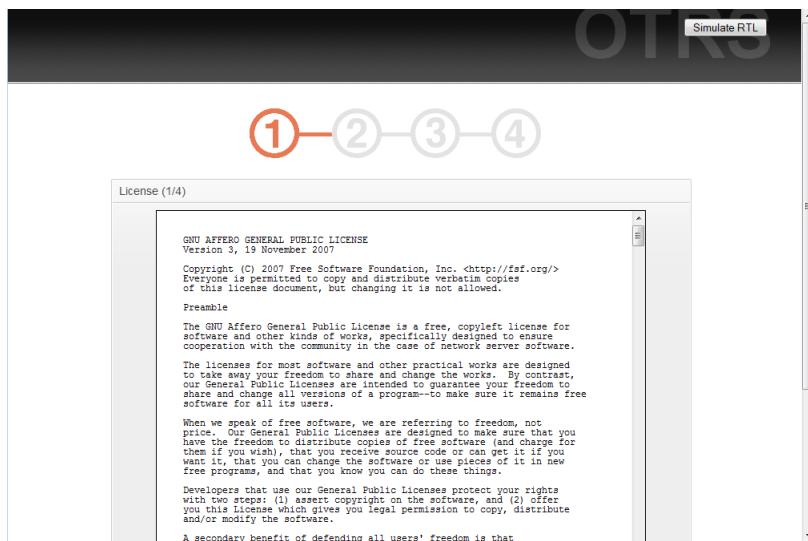
When the web installer starts, please follow the next steps to setup your system:

1. Check out the information about the OTRS offices and click on next to continue (see Figure below).



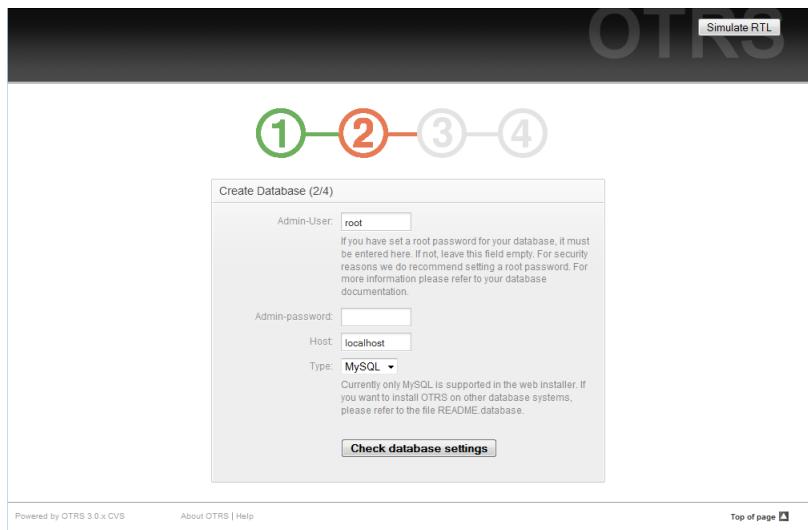
*Figure: Welcome screen.*

2. Read the GNU Affero General Public License (see Figure below) and accept it, by clicking the corresponding button at the bottom of the page.



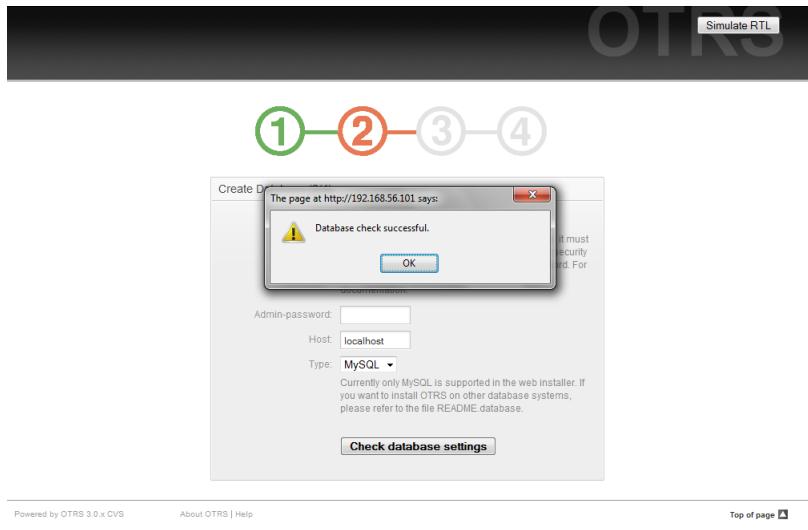
*Figure: GNU Affero General Public License.*

3. Provide the username and password of the administrator, the DNS name of the computer which hosts OTRS and the type of database system to be used. After that, check the settings (see Figure below).



*Figure: Database initial settings.*

You will be notified if the check was successful. Press OK to continue (see Figure below).



*Figure: Notification for successful check.*

4. Create a new database user, choose a name for the database and click on 'Next' (see Figure below).

## Warning

It is never a good idea to use default passwords. Please change the default password for the OTRS database!

Create Database (2/4)

Admin-User:  If you have set a root password for your database, it must be entered here. If not, leave this field empty. For security reasons we do recommend setting a root password. For more information please refer to your database documentation.

Admin-password:

Host:

Type: MySQL

Currently only MySQL is supported in the web installer. If you want to install OTRS on other database systems, please refer to the file README\_database.

**Database-User (New)**

User:  A new database user with limited rights will be created for this OTRS system.

Password:  default 'hot'

DB connect host:

**Database**

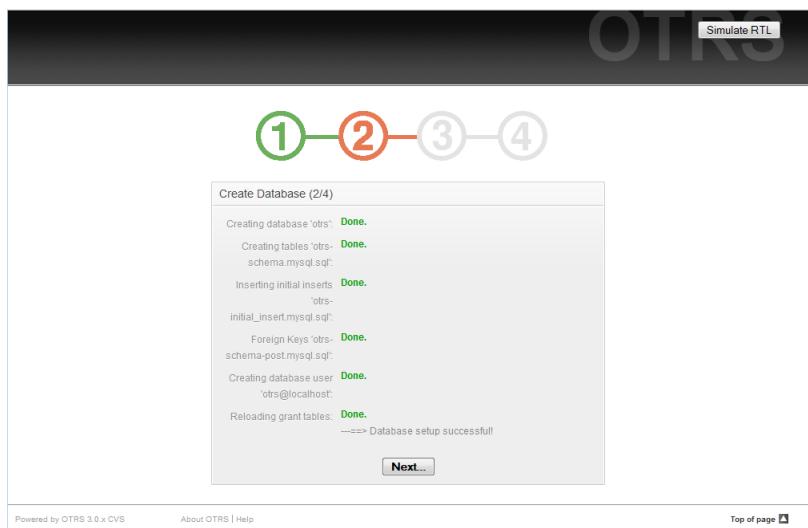
Name:

Action:  Create  Delete

**Next...**

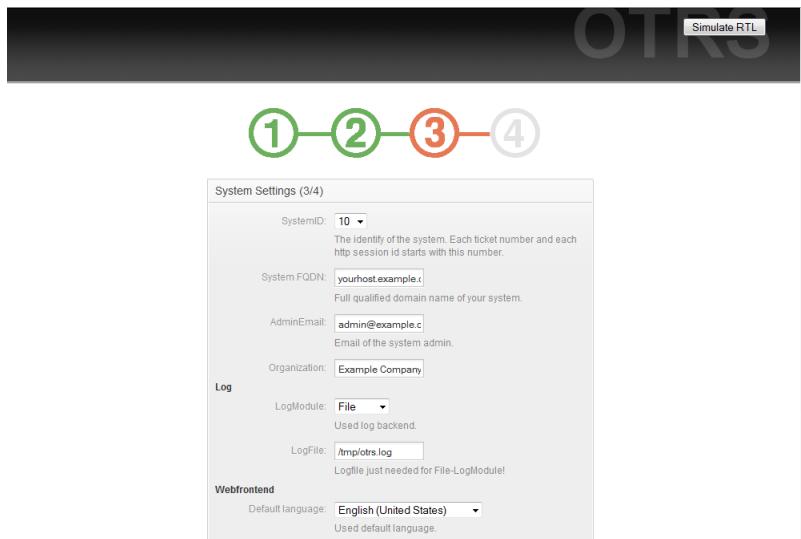
*Figure: Database settings.*

If the database and its user were successfully created, you will get a setup notification, as shown in Figure. Click 'Next' to go to the next screen.



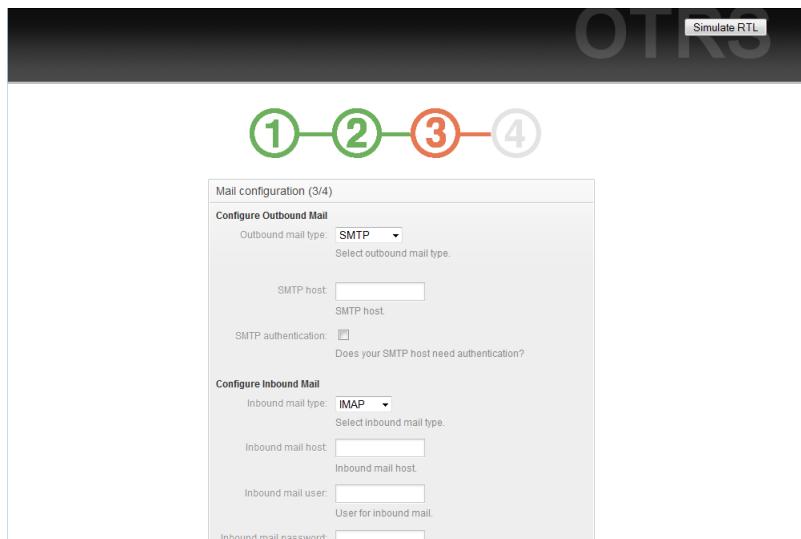
*Figure: Notification indicating successful database setup.*

5. Provide all the required system settings and click on 'Next' (see Figure below).



*Figure: System settings.*

6. If you want, you can provide the needed data to configure your inbound and outbound mail, or skip this step by pressing the right button at the bottom of the screen (see Figure below).



*Figure: Mail configuration.*

7. Restart the OTRS service now to use the new configuration settings as shown in the script below.

```
linux:~ # rcotrs restart-force
Shutting down OTRS
  Disable /opt/otrs/bin/otrs.PostMaster.pl ... done.
no crontab for otrs
  Shutting down cronjobs ... failed!
  Shutting down OTRS (completely)
  Shutting down Apache ... done.
```

```

Shutting down MySQL ... done.

done
Starting OTRS (completely)
  Starting Apache ... done.
  Starting MySQL ... done.
Starting OTRS
  Checking Apache ... done.
  Checking MySQL ... done.
  Checking database connect... (It looks Ok!).
  Enable /opt/otrs/bin/otrs.PostMaster.pl ... done.
  Checking otrs spool dir... done.
  Creating cronjobs (source /opt/otrs/var/cron/*) ... done.

-->> http://linux.example.com/otrs/index.pl <<--

done

done
linux:~ #

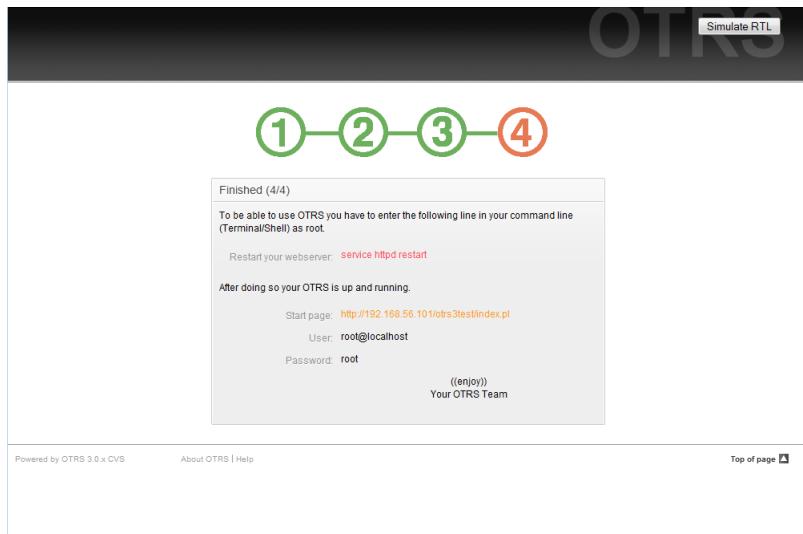
```

*Script: Restarting the OTRS service.*

Congratulations! Now the installation of OTRS is finished and you should be able to work with the system (see Figure below). To log into the web interface of OTRS, use the address `http://localhost/otrs/index.pl` [`http://localhost/otrs/index.pl`] from your web browser. Log in as OTRS administrator, using the username 'root@localhost' and the password 'root'. After that you can configure the system for your needs.

## Warning

Please change the password for the 'root@localhost' account as soon as possible.



*Figure: Final steps to install OTRS.*

## Installing the OTRS database manually

If you can't use the web installer to setup the OTRS database, you have to set it up manually. Scripts with the SQL statements to create and configure the database are located in `scripts/database`, in the home directory of the 'otrs' user (see Script below).

```
linux:~# cd /opt/otrs/scripts/database/
linux:/opt/otrs/scripts/database# ls
otrs-initial_insert.db2.sql          otrs-schema.mysql.sql
otrs-schema.oracle.sql
otrs-initial_insert.mssql.sql        otrs-schema-post.db2.sql
otrs-initial_insert.mysql.sql        otrs-schema.postgresql.sql
otrs-initial_insert.oracle.sql
otrs-initial_insert.postgresql.sql   otrs-schema-post.mssql.sql
otrs-initial_insert.xml              otrs-schema-post.mysql.sql
otrs-schema.db2.sql                 otrs-schema-post.oracle.sql
      otrs-schema-post.postgresql.sql
otrs-schema.mssql.sql               otrs-schema.xml
linux:/opt/otrs/scripts/database#
```

*Script: Files needed to create and configure the database.*

To setup the database for the different database back-ends, the .sql files must be processed in a specific order.

### Create the OTRS database manually step by step

1. Creating the DB: Create the database that you want to use for OTRS, with your database client or your database interface.
2. Creating the tables: With the `otrs-schema.DatabaseType.sql` files (e.g. `otrs-schema.oracle.sql`, `otrs-schema.postgresql.sql`) you can create the tables in your OTRS database.
3. Inserting the initial system data: OTRS needs some initial system data to work properly (e.g. the different ticket states, ticket and notification types). Depending on the type of your database, use one of the files `otrs-initial_insert.mysql.sql`, `otrs-initial_insert.oracle.sql`, `otrs-initial_insert.postgresql.sql` or `otrs-initial_insert.mssql.sql`.
4. Creating references between tables: The last step is to create the references between the different tables in the OTRS database. Use the `otrs-schema-post.DatabaseType.sql` file to create these (e.g. `otrs-schema-oracle.post.sql`, `otrs-schema-post.postgresql.sql`).

After you have finished the database setup, you should check and set proper access rights for the OTRS database. It should be enough to grant access to one user. Depending on the database server you are using, setting up the access rights differs, but it should be possible either with your database client or your graphical database front-end.

If your database and the access rights are configured properly, you have to tell OTRS which database back-end you want to use and how the ticket system can connect to the database. Open the file `Kernel/Config.pm` located in the home directory of the 'otrs' user, and change the parameters shown in the script below according to your needs.

```
# DatabaseHost
# (The database host.)
$Self->{'DatabaseHost'} = 'localhost';

# Database
# (The database name.)
$Self->{Database} = 'otrs';

# DatabaseUser
# (The database user.)
$Self->{DatabaseUser} = 'otrs';

# DatabasePw
# (The password of database user.)
$Self->{DatabasePw} = 'some-pass';
```

*Script: Parameters to be customized.*

## Setting up the cron jobs for OTRS

OTRS needs some cron jobs to work properly. The cron jobs should be run with the same user rights that were specified for the OTRS modules. That means that the cron jobs must be inserted into the crontab file of the 'otrs' user.

All scripts with the cron jobs are located in `var/cron`, in the home directory of the 'otrs' user (see Script below).

```
linux:~# cd /opt/otrs/var/cron
linux:/opt/otrs/var/cron# ls
aaa_base.dist          generic_agent.dist
rebuild_ticket_index.dist
cache.dist              pending_jobs.dist      session.dist
fetchmail.dist          postmaster.dist       unlock.dist
generic_agent-database.dist  postmaster_mailbox.dist
linux:/opt/otrs/var/cron#
```

*Script: Files needed to create the cron jobs.*

These scripts have a suffix of '.dist'. You should copy them to files with the suffix removed. If you use bash, you might want to use the command listed in Script below.

```
linux:/opt/otrs/var/cron# for foo in *.dist; do cp $foo `basename
$foo .dist`; done
linux:/opt/otrs/var/cron# ls
aaa_base          generic_agent-database.dist
rebuild_ticket_index
aaa_base.dist      generic_agent.dist
rebuild_ticket_index.dist
cache              pending_jobs          session
cache.dist         pending_jobs.dist     session.dist
fetchmail          postmaster           unlock
```

```

fetchmail.dist          postmaster.dist           unlock.dist
generic_agent          postmaster_mailbox
generic_agent-database postmaster_mailbox.dist
linux:/opt/otrs/var/cron#

```

*Script: Copying and renaming all the files needed to create the cron jobs.*

Table 3-2 describes the different cron jobs.

**Table 3.2. Description of several cron job scripts.**

Script	Function
aaa_base	Sets the basics for the crontab of the 'otrs' user.
cache	Removes expired cache entries from disk. Clears the loader cache for CSS and JavaScript files.
fetchmail	Used only if new mails will be fetched with fetchmail into the ticket system.
generic_agent	Executes the jobs of the GenericAgent that are not stored in the database but in own config files.
generic_agent-database	Executes the jobs of the GenericAgent that are stored in the database.
pending_jobs	Checks system for pending tickets, and closes them or sends reminders if needed.
postmaster	Checks the message queue of the ticket system, and delivers messages that are still in the queues.
postmaster_mailbox	Fetches the mails from the POP3 accounts that were specified in the admin area, in the section for "PostMaster Mail Accounts".
rebuild_ticket_index	Rebuilds the ticket index, which improves the speed of the QueueView.
session	Removes old and no longer needed session IDs.
unlock	Unlocks tickets in the system.

To setup all cron jobs, the script `bin/Cron.sh` located in the home directory of the 'otrs' user can be used. When this script is executed, it needs a parameter to specify whether you want to install, remove or reinstall the cron jobs. The following parameters can be used:

```
Cron.sh { start } { stop } { restart } [ OTRS user ]
```

Because the cron jobs need to be installed in the crontab file of the 'otrs' user, you need to be logged in as 'otrs'. If you are logged in as root, you can switch to 'otrs' with the command `su otrs`. Execute the commands specified in Script below to install the cron jobs.

## Warning

Please note that other crontab entries of the 'otrs' user will be overwritten or removed by the `Cron.sh` script. Please change the `Cron.sh` script to retain other crontab entries as needed.

```
linux:/opt/otrs/var/cron# cd /opt/otrs/bin/
linux:/opt/otrs/bin# su otrs
linux:~/bin$ ./Cron.sh start
/opt/otrs/bin
Cron.sh - start/stop OTRS cronjobs
Copyright (C) 2001-2009 OTRS AG, http://otrs.org/
(using /opt/otrs) done
linux:~/bin$ exit
exit
linux:/opt/otrs/bin#
```

*Script: Installing the cron jobs.*

The command **crontab -l -u otrs**, which can be executed as root, shows you the crontab file of the 'otrs' user, and you can check if all entries are placed correctly (see Script below).

```
linux:/opt/otrs/bin# crontab -l -u otrs
# --
# cron/aaa_base - base crontab package
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# Who gets the cron emails?
MAILTO="root@localhost"

# --
# cron/cache - delete expired cache
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# delete expired cache weekly (Sunday mornings)
20 0 * * 0 $HOME/bin/otrs.CacheDelete.pl --expired >> /dev/null
30 0 * * 0 $HOME/bin/otrs.LoaderCache.pl -o delete >> /dev/null

# --
# cron/fetchmail - fetchmail cron of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# fetch every 5 minutes emails via fetchmail
#*/5 * * * * /usr/bin/fetchmail -a >> /dev/null

# --
# cron/generic_agent - otrs.GenericAgent.pl cron of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# start generic agent every 20 minutes
*/20 * * * * $HOME/bin/GenericAgent.pl >> /dev/null
```

```
# example to execute GenericAgent.pl on 23:00 with
# Kernel::Config::GenericAgentMove job file
#0 23 * * * $HOME/bin/otrs.GenericAgent.pl -c
"Kernel::Config::GenericAgentMove" >> /dev/null
# --
# cron/generic_agent - GenericAgent.pl cron of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# start generic agent every 10 minutes
*/10 * * * * $HOME/bin/otrs.GenericAgent.pl -c db >> /dev/null
# --
# cron/pending_jobs - pending_jobs cron of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# check every 120 min the pending jobs
45 */2 * * * $HOME/bin/otrs.PendingJobs.pl >> /dev/null
# --
# cron/postmaster - postmaster cron of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# check daily the spool directory of OTRS
#10 0 * * * test -e /etc/init.d/otrs & /etc/init.d/otrs cleanup
    >> /dev/null; test -e /etc/rc.d/init.d/otrs && /etc/rc.d/init.d/otrs
    cleanup >> /dev/null
10 0 * * * $HOME/bin/otrs.CleanUp.pl >> /dev/null
# --
# cron/postmaster_mailbox - postmaster_mailbox cron of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# fetch emails every 10 minutes
*/10 * * * * $HOME/bin/otrs.PostMasterMailbox.pl >> /dev/null
# --
# cron/rebuild_ticket_index - rebuild ticket index for OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# just every day
01 01 * * * $HOME/bin/otrs.RebuildTicketIndex.pl >> /dev/null

# --
# cron/session - delete old session ids of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
```

```
# delete every 120 minutes old/idle session ids
55 */2 * * * $HOME/bin/otrs.DeleteSessionIDs.pl --expired >> /dev/null

# --
# cron/unlock - unlock old locked ticket of the OTRS
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# unlock every hour old locked tickets
35 * * * * $HOME/bin/otrs.UnlockTickets.pl --timeout >> /dev/null

linux:/opt/otrs/bin#
```

*Script: Crontab file.*

## Upgrading the OTRS Framework

These instructions are for people upgrading OTRS from version 3.0 to 3.1, and apply both for RPM and source code (tarball) upgrades.

If you are running a lower version of OTRS you have to follow the upgrade path to 3.0 first (1.1->1.2->1.3->2.0->2.1->2.2->2.3->2.4->3.0->3.1 ...)!

Please note that if you upgrade from OTRS 2.2 or earlier, you have to take an extra step; please read [http://bugs.otrs.org/show\\_bug.cgi?id=6798](http://bugs.otrs.org/show_bug.cgi?id=6798).

Within a single minor version you can skip patch level releases if you want to upgrade. For instance you can upgrade directly from OTRS 3.1.1 to version 3.1.4. If you need to do such a "patch level upgrade", you should skip steps 9, 11 and 13-19.

Please note that for upgrades from 3.1.beta1 or 3.1.beta2, an additional step 21 is needed!

If you are using Microsoft SQL Server as the DBMS for OTRS, please refer to the manual, chapter "Upgrading Microsoft SQL Server Data Types" for instructions how to upgrade the data types used by OTRS (<http://doc.otrs.org/3.1/en/html/upgrading-mssql-datatatypes.html>).

1. Stop all relevant services.

e. g. (depends on used services):

```
shell> /etc/init.d/cron stop
shell> /etc/init.d/postfix stop
shell> /etc/init.d/apache stop
```

2. Backup everything below \$OTRS\_HOME (default: OTRS\_HOME=/opt/otrs):

- Kernel/Config.pm
- Kernel/Config/GenericAgent.pm
- Kernel/Config/Files/ZZZAuto.pm
- var/\*

- as well as the database
3. Make sure that you have backed up everything ;-)
  4. Setup new system (optional)

If possible, try this install on a separate machine for testing first.

5. Install the new release (tar or RPM).

- With the tarball:

```
shell> cd /opt
shell> tar -xzf otrs-x.x.x.tar.gz
shell> ln -s otrs-x.x.x otrs
```

Restore old configuration files.

- Kernel/Config.pm
  - Kernel/Config/GenericAgent.pm
  - Kernel/Config/Files/ZZZAuto.pm
- With the RPM:

```
shell> rpm -Uvh otrs-x.x.x.-01.rpm
```

In this case the RPM update automatically restores the old configuration files.

### 6. Own themes

Note: The OTRS themes between 3.0 and 3.1 are NOT compatible, so don't use your old themes!

Themes are located under \$OTRS\_HOME/Kernel/Output/HTML/\*/\*.dtl (default: OTRS\_HOME=/opt/otrs).

### 7. Set file permissions.

If the tarball is used, execute:

```
shell> cd /opt/otrs/
shell> bin/otrs.SetPermissions.pl
```

with the permissions needed for your system setup.

### 8. Apply the database changes (part 1/2):

```
shell> cd /opt/otrs/
```

```
# MySQL:  
shell> cat scripts/DBUpdate-to-3.1.mysql.sql | mysql -p -f -u root  
      otrs  
# PostgreSQL 8.2+:  
shell> cat scripts/DBUpdate-to-3.1.postgresql.sql | psql otrs  
# PostgreSQL, older versions:  
shell> cat scripts/DBUpdate-to-3.1.postgresql_before_8_2.sql | psql  
      otrs
```

NOTE: If you use PostgreSQL 8.1 or earlier, you need to activate the new legacy driver for these older versions. Do this by adding a new line to your `Kernel/Config.pm` like this:

```
$Self->{DatabasePostgresqlBefore82} = 1;
```

Run the migration script (as user 'otrs', NOT as root):

You must execute the migration script to migrate some data from the old database structure to the new one. Please run:

```
shell> scripts/DBUpdate-to-3.1.pl
```

Apply the database changes (part 2/2):

```
# MySQL:  
shell> cat scripts/DBUpdate-to-3.1-post.mysql.sql | mysql -p -f -u  
      root otrs  
# PostgreSQL 8.2+:  
shell> cat scripts/DBUpdate-to-3.1-post.postgresql.sql | psql otrs  
# PostgreSQL, older versions:  
shell> cat scripts/DBUpdate-to-3.1-post.postgresql_before_8_2.sql |  
      psql otrs
```

9. Refresh the configuration and delete caches. Please run:

```
shell> bin/otrs.RebuildConfig.pl  
shell> bin/otrs.DeleteCache.pl
```

10 Update your web server configuration

Note: this applies only if you use the Apache web server together with mod\_perl2, and do not use the configuration file directly from the OTRS installation directory (e. g. with a symlink from the Apache configuration directory).

Please add a new setting to the Apache configuration file for OTRS:

```
# set mod_perl2 option for generic interface
<Location /otrs/nph-genericinterface.pl>
    PerlOptions -ParseHeaders
</Location>
```

Please see the file /opt/otrs/scripts/apache2-htpd.include.conf for an example of where this new option needs to be added (inside the <IfModule mod\_perl.c> block).

In this file, you will also note a new section on caching:

```
<IfModule mod_headers.c>
    <Directory "/opt/otrs/var/htpd/htdocs/skins/*/*/*css-cache">
        <FilesMatch "\.(css|CSS)$">
            Header set Cache-Control "max-age=2592000 must-
revalidate"
        </FilesMatch>
    </Directory>

    <Directory "/opt/otrs/var/htpd/htdocs/js/*/*/*js-cache">
        <FilesMatch "\.(js|JS)$">
            Header set Cache-Control "max-age=2592000 must-
revalidate"
        </FilesMatch>
    </Directory>
</IfModule>
```

Please activate this in your local installation too, and make sure that mod\_headers is installed and active.

### 11 Restart your services.

e. g. (depends on used services):

```
shell> /etc/init.d/cron start
shell> /etc/init.d/postfix start
shell> /etc/init.d/apache start
```

Now you can log into your system.

### 12 Check installed packages

In the package manager, check if all packages are still marked as correctly installed or if any require reinstallation or even a package upgrade.

### 13 Check for encoding issues

OTRS 3.1 only allows UTF-8 as internal charset. Non-UTF-8 installations of OTRS must switch to UTF-8.

### 14 Escalation events

If you want to use the new escalation events in your system, you need to activate the corresponding GenericAgent job in Kernel/Config/GenericAgent.pm. Please look into Kernel/Config/GenericAgent.pm.dist for an example of how to do this.

### 15.TicketHistory

The TicketHistory type TicketFreeTextUpdate was renamed to TicketDynamicFieldUpdate. If you have any custom reporting using this, please adjust it.

### 16.Ticket event handlers

The Event name TicketFreeTextUpdate\_\$Counter was renamed to TicketDynamicFieldUpdate\_\$FieldName. If you have any custom event handlers for these events, please adapt them.

### 17.DynamicField user preferences module

If you had one or more active custom settings for "PreferencesGroups###Freetext", you need to adapt them to work with the new DynamicFields engine. The PrefKey setting must be changed to "UserDynamicField\_DynamicField", where the part after the \_ is the name of the dynamic field. Existing values would need to be renamed in the database as well.

### 18.Custom free field default value event handler

If you used the event handler Ticket::EventModulePost###TicketFreeFieldDefault (not active by default), you'll need to migrate its configuration to the new setting Ticket::EventModulePost###TicketDynamicFieldDefault.

The configuration of this is slightly different; where you had to specify a Counter indicating the TicketFreeText number previously, now you need to specify the name of the DynamicField (for migrated fields, this will be DynamicField\_TicketFreeKey\$Counter and DynamicField\_TicketFreeText\$Counter). You need two separate entries now if you want to set both the key and the text field.

### 19.ACL changes

If you have any ACLs defined which involve freetext or freetime fields, you need to adjust these ACL definitions.

Please have a look at <http://doc.otsr.org/3.1/en/html/acl.html>. There you can find a list of all possible ACL settings. In general, you need to add the prefix "DynamicField\_" to existing free field definitions, and you can add a new "DynamicField" section to the "Properties" list for situations when a ticket does not exist yet.

Please also note that since OTRS 3.1.5, it is possible to match either the values of an existing ticket as it is on the database (new setting "PropertiesDatabase"), in addition to the existing match against the current values of the form. Details can be found at <http://doc.otsr.org/3.1/en/html/acl.html>.

### 20.SMIME file names

This step is ONLY needed if you use SMIME to encrypt/sign your emails. You need to take this step if you upgrade from 3.0.x OR if you upgrade from 3.1.x before 3.1.6 while using OpenSSL 1.x to encrypt/sign your emails.

Between OTRS 3.0.x and 3.1.x, the file naming of private secret file names changed and need to be updated. In addition, OpenSSL 0.9.x and 1.x use different algorithms to calculate the certificate hash. To update your private secrets and certificate file names, please run this command:

```
shell> bin/otrs.RefreshSMIMEKeys.pl
```

This step must also be taken if you change a running installation from OpenSSL 0.9 to 1.x.

## 21 Database Upgrade During Beta Phase

This step is ONLY needed if you upgrade from 3.1.beta1 or 3.1.beta2! Please apply the required database changes as follows:

MySQL:

```
shell> cat scripts/DBUpdate-3.1.beta.mysql.sql | mysql -p -f -u root otrs
```

PostgreSQL 8.2+:

```
shell> cat scripts/DBUpdate-3.1.beta.postgresql.sql | psql otrs
```

PostgreSQL, older versions:

```
shell> cat scripts/DBUpdate-3.1.beta.postgresql_before_8_2.sql | psql otrs
```

## 22 Well done!

# Upgrading Windows Installer

There is currently no in-place upgrade tool available for OTRS installations that were done with the Windows Installer. The upgrade process basically consists of backing up the database and the filesystem, uninstalling OTRS, installing the new version, restoring the database and running the upgrade procedure if needed.

Upgrading is described in FAQ# 4200351 [<http://faq.otrs.org/otrs/public.pl?Action=PublicFAQZoom;ItemID=351>], and there is also an informative YouTube video [<http://www.youtube.com/watch?v=sf0R-reMTWc>] available.

# Upgrading Microsoft SQL Server Data Types

Starting OTRS version 3.1, OTRS uses the *NVARCHAR* data type rather than *VARCHAR* or *TEXT*, to store textual data. This is because the *NVARCHAR* type has full support for Unicode, whereas the old data types store data in UCS-2 format, which is a sub-set of Unicode. Also, the *TEXT* data type is deprecated since *SQL Server 2005*. Due to this, starting with OTRS version 3.1, the minimal SQL Server version required for operation with OTRS is now *Microsoft SQL Server 2005*.

Because dropping and re-creating these indexes is a time-consuming operation, especially on large databases, please plan enough time for performing the upgrade. We would recommend

that you perform the upgrade on a copy of the database prior to doing the actual conversion to test the upgrade procedure and to time how much time will be needed on your specific environment.

Please make sure that, before you start, there is enough space available on the database server. Make sure the free space on your database server is at least 2.5x the current size of the database.

## **Important**

This upgrade procedure will upgrade all fields of the mentioned data types to the new types. This procedure first removes any indexes and constraints in which these fields are referenced, upgrades the fields, and then adds the indexes and constraints back. It will do so on all tables found in the SQL Server database that OTRS uses. If you would have stored non-OTRS tables in the OTRS database, and these tables contain columns of the data types VARCHAR or TEXT, these will also be updated.

1. Open a Command Line on the OTRS server.
2. Change directory to the OTRS root directory. If you're using the default OTRS installer this would be C:\Program Files\OTRS\OTRS.
3. Run the following command:

```
shell> perl scripts/DUpdate-to-3.1.mssql-datatYPES.pl
```

4. This will generate three scripts in the specified directory scripts\database\update. Run these scripts on the SQL Server database, via SQL Server Management Studio or isql.

# Chapter 4. First steps

This chapter's goal is to give a quick overview of OTRS and the structure of its web interface. The terms agents, customers and administrators are introduced. We also login as the OTRS administrator and take a closer look at the user preferences available for every account.

## Agent web interface

The agent web interface allows agents to answer customer requests, create new tickets for customers or other agents, write tickets about telephone calls with customers, write FAQ entries, edit customer data, etc.

Supposing your OTRS host is reachable via the URL <http://www.example.com> [<http://www.example.com/>], then the OTRS login screen can be reached by using the address <http://www.example.com/otrs/index.pl> [<http://www.example.com/otrs/index.pl>] in a web browser (see Figure below).

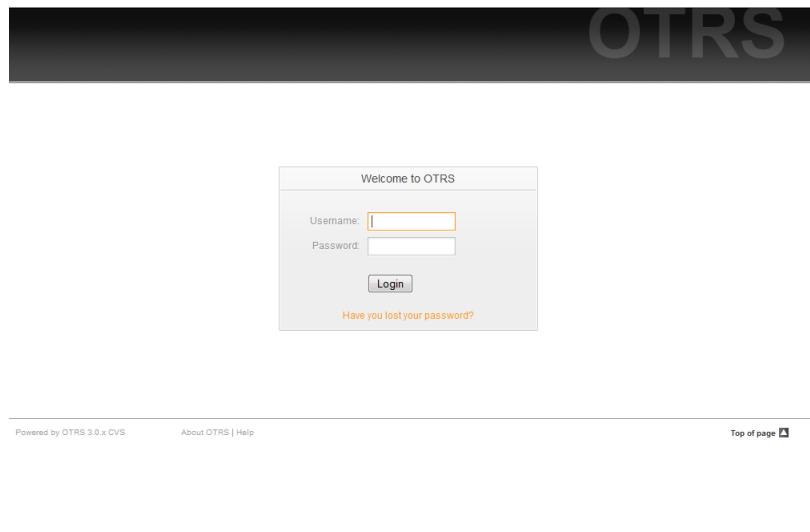
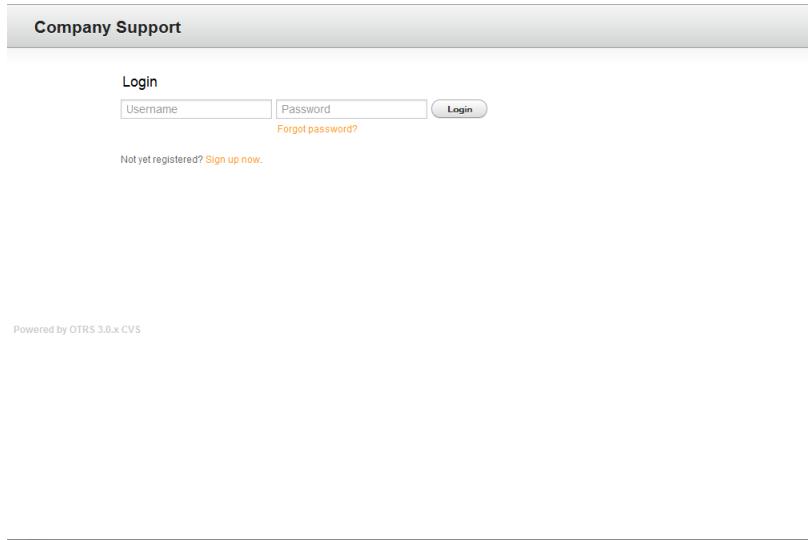


Figure: Login screen of the agent interface.

## Customer web interface

Customers have a separate web interface in OTRS, through which they can create new accounts, change their account settings, create and edit tickets, get an overview on tickets that they created, etc.

Continuing with the above example, the customer login screen can be reached by using the URL <http://www.example.com/otrs/customer.pl> [<http://www.example.com/otrs/customer.pl>] with a web browser (see Figure below).

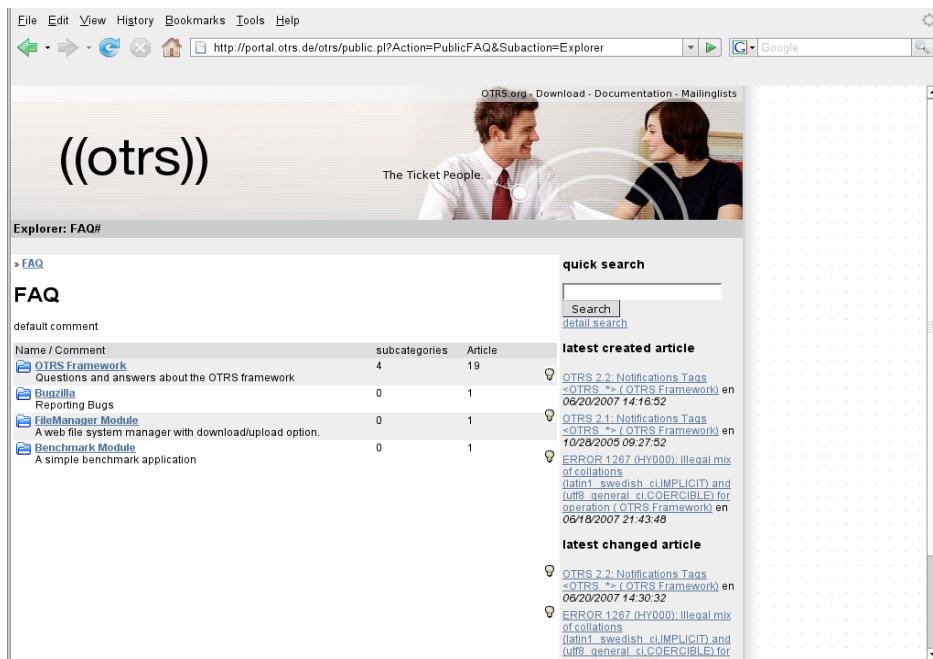


*Figure: Login screen of the customer interface.*

## Public web interface

In addition to the web interfaces for agents and customers, OTRS also has a public web interface that is available through the FAQ-Module. This module needs to be installed separately. It provides public access to the FAQ system, and lets visitors search through FAQ entries without any special authorization.

In our example, the public web interface can be reached via either of the URLs below: <http://www.example.com/otrs/faq.pl> [<http://www.example.com/otrs/faq.pl>] , <http://www.example.com/otrs/public.pl> [<http://www.example.com/otrs/public.pl>]



*Figure: Public web interface.*

## First login

Access the login screen as described in the section Agent web interface . Enter a user name and a password. Since the system has just been freshly installed and no users have yet been created, login as OTRS administrator first, using 'root@localhost' for username and 'root' for password.

### Warning

This account data is valid on every newly installed OTRS system. You should change the password for the OTRS administrator as soon as possible! This can be done via the preferences screen for the OTRS administrator account.

If you don't want to login as OTRS administrator, just enter the user name and password for your normal agent account.

In case you have forgotten your password, you can request the system for a new password. Simply press the link below the Login button, enter the mail address that is registered for your OTRS account into the input field, and press the Submit button (see Figure).

The screenshot shows a web browser window with a dark header bar containing the word 'OTRS'. Below the header is a light gray form area. At the top of the form, it says 'Welcome to OTRS' and 'Request New Password'. There is a text input field labeled 'Username:' followed by a submit button labeled 'Submit'. At the bottom of the form, there is a link 'Back to login'.

Powered by OTRS 3.0.x CVS    About OTRS | Help    Top of page

*Figure: Request new password.*

## The web interface - an overview

On successfully logging into the system, you are presented with the Dashboard page (see Figure below). The Dashboard is completely customizable. It shows your locked tickets, allows direct access through menus to the queue, status and escalation views, and also holds options for creation of new phone and e-mail tickets. It also presents a quick summary of the tickets which are pending, escalated, new and open.

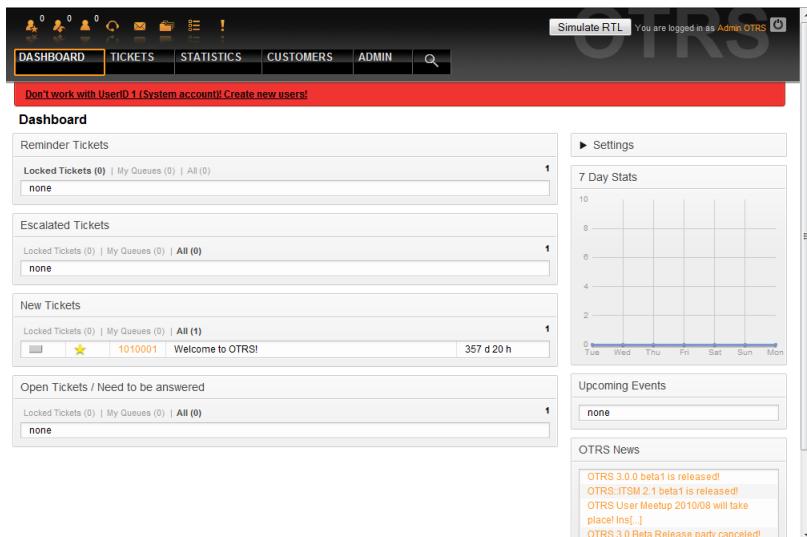


Figure: Dashboard of the agent interface.

To improve clarity, the general web interface is separated into different areas. The top row of each page shows some general information such as the current username, the logout button, icons listing the number of locked tickets with direct access to them, links to create a new phone/e-mail ticket, etc. There are also icons to go to the queue, status and escalation views.

Below the icons row is the navigation bar. It shows a menu that enables you to navigate to different areas or modules of the system, letting you execute some global actions. Clicking on the Dashboard button takes you to the dashboard which is the default start page after login. If you click on the Tickets button, you will get a submenu with options to change the ticket's view, create a new ticket (phone/e-mail) or search for a specific ticket. The Statistics button presents a menu that allows choosing from an overview of the registered statistics, creating a new one or importing an existing one. The Customers button leads you to the Customer Management screen. By clicking the Admin button, you can access all the administrator modules, allowing you to create new agents, queues, etc. There is also a Search button to make ticket searches.

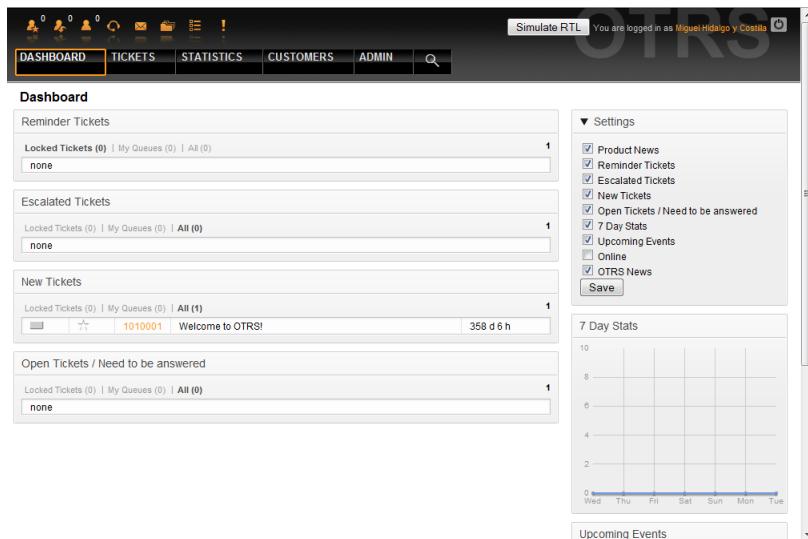
If any associated applications are also installed, e.g. the File Manager or the Web Mailer, buttons to reach these applications are also displayed.

The red bar below the navigation bar shows different system messages. If you are logged in as OTRS administrator, you get a message warning you not to work using this system account.

Below the title of the section you are currently in, there are several subsections each in a separate box. These boxes can be relocated within the same column by clicking on and dragging the box header, and dropping them elsewhere.

In the left column, you can see information on some tickets classified as - reminder, escalated, new and open. In each of the categories, you are also able to see all tickets you are allowed to access, how many tickets you have locked and how many are located in "My Queues". "My Queues" are queues that you identify in your user configuration account preferences as those you have a special interest in tracking.

In the right column is the Settings button. Click on it to expand the section and see the various settings, as shown in Figure. You can then check or uncheck the individual settings options, and save your changes. This section is fixed, so you can not drag and drop it.



*Figure: Dashboard Settings.*

Below the settings area, you can see a section with a graph of ticket activity over the past 7 days. Further below is a section showing Upcoming Events and OTRS News.

Finally at the bottom of the page, the site footer is displayed (see Figure below). It contains links to directly access the OTRS official website, or go to the Top of the page.

Powered by OTRS 3.0.x CVS    About OTRS | Help    Top of page

*Figure: Footer.*

## What is a queue?

On many mail systems, it is common for all messages to flow into an Inbox file, where they remain stored. New messages are appended at the end of the Inbox file. The mail client program used to read and write mails reads this Inbox file and presents the content to the user.

A queue in OTRS is somewhat comparable to an Inbox file, since it too can store many messages. A queue also has features beyond those of an Inbox mail file. As an OTRS agent or user, one needs to remember which queue a ticket is stored in. Agents can open and edit tickets in a queue, and also move tickets from one queue to another. But why would they move tickets?

To explain it more practically, remember the example of Max's company described in an example of a ticket system. Max installed OTRS in order to allow his team to better manage support for company customers buying video recorders.

One queue holding all requests is enough for this situation. However, after some time Max decides to also sell DVD recorders. Now, the customers have questions not only about the video recorder, but also the new product. More and more emails get into the one queue of Max's OTRS and it's hard to have a clear picture of what's happening.

Max decides to restructure his support system, and adds two new queues. So now three queues are being used. Fresh new mails arriving at the ticket system are stored into the old queue titled "raw". Of the two new queues, one titled "video recorder" is for video recorder requests, while the other one titled "dvd recorder" is for dvd recorder requests.

Max asks Sandra to watch the "raw" queue and sort (dispatch) the mails either into "video recorder" or "dvd recorder" queue, depending on the customer request. John only has access to the "video recorder" queue, while Joe can only answer tickets in the "dvd recorder" queue. Max is able to edit tickets in all queues.

OTRS supports access management for users, groups and roles, and it is easy to setup queues that are accessible only to some user accounts. Max could also use another way to get his requests into the different queues, with filter rules. Else, if two different mail addresses are used, Sandra only has to dispatch those emails into the two other queues, that can't be dispatched automatically.

Sorting your incoming messages into different queues helps you to keep the support system structured and tidy. Because your agents are arranged into different groups with different access rights on queues, the system can be optimized even further. Queues can be used to define work flow processes or to create the structure of a company. Max could implement, for example, another queue called "sales", which could contain the sub queues "requests", "offers", "orders", "billing", etc. Such a queue structure could help Max to optimize his order transactions.

Improved system structures, such as through the proper design of queues, can lead to significant time and cost savings. Queues can help to optimize the processes in your company.

## User preferences

OTRS users such as customers, agents and the OTRS administrator can configure their account preferences as per their needs. Agent can access the configuration screen by clicking on their login name at the top right corner of the web interface (see Figure below), and customers must click on the "Preferences" link (see Figure below).

The screenshot shows the 'Edit your preferences' page in the OTRS web interface. At the top, there is a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN, and a search bar. The main content area is titled 'Edit your preferences' and is divided into three columns:

- User Profile:** Contains fields for 'Change password' (New Password, Verify, Password, Update button), 'Language' (Frontend: English (United States), Language: English (United States), Update button), 'Spelling Dictionary' (Default spelling: English, Update button), 'Skin' (Wear this frontend skin: Default, Update button), and 'Theme'.
- Email Settings:** Contains sections for 'New ticket notification' (Send me a notification if there is a new ticket in "My Queues"), 'Ticket follow up notification' (Send me a notification if a customer sends a follow up and I'm the owner of the ticket or the ticket is unlocked and is in one of my subscribed queues), 'Ticket lock timeout notification' (Send me a notification if a ticket is unlocked by the system), and 'Ticket move notification'.
- Other Settings:** Contains sections for 'My Queues' (List of queues: Junk, Misc, Postmaster, Raw), 'QueueView Refresh Time' (Refresh: off, QueueView after:), and 'Screen after new ticket' (Show this: CreateTicket, Update button).

Figure: Agent's personal preferences.

An agent can configure 3 different categories of preferences: user profile, email settings and other settings. The default possibilities are:

### User Profile

- Change the current password.

- Adjust the interface language.
- Switch the frontend skin.
- Shift the frontend theme.
- Activate and configure the out-of-office time.

### Email Settings

- Select events that trigger email notifications to the agent.

### Other Settings

- Select the queues you want to monitor in "My Queues".
- Set the refresh period for the queue view.
- Set the screen to be displayed after a ticket is created.

The screenshot shows the 'Company Personal Support' configuration page. At the top, there are links for 'New Ticket', 'My Tickets', 'Company Tickets', 'Search', 'Preferences', and 'Logout'. A 'Simulate RTL' button is also present. The main area is divided into several sections:

- Interface language:** A dropdown menu set to 'English (United States)' with an 'Update' button.
- Number of displayed tickets:** A dropdown menu set to '25' with an 'Update' button.
- Ticket overview:** A dropdown menu set to 'off' with an 'Update' button.
- Change password:** Fields for 'New Password' and 'Verify Password' with an 'Update' button.
- S/MIME Certificate:** A section for uploading an S/MIME certificate, featuring a 'Browse...' button and an 'Update' button.

At the bottom, there are links for 'Powered by OTRS 3.0.x CVS' and 'About OTRS Help'.

*Figure: Customer's personal preferences.*

A customer can select the web interface language, set the refresh interval for the ticket overview, and choose the maximum amount of shown tickets. It is also possible to set a new password.

# Chapter 5. The ADMIN area of OTRS

## Basics

OTRS administrators use the Admin page on the OTRS web interface to configure the system  
- adding agents, customers and queues, ticket and mail settings, installing additional packages such as FAQ and ITSM, and much more.

Agents who are members of the *admin* group can access the Admin area by clicking the *Admin* link in the navigation bar (see Figure below). The rest of the agents won't see this link.

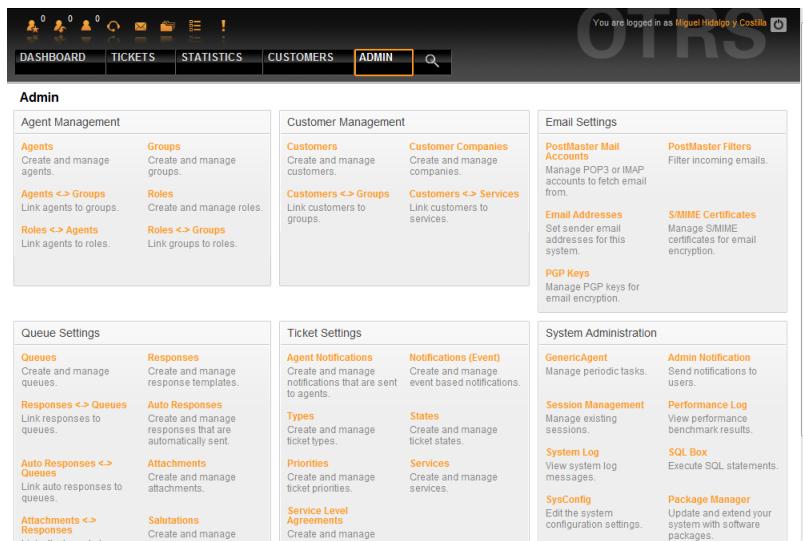


Figure: OTRS Admin screen.

## Agents, Groups and Roles

### Agents

By clicking the link *Agents*, you get access to the agent management screen of OTRS (see Figure below). Administrators can add, change or deactivate agent accounts. Administrators can also manage agent preferences, for instance the language and notification settings for their interface.

#### Note

An OTRS agent account may be deactivated but not deleted. Deactivation is done by setting the Valid flag to *invalid* or *invalid-temporarily*.

## The ADMIN area of OTRS

The screenshot shows the 'Agent Management' section of the OTRS Admin interface. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search bar. A message at the top right says 'You are logged in as Miguel Hidalgo y Costilla'. The main area has a title 'Agent Management' and a sub-section 'Actions' with a button 'Add agent'. Below that is a 'Filter for Agents' input field. A note on the left says 'Agents will be needed to handle tickets. Attention: Don't forget to add a new agent to groups and/or roles!'. On the right, there's a table titled 'List' showing four agents:

USERNAME	NAME	EMAIL	LAST LOGIN	VALID	CHANGED	CREATED
fcoxavier.mina	Francisco Xavier Mina	fcoxavier.mina@freedom.com		valid	08/03/2010 10:38	08/03/2010 10:38
miguel.hidalgo	Miguel Hidalgo y Costilla	miguel.hidalgo@freedom.com	08/03/2010 06:04	valid	08/03/2010 06:01	08/03/2010 06:01
root@localhost	Admin OTRS	root@localhost	08/03/2010 05:59	valid	08/03/2010 05:57	08/03/2010 05:57

At the bottom left is a note 'Powered by OTRS 3.0.x CVS', and at the bottom right is a link 'Top of page'.

Figure: Agent management.

To register an agent, click on the "Add agent" button, type all the needed data and press the Submit button at the bottom of the screen, as shown in Figure.

The screenshot shows the 'Add Agent' form in the OTRS Admin interface. The top navigation bar and user info are the same as in the previous screenshot. The main area has a title 'Agent Management' and a sub-section 'Actions' with a button 'Go to overview'. Below that is a note 'Agents will be needed to handle tickets. Attention: Don't forget to add a new agent to groups and/or roles!'. The right side contains the 'Add Agent' form fields:

- Title: Mr.
- Firstname: Agustin
- Lastname: de turbide
- Username: agustin.deurbide
- Password: (redacted)
- Email: agustin.deurbide@freedom.com
- Valid: valid
- Language: English (United States)
- Frontend language: English
- Spelling Dictionary: English
- Skin: Default
- Theme: Standard
- Out Of Office Time:  On  Off
- Start: 08 / 03 / 2010

Figure: Adding a new agent.

After the new agent account has been created, you should make the agent a member of one or more groups or roles. Information about groups and roles is available in the Groups and Roles sections of this chapter.

## Groups

Every agent's account should belong to at least one group or role. In a brand new installation, there are three pre-defined groups available, as shown in Table 5-1.

**Table 5.1. Default groups available on a fresh OTRS installation**

<b>Group</b>	<b>Description</b>
admin	Allowed to perform administrative tasks in the system.
stats	Qualified to access the stats module of OTRS and generate statistics.
users	Agents should belong to this group, with read and write permissions. They can then access all functions of the ticket system.

**Note**

In a brand new OTRS installation, the group *users* is initially empty. The agent 'root@localhost' belongs by default to the admin and stats groups.

You can access the group management page (see Figure below) by clicking the *Groups* link in the admin area.

The screenshot shows the 'Group Management' page in the OTRS Admin interface. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search bar. Below the navigation, the title 'Group Management' is displayed. On the left, there's a sidebar with 'Actions' and a button for 'Add group'. A note section explains the purpose of the admin and stats groups. The main content area is titled 'List' and contains a table with three rows:

NAME	COMMENT	VALID	CHANGED	CREATED
admin	Group of all admins.	valid	08/03/2010 05:57	08/03/2010 05:57
stats	Group for stats access.	valid	08/03/2010 05:57	08/03/2010 05:57
users	Group for default access.	valid	08/03/2010 05:57	08/03/2010 05:57

At the bottom of the page, there are links for 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

*Figure: Group management.***Note**

As with agents, an OTRS group may be deactivated but not deleted. Deactivation is done by setting the Valid flag to *invalid* or *invalid-temporarily*.

To add an agent to a group, or to change the agents who belong to a group, you can use the link *Agents <-> Groups* from the Admin page (see Figure below).

## The ADMIN area of OTRS

You are logged in as Miguel Hidalgo y Costilla

DASHBOARD TICKETS STATISTICS CUSTOMERS ADMIN

**Manage Agent-Group Relations**

Filter for Agents

Filter for Groups

Overview

AGENTS	GROUPS
agustin delturbide (Agustín de Iturbide)	admin
xavier mina (Francisco Xavier Mina)	stats
miguel.hidalgo (Miguel Hidalgo y Costilla)	users
root@localhost (Admin OTRS)	

Powered by OTRS 3.0.x CVS

Top of page

Figure: Group management.

An overview of all groups and agents in the system is displayed. You can also use the filters to find a specific entity. If you want to change the groups that an agent is member of, just click on the agent's name (see Figure below). To change the agents associated with a group, just click on the group you want to edit (see Figure below).

You are logged in as Miguel Hidalgo y Costilla

DASHBOARD TICKETS STATISTICS CUSTOMERS ADMIN

**Manage Agent-Group Relations**

Actions

Go to overview

Change Group Relations for Agent agustin.delturbide (4)

GROUP	RO	MOVE_INTO	CREATE	NOTE	OWNER	PRIORITY	RW
admin	<input type="checkbox"/>						
stats	<input type="checkbox"/>						
users	<input type="checkbox"/>						

Submit or Cancel

**Reference**

- ro**  
Read only access to the ticket in this group/queue.
- move\_into**  
Permissions to move tickets into this group/queue.
- create**  
Permissions to create tickets in this group/queue.
- note**  
Permissions to add notes to tickets in this group/queue.
- owner**  
Permissions to change the owner of tickets in this group/queue.
- priority**  
Permissions to change the ticket priority in this group/queue.
- rw**  
Full read and write access to the tickets in this group/queue.

Figure: Change the groups an agent belongs to.

AGENT	RO	MOVE_INTO	CREATE	NOTE	OWNER	PRIORITY	RW
agustin deluribe (Agustin de Ibarra)	<input checked="" type="checkbox"/>						
fcxavier mina (Francisco Xavier Mina)	<input checked="" type="checkbox"/>						
miguel hidalgo (Miguel Hidalgo y Costilla)	<input checked="" type="checkbox"/>						
root@localhost (Admin OTRS)	<input checked="" type="checkbox"/>						

Submit or Cancel

Reference

- ro**: Read only access to the ticket in this group/queue.
- move\_into**: Permissions to move tickets into this group/queue.
- create**: Permissions to create tickets in this group/queue.
- note**: Permissions to add notes to tickets in this group/queue.
- owner**: Permissions to change the owner of tickets in this group/queue.
- priority**: Permissions to change the ticket priority in this group/queue.

Figure: Change the agents that belong to a specific group.

Each group has a set of rights associated with it, and each member agent may have some combination of these rights for themselves. A list of the permissions / rights is shown in Table 5-2.

**Table 5.2. Rights associated with OTRS Groups**

Right	Description
ro	Read only access to the tickets, entries and queues of this group.
move into	Right to move tickets or entries between queues or areas that belong to this group.
create	Right to create tickets or entries in the queues or areas of this group.
owner	Right to update the owner of tickets or entries in queues or areas that belong to this group.
priority	Right to change the priority of tickets or entries in queues or areas that belong to this group.
rw	Full read and write access on tickets or entries in the queues or areas that belong to this group.

## Note

By default, the QueueView only lists tickets in queues that an agent has *rw* access to, i.e., the tickets the agent needs to work on. If you want to change this behaviour, you can set `Ticket::Frontend::AgentTicketQueue###ViewAllPossibleTickets` to Yes.

## Roles

Roles are a powerful feature to manage the access rights of many agents in a very simple and quick manner. They are particularly applicable on large, complex support systems with a lot of agents, groups and queues. An example below explains when they may be used.

Suppose that you have a system with 100 agents, 90 of them with access to a single queue called "support" where all support requests are handled. The "support" queue contains some

sub queues. The other 10 agents have permission to access all queues of the system. These 10 agents dispatch tickets, watch the raw queue and move spam messages into the "junk" queue.

The company now opens a new department that sells some products. Order request and acceptance, order confirmation, bills, etc. must be processed, and some of the company's agents shall do this via OTRS. The different agents have to get access to the new queues that must be created.

Because it would take a long time to change the access rights for the different agents manually, roles that define the different access levels can be created. The agents can then be added to one or more roles, with their rights automatically changed. If a new agent account is created, it is also possible to add this account to one or more roles.

## Note

Roles are really useful when maintaining larger OTRS installations. You should take care in their use though. Mixing Agent to Group with Agent to Role mappings can make for a complex access control scheme, difficult to understand and maintain. If you wish to use only roles and disable the Agents <-> Groups option in the Admin area, you can do so by modifying the Frontend::Module###AdminUserGroup in the SysConfig. Be aware that this won't remove already existing Agents to Group assignments!

You can access the role management section (see Figure below ) by clicking the *Roles* link on the Admin page.

NAME	COMMENT	VALID	CHANGED	CREATED
Help desk	Member of the help desk [..]	valid	08/03/2010 14:37	08/03/2010 14:37
IT supervisor	Supervisor of the IT depart[..]	valid	08/03/2010 14:29	08/03/2010 14:29
Service desk	Member of the service desk[..]	valid	08/03/2010 14:37	08/03/2010 14:36

*Figure: Role management.*

## Note

As with agent and groups, roles once created can be deactivated but not deleted. To deactivate, set the Valid option to *invalid* or *invalid-temporarily*.

An overview of all roles in the system is displayed. To edit a role's settings, click on the role's name. In a fresh new OTRS installation, there are no roles defined by default. To register one, click on the "Add role" button, provide the needed data and submit it (see Figure below).

## The ADMIN area of OTRS

The screenshot shows the 'Role Management' section of the OTRS Admin interface. On the left, there's a sidebar with 'Actions' (containing 'Go to overview') and a 'Note' box explaining how to create roles and assign them to users. The main panel is titled 'Add Role' and contains fields for 'Name' (set to 'IT supervisor'), 'Valid' (set to 'valid'), and 'Comment' (set to 'Supervisor of the IT department'). There are 'Submit' and 'Cancel' buttons at the bottom.

Figure: Adding a new role.

To get an overview of all roles and agents in the system, click on the link Roles <-> Agents on the Admin page. You can also use filters to find a specific element. If you want to change the roles associated with an agent, just click on the agent's name (see Figure below). To change the agents associated with a role, click on the role you want to edit (see Figure below).

The screenshot shows the 'Manage Role-Agent Relations' section. It lists the roles assigned to the agent 'agustin delturbide'. The roles listed are 'Help desk', 'IT supervisor', and 'Service desk'. The 'IT supervisor' role has the 'ACTIVE' checkbox checked. There are 'Submit' and 'Cancel' buttons at the bottom.

Figure: Change the Roles associated with an Agent.

## The ADMIN area of OTRS

The screenshot shows the 'Manage Role-Agent Relations' page in the OTRS Admin interface. At the top, there is a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN, and a search bar. A message indicates the user is logged in as 'Miguel Hidalgo y Costilla'. The main content area is titled 'Change Agent Relations for Role Help desk (3)'. It displays a table with columns for 'AGENT' and 'ACTIVE'. The table lists four agents: 'agustin delturvide (Agustín de Iturbide)', 'fcoxavier mina (Francisco Xavier Mina)', 'miguel hidalgo (Miguel Hidalgo y Costilla)', and 'root@localhost (Admin OTRS)'. The 'ACTIVE' column contains checkboxes, with the first three checked and the last one unchecked. Below the table are 'Submit' and 'Cancel' buttons. The bottom of the page includes a footer with 'Powered by OTRS 3.0.x CVS' and a 'Top of page' link.

Figure: Change the Agents associated with a specific Role.

To get an overview of all roles and groups in the system, click on the link Roles <-> Groups on the Admin page. You will see a similar screen as the one shown in the Figure. You can also use filters to find a specific entity.

The screenshot shows the 'Manage Role-Group Relations' page in the OTRS Admin interface. The layout is similar to the previous figure, with a navigation bar and a message about the user being logged in. The main content area is titled 'Overview'. It shows two tables: 'ROLES' and 'GROUPS'. The 'ROLES' table lists 'Help desk', 'IT supervisor', and 'Service desk'. The 'GROUPS' table lists 'admin', 'stats', and 'users'. There are also 'Filter for Roles' and 'Filter for Groups' input fields on the left side of the main content area. The bottom of the page includes a footer with 'Powered by OTRS 3.0.x CVS' and a 'Top of page' link.

Figure: Manage Roles-Groups relations.

To define the different access rights for a role, click on the name of a role or a group (see below the Figures 5.13 and 5.14, respectively).

This screenshot shows the 'Manage Role-Group Relations' page for the 'Help desk' role. The top navigation bar includes links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN, and a search bar. A message at the top right indicates the user is logged in as 'Miguel Hidalgo y Costilla'. The main content area has a title 'Change Group Relations for Role Help desk (3)'. It features a table where rows represent groups ('admin', 'stats', 'users') and columns represent permissions: RO, MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. The 'admin' group has checked boxes for RO, MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. The 'stats' group has checked boxes for MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. The 'users' group has checked boxes for MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. Below the table are 'Submit' and 'Cancel' buttons. A 'Note' section provides instructions for selecting role-group permissions. A 'Reference' section defines the permissions: RO (Read only access), MOVE\_INTO (Permissions to move tickets into this group/queue), CREATE (Permissions to create tickets in this group/queue), PRIORITY (Permissions to change the ticket priority in this group/queue), and RW (Full read and write access to the tickets in this group/queue). At the bottom left is a 'Powered by OTRS 3.0.x CVS' link, and at the bottom right is a 'Top of page' link.

*Figure: Change Group relations for a Role.*

This screenshot shows the 'Change Role Relations for a Group' page for the 'admin' group. The top navigation bar and user information are identical to the previous screenshot. The main content area has a title 'Change Role Relations for Group admin (2)'. It features a table where rows represent roles ('Help desk', 'IT supervisor', 'Service desk') and columns represent permissions: RO, MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. The 'Help desk' role has checked boxes for RO, MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. The 'IT supervisor' role has checked boxes for MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. The 'Service desk' role has checked boxes for MOVE\_INTO, CREATE, NOTE, OWNER, PRIORITY, and RW. Below the table are 'Submit' and 'Cancel' buttons. A 'Note' section provides instructions for selecting role-group permissions. A 'Reference' section defines the permissions: RO (Read only access), MOVE\_INTO (Permissions to move tickets into this group/queue), CREATE (Permissions to create tickets in this group/queue), PRIORITY (Permissions to change the ticket priority in this group/queue), and RW (Full read and write access to the tickets in this group/queue). At the bottom left is a 'Powered by OTRS 3.0.x CVS' link, and at the bottom right is a 'Top of page' link.

*Figure: Change Role relations for a Group.*

## Customers and Customer Groups

### Customers

OTRS supports different types of users. Using the link "Customers" (via the navigation bar, or the Admin page), you can manage the accounts of your customers (see Figure below), who can log into the system via the Customers interface (customer.pl). Through this interface, your customers can create tickets and access them as they are updated. It is important to know that a customer is needed for the ticket history in the system.

## The ADMIN area of OTRS

The screenshot shows the 'Customer Management' page in the OTRS Admin area. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS (which is highlighted in orange), and ADMIN. Below the navigation is a search bar and a note: 'Customer will be needed to have a customer history and to login via customer panel.' On the left, there's an 'Actions' section with a search input, a 'Add customer' button, and a 'Database Backend' dropdown. The main area is titled 'List' and contains a table with columns: USERNAME, NAME, EMAIL, CUSTOMERID, LAST LOGIN, and VALID. The table data is as follows:

USERNAME	NAME	EMAIL	CUSTOMERID	LAST LOGIN	VALID
ignacio.lopez	Ignacio López Rayón	ignacio.lopez@freedom.com	Independence		valid
leona.vicario	Leona Vicario	leona.vicario@freedom.com	Independence		valid
vicente.guerrero	Vicente Guerrero	vicente.guerrero@freedom.com	Independence	08/03/2010 06:05	valid

At the bottom left is a note: 'Powered by OTRS 3.0.x CVS'. At the bottom right is a 'Top of page' link.

Figure: Customer management.

You can search for a registered customer, or edit their settings by clicking on their name. You also have the possibility to change the customer back-end, for further information please refer to the chapter about external back-ends.

To create a new customer account, click on the "Add customer" button (see Figure below). Some of the fields are mandatory, i.e., they have to contain values, so if you leave one of those empty, it will be highlighted in red.

The screenshot shows the 'Add Customer' form in the OTRS Admin area. The navigation bar at the top is identical to the previous screenshot. The left sidebar has a 'Note' section: 'Customer will be needed to have a customer history and to login via customer panel.' The main form is titled 'Add Customer' and contains the following fields:

Title:	Mr.
Firstname:	Ignacio
Lastname:	Allende
Username:	ignacio.allende
Password:	(empty)
Email:	ignacio.allende@freedom.com
CustomerID:	Independence
Phone:	(empty)
Fax:	(empty)
Mobile:	(empty)
Street:	(empty)
Zip:	(empty)
City:	(empty)
Country:	(empty)
Comment:	(empty)
Valid:	valid

Figure: Adding a customer.

Customers can access the system by providing their username and password. The CustomerID is needed by the system to identify the user and associated tickets. Since the email address is a unique value, it can be used as the ID.

### Note

As with agents, groups and roles, customers can not be deleted from the system, only deactivated by setting the Valid option to *invalid* or *invalid-temporarily*.

## Customer Groups

Customer users can also be added to a group, which can be useful if you want to add customers of the same company with access to one or a few queues. First create the group to which your customers will belong, via the Group management module. Then add the queues and select the new group for the queues.

The next step is to activate the customer group support. This can be done with the configuration parameter CustomerGroupSupport, from the Admin SysConfig option. Using the parameter CustomerGroupAlwaysGroups, you can specify the default groups for a newly added customer, so that every new account will be automatically added to these groups.

Through the link "Customers <-> Groups" you can manage which customer shall belong to the different groups (see Figure below).

**Manage Customer-Group Relations**

**Actions**

Search for customers (wildcards are allowed).  
Edit Customer Default Groups  
These groups are automatically assigned to all customers. They can be administered through the configuration setting "CustomerGroupAlwaysGroups".  
Filter for Groups

**Search Result:**

**CUSTOMERS (4)**  
Mr. Ignacio Allende <ignacio.allende@freedom.com>  
(Independence)  
Mr. Ignacio López Rayón <ignacio.lopez@freedom.com>  
(Independence)  
Mr. Vicente Guerrero <vicente.guerrero@freedom.com>  
(Independence)  
Mrs. Leona Vicario <leona.vicario@freedom.com>  
(Independence)

**GROUPS**  
admin  
stats

**Customer Default Groups:**

**GROUPS**  
users  
info  
No changes can be made to these groups.

*Figure: Customer-Group relations management.*

To define the different groups a customer should be part of and vice versa, click on the corresponding customer username or group (see below the Figures 5.16 and 5.17, respectively).

**Manage Customer-Group Relations**

**Actions**

Go to overview  
Edit Customer Default Groups  
These groups are automatically assigned to all customers. They can be administered through the configuration setting "CustomerGroupAlwaysGroups".  
Filter for Groups

**Note:**  
Select the customer group permissions.  
If nothing is selected, then there are no permissions in this group (tickets will not be available for the customer).

**Change Group Relations for Customer ignacio.allende (ignacio.allende)**

GROUP	<input type="checkbox"/> RO	<input type="checkbox"/> RW
admin	<input type="checkbox"/>	<input type="checkbox"/>
stats	<input type="checkbox"/>	<input type="checkbox"/>

**Customer Default Groups:**

**GROUPS**  
users  
info  
No changes can be made to these groups.

**Reference**

**RO**  
Read only access to the ticket in this group/queue.

**RW**  
Full read and write access to the tickets in this group/queue.

*Figure: Change Group relations for a Customer.*

The screenshot shows the 'Manage Customer-Group Relations' page. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search bar. A message at the top right says 'You are logged in as Miguel Hidalgo y Costilla'. Below the navigation, there's a table titled 'CUSTOMER (4)' listing four customers: Mr. Ignacio Allende, Mr. Ignacio López Rayón, Mr. Vicente Guerrero, and Mrs. Leona Vicario. To the right of the table are two checkboxes: 'RO' (Read Only) and 'RW' (Read Write). Below the table is a 'Note' section with instructions about selecting customer group permissions. There are also 'Reference' sections for 'ro' and 'rw' with their respective descriptions. At the bottom left is a note about the system being 'Powered by OTRS 3.0.x CVS', and at the bottom right is a 'Top of page' link.

*Figure: Change Customer relations for a Group.*

## Queues

Clicking on the link "Queues" of the Admin page, you can manage the queues of your system (see Figure below). In a new OTRS installation there are 4 default queues: Raw, Junk, Misc and Postmaster. All incoming messages will be stored in the "Raw" queue if no filter rules are defined. The "Junk" queue can be used to store spam messages.

The screenshot shows the 'Manage Queues' page. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (highlighted), and a search bar. A message at the top right says 'You are logged in as Miguel Hidalgo y Costilla'. Below the navigation, there's a table titled 'List' showing four default queues: Junk, Misc, Postmaster, and Raw. Each row includes columns for NAME, GROUP, COMMENT, VALID, CHANGED, and CREATED. At the bottom left is a note about the system being 'Powered by OTRS 3.0.x CVS', and at the bottom right is a 'Top of page' link.

NAME	GROUP	COMMENT	VALID	CHANGED	CREATED
Junk	users	All junk tickets.	valid	08/03/2010 05:57	08/03/2010 05:57
Misc	users	All misc tickets.	valid	08/03/2010 05:57	08/03/2010 05:57
Postmaster	users	Post master queue.	valid	08/03/2010 05:57	08/03/2010 05:57
Raw	users	All default incoming ticket...	valid	08/03/2010 05:57	08/03/2010 05:57

*Figure: Queue management.*

Here you can add queues (see Figure below) and modify them. You can specify the group that should use the queue. You can also set the queue as a sub-queue of an existing queue.

The screenshot shows the OTRS Admin interface with the 'Manage Queues' section selected. A modal window titled 'Add Queue' is open, prompting for queue details. The fields include:

- Name:** Support
- Sub-queue of:** (dropdown menu)
- Group:** admin
- Unlock timeout minutes:** 1220
- Escalation - first response time (minutes):** 60 (Notify by dropdown)
- Escalation - update time (minutes):** 180 (Notify by dropdown)
- Escalation - solution time (minutes):** 300 (Notify by dropdown)

Below each escalation setting is a note explaining the behavior if no communication occurs: 0 = no unlock - 24 hours = 1440 minutes - Only business hours are counted. If an agent locks a ticket and does not close it before the unlock timeout has passed, the ticket will unlock and will become available for other agents.

Figure: Adding a new queue.

You can define an unlock timeout for a queue - if an agent locks a ticket and does not close it before the unlock timeout has passed, the ticket will be automatically unlocked and made available for other agents to work on.

There are three escalation time settings that can be associated at queue level:

### Escalation - First Response Time

- After creation of the ticket, if the time defined here expires without any communication to the customer, either by email or phone, the ticket is escalated.

### Escalation - Update Time

- If there is any customer followup via e-mail or the customer portal and recorded in the ticket, the escalation update time is reset. If there is no customer contact before the time defined here expires, the ticket is escalated.

### Escalation - Solution Time

- If the ticket is not closed before the time defined here expires, the ticket is escalated.

With 'Ticket lock after a follow-up', you can define if a ticket should be set to 'locked' to the old owner if a ticket that has been closed and later is re-opened. This ensures that a follow up for a ticket is processed by the agent that has previously handled that ticket.

The parameter for the system address specifies the email address that will be used for the outgoing tickets of this queue. There is also possibility to associate a queue with a salutation and a signature, for the email answers. For more detailed information, please refer to the sections email addresses, salutations and signatures.

### Note

As with agents, groups and customers, queues cannot be deleted, only deactivated, by setting the Valid option to *invalid* or *invalid-temporarily*.

# Salutations, signatures, attachments and responses

## Salutations

A salutation is a text module for a response. Salutations can be linked to one or more queues, as described in the section about queues. A salutation is used only if a ticket from a queue the salutation is linked to, is answered. To manage the different salutations of your system, use the "Salutations" link of the admin area (see Figure below).

The screenshot shows the OTRS Admin interface with the 'ADMIN' tab selected. The main content area is titled 'Salutation Management'. On the left, there's an 'Actions' sidebar with a 'Add salutation' button. The main area shows a table titled 'List' with columns: NAME, COMMENT, VALID, CHANGED, and CREATED. One row is visible: 'system standard salutation (en)' with comments 'Standard Salutation.', status 'valid', and creation and change dates '08/03/2010 05:57'. At the bottom left is a note 'Powered by OTRS 3.0.x CVS', and at the bottom right is a 'Top of page' link.

*Figure: Salutation management.*

After a default installation there is already one salutation available, "system standard salutation (en)".

To create a new salutation, press the button "Add salutation", provide the needed data and submit it (see Figure below).

The screenshot shows the 'Add Salutation' form within the OTRS Admin interface. The 'Name' field is populated with 'Example of salutation'. The 'Salutation' field contains a rich text editor with the following placeholder text:

```
Hello <OTRS_CUSTOMER_DATA_UserFirstname>,  
Here is some information about your ticket:  
The current owner of the ticket <OTRS_TICKET_TicketNumber> is: <OTRS_OWNER_UserFirstname>. We expect to solve your issue in less than 24 hours.  
Thank you and feel free to contact us if you have any question.
```

*Figure: Adding a new salutation.*

It is possible to use variables in salutations. When you respond to a ticket, the variable names will be replaced by their values.

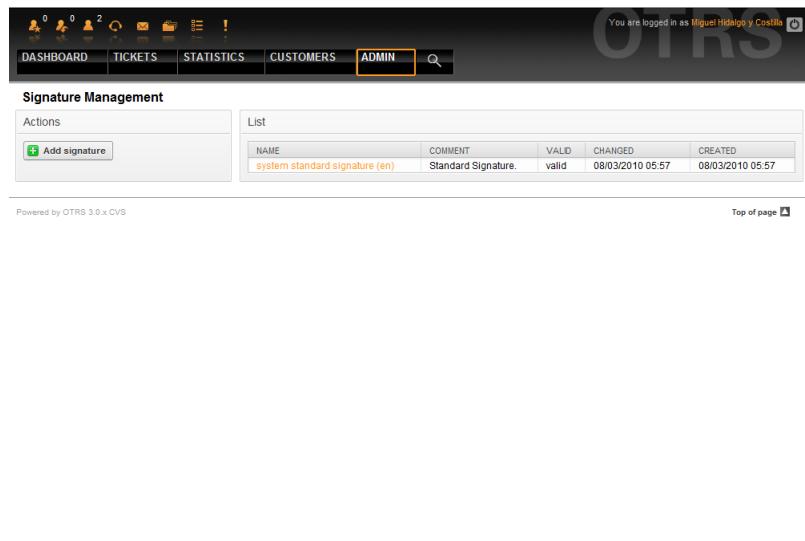
The different variables you can use in responses are listed in the lower part of the salutation screen. If you use, for example, the variable <OTRS\_LAST\_NAME> the last name of the ticket's sender will be included in your reply.

## Note

As with other OTRS entities, salutations cannot be deleted, only deactivated by setting the Valid option to *invalid* or *invalid-temporarily*.

# Signatures

Another text module for a response is the signature. Signatures can be linked to a queue, as described in the section about the queues. Only if a signature is linked to a queue will it be included into the response text. Through the "Signatures" link of the Admin page, you can manage the signatures in your system (see Figure below).



*Figure: Signatures management.*

After a fresh installation of OTRS, there is one predefined signature stored in your system, "system standard signature (en)".

To create a new signature, press the button "Add signature", provide the needed data and submit it (see Figure below).

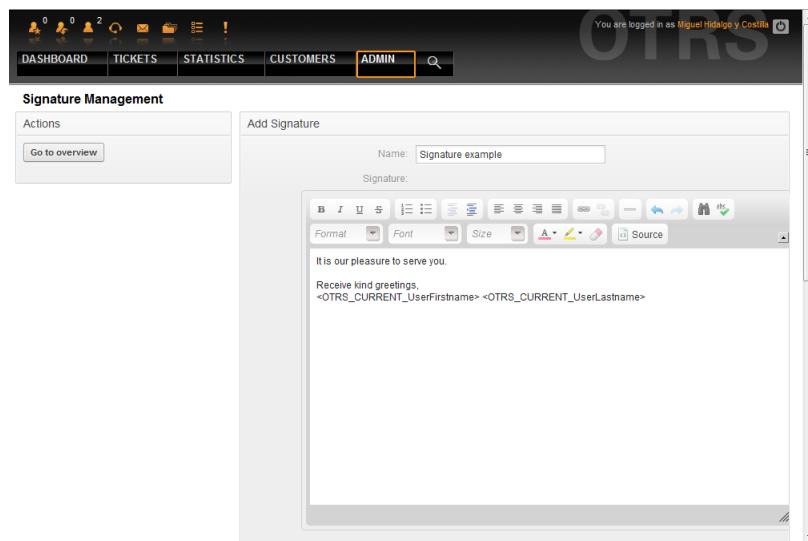


Figure: Adding a new signature.

Like salutations, signatures can also contain dynamical content, such as the first and last name of the agent who answers the ticket. Here too, variables can be used to replace the content of the signature text for every ticket. See the lower part of the signatures screen for the variables which can be used. If you include the variable <OTRS\_LAST\_NAME> in a signature for example, the last name of the agent who answers the ticket will replace the variable.

## Note

As with salutations, signatures too cannot be deleted, only deactivated by setting the Valid option to *invalid* or *invalid-temporarily*.

## Attachments

You can also optionally add one or more attachments for a response. If the response is selected, the attachments will be attached to the message composition window. If necessary, the agent can remove the attachment from an individual response before sending it to the customer.

Through the "Attachment" link of the Admin page, you can load the attachments into the database of the system (see Figure below).

## The ADMIN area of OTRS

This screenshot shows the 'Attachment Management' section of the OTRS Admin interface. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, and ADMIN (which is highlighted). A search bar is also present. On the right, a message indicates the user is logged in as 'Miguel Hidalgo y Costilla'. The main content area is titled 'Attachment Management' and contains a table titled 'List' showing two attachments:

NAME	FILENAME	COMMENT	VALID	CHANGED	CREATED	DELETE
Sample 1	homepage-otrs.png	Just a sample of att[.]	valid	08/03/2010 23:22	08/03/2010 23:22	[Delete]
Sample 2	first-screen.png	Another sample	valid	08/03/2010 23:22	08/03/2010 23:22	[Delete]

At the bottom left, there's a link 'Powered by OTRS 3.0.x CVS'. On the right, a link 'Top of page'.

*Figure: Attachments management.*

To create a new attachment, press the button "Add attachment", provide the needed data and submit it (see Figure below).

This screenshot shows the 'Add Attachment' form within the OTRS Admin interface. The top navigation bar and user information are identical to the previous screenshot. The main content area is titled 'Add Attachment' and contains fields for inputting attachment details:

Name: Sample 3  
Attachment: C:\Intel\Logs\IntelGFX.log [Browse...]  
Valid: valid  
Comment: Just another sample.

At the bottom, there are 'Submit' and 'Cancel' buttons. The footer links 'Powered by OTRS 3.0.x CVS' and 'Top of page' are also present.

*Figure: Adding a new attachment.*

If an attachment is stored it can be linked to one or more responses. Click on the "Attachment <-> Responses" link of the Admin page (see Figure below).

## The ADMIN area of OTRS

---

This screenshot shows the 'Manage Responses <-> Attachments Relations' page in the OTRS Admin interface. At the top, there is a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search bar. A message indicates the user is logged in as 'Miguel Hidalgo y Costilla'. Below the navigation, the title 'Manage Responses <-> Attachments Relations' is displayed, followed by a sub-section titled 'Overview'. The 'RESPONSES' section lists three responses: 'empty answer' (highlighted in orange), 'More details needed', and 'test answer'. The 'ATTACHMENTS' section lists three attachments: 'Sample 1 (homepage-otrs.png)', 'Sample 2 (first-screen.png)', and 'Sample 3 (IntelGFXLog)'. At the bottom left, it says 'Powered by OTRS 3.0.x CVS', and at the bottom right, there is a 'Top of page' link.

*Figure: Linking Attachments to Responses.*

To associate different attachments with a specific response and vice versa, click on the corresponding response name or attachment (see below the Figures 5.27 and 5.28, respectively).

This screenshot shows the 'Change Attachment relations for a Response' page in the OTRS Admin interface. The top navigation bar and user information are identical to the previous screenshot. The main content area has a title 'Manage Responses <-> Attachments Relations' and a sub-section 'Actions' with a 'Go to overview' button. Below this, it says 'Change StandardAttachment Relations for Standard Response empty answer (1)'. It shows a table titled 'STANDARDATTACHMENT' with a column for attachments and a column for 'ACTIVE' status. Three attachments are listed: 'Sample 1 (homepage-otrs.png)' (ACTIVE), 'Sample 2 (first-screen.png)' (not active), and 'Sample 3 (IntelGFXLog)' (ACTIVE). At the bottom, there is a 'Submit' button and a 'Cancel' link. The footer indicates 'Powered by OTRS 3.0.x CVS' and a 'Top of page' link.

*Figure: Change Attachment relations for a Response.*

STANDARD RESPONSE	ATTACHMENT	ACTIVE
empty answer	0	<input checked="" type="checkbox"/>
More details needed	0	<input type="checkbox"/>
test answer	0	<input type="checkbox"/>

Figure: Change Response relations for an Attachment.

## Responses

To speed up the answering of tickets and to standardize the look of answers, you can define responses in OTRS. A response can be linked to one or more queues and vice versa. In order to be able to use a response quickly, the different responses are displayed below every ticket in the QueueView or in "My Queues".

On a fresh OTRS installation, the "empty answer" response is defined for every queue. Clicking the "Responses" link on the Admin page brings you to the Responses management page (see Figure below).

NAME	ATTACHMENTS	COMMENT	VALID	CHANGED	CREATED	DELETE
empty answer	0		valid	08/03/2010 05:57	08/03/2010 05:57	
test answer	0		valid	08/03/2010 05:57	08/03/2010 05:57	

Figure: Responses management.

To create a new response, click on the "Add response" button, provide the required data and submit it (see Figure below).

## The ADMIN area of OTRS

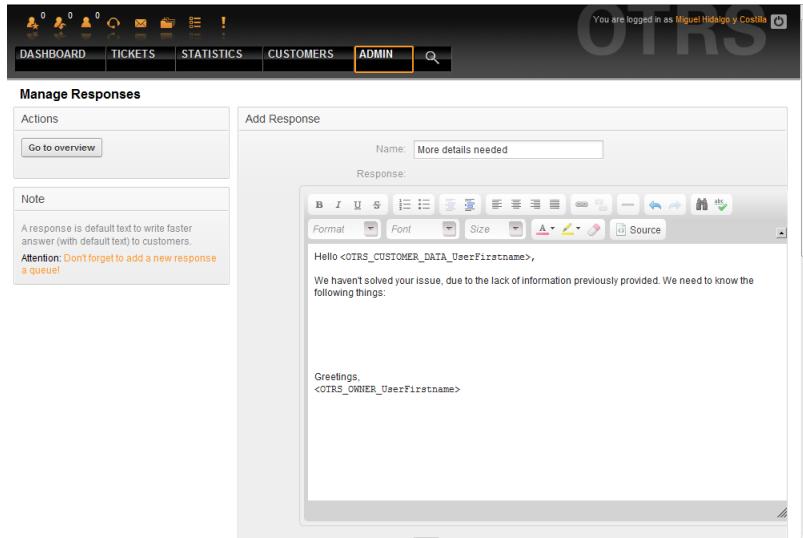


Figure: Adding a response.

To add/remove responses to one or more queues, click on the "Responses <-> Queues" link on the Admin page (see Figure below). You can also use filters to get information on a specific entity.

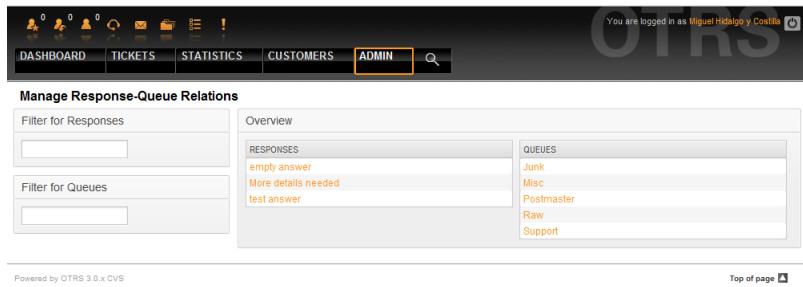


Figure: Response-Queue relations management.

To define the different responses that will be available for a queue and vice versa, click on the corresponding response or queue (see below the Figures 5.32 and 5.33, respectively).

This screenshot shows the 'Manage Response-Queue Relations' page in the OTRS Admin interface. The top navigation bar includes links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search bar. A message at the top right indicates the user is logged in as 'Miguel Hidalgo y Costilla'. The main content area is titled 'Change Queue Relations for Response More details needed (3)'. It features a table with columns for 'QUEUE' and 'ACTIVE'. The rows show five queues: Junk, Misc, Postmaster, Raw, and Support, each with an 'ACTIVE' checkbox. The 'Misc' and 'Support' checkboxes are checked. At the bottom are 'Submit' and 'Cancel' buttons.

*Figure: Change Queue relations for a Response.*

This screenshot shows the 'Manage Response-Queue Relations' page for the 'Postmaster' queue. The top navigation bar and user information are identical to the previous screenshot. The main content area is titled 'Change Response Relations for Queue Postmaster (1)'. It features a table with columns for 'RESPONSE' and 'ACTIVE'. The row shows three responses: 'empty answer', 'More details needed', and 'test answer', each with an 'ACTIVE' checkbox. The 'empty answer' and 'test answer' checkboxes are checked. At the bottom are 'Submit' and 'Cancel' buttons.

*Figure: Change Response relations for a Queue.*

The structure of a response is intuitive. It includes the salutation associated with the queue, then the text of the response, then the quoted ticket text, and finally the signature associated with the queue.

## Auto responses

OTRS allows you to send automatic responses to customers on the occurrence of certain events, such as the creation of a ticket in certain queue, reception of a follow-up message on a ticket, closure or rejection of a ticket, etc. To manage such responses, click the link "Auto responses" on the Admin page (see Figure below).

## The ADMIN area of OTRS

NAME	TYPE	COMMENT	VALID	CHANGED	CREATED
default follow up (after a ticket follow up has been added)	auto follow up		valid	08/03/2010 05:57	08/03/2010 05:57
default reject (after follow up and rejected of a closed ticket)	auto reject		valid	08/03/2010 05:57	08/03/2010 05:57
default reject/new ticket created (after closed follow up with new ticket creation)	auto reply/new ticket		valid	08/03/2010 05:57	08/03/2010 05:57
default reply (after new ticket has been created)	auto reply		valid	08/03/2010 05:57	08/03/2010 05:57

Figure: Auto Response management.

To create an automatic response, click on the button "Add auto response", provide the needed data and submit it (see Figure below).

Figure: Adding an Auto Response.

The subject and text of auto responses can be generated by variables, just as in signatures and salutations. If you insert, for example, the variable <OTRS\_CUSTOMER\_EMAIL[5]> into the body of the auto answer, the first 5 lines of the customer mail text will be inserted into the auto answer. You will find more details about the valid variables that can be used at the bottom of the screen shown in the Figure.

For every automatic answer, you can specify the event that should trigger it. The system events that are available after a default installation are described in the Table 5-3.

**Table 5.3. Events for Auto answers**

Name	Description
auto reply	Creation of a ticket in a certain queue.
auto reply/new ticket	Reopening of an already closed ticket, e.g. if a customer replies to such ticket.
auto follow up	Reception of a follow-up for a ticket.
auto reject	Automatic rejection of a ticket, done by the system.
auto remove	Deletion of a ticket, done by the system.

## Note

As with other OTRS entities, Auto responses too cannot be deleted, only deactivated, by setting the Valid option to *invalid* or *invalid-temporarily*.

To add an auto response to a queue, use the "Auto Response <-> Queues" link on the Admin page (see Figure below). All system events are listed for every queue, and an auto answer with the same event can be selected or removed via a listbox.

Figure: Queue-Auto Response relations management.

To define the different auto responses that will be available for a queue, click on the corresponding queue name (see Figure below). It is also possible to edit an existing auto response - to do so, click on the response and edit in the same manner as editing a new auto response.

This screenshot shows the 'Manage Queue-Auto Response Relations' page for the 'Junk' queue in OTRS. The top navigation bar includes links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN, and a search bar. The main content area has a title 'Change Auto Response Relations for Queue Junk (3)'. It contains several dropdown menus for different auto-response settings:

- Change "auto reply" settings: default reply (after new ticket has been created)
- Change "auto reply/new ticket" settings: default reject (new ticket created after creation)
- Change "auto follow up" settings: default follow up (after a ticket follows up)
- Change "auto reject" settings: default reject (after follow up and reject)
- Change "auto remove" settings: -

At the bottom are 'Update' and 'Cancel' buttons.

*Figure: Change Auto Response relations for a Queue.*

## Email addresses

To enable OTRS to send emails, you need a valid email address to be used by the system. OTRS is capable of working with multiple email addresses, since many support installations need to use more than one. A queue can be linked to many email addresses, and vice versa. The address used for outgoing messages from a queue can be set when the queue is created. Use the "Email Addresses" link from the Admin page to manage all email addresses of the system (see Figure below).

This screenshot shows the 'System Email Addresses Management' page. The top navigation bar includes links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN, and a search bar. The main content area has a title 'List' and a table showing three email addresses:

EMAIL ADDRESS	DISPLAY NAME	COMMENT	VALID	CHANGED	CREATED
otrs@localhost	OTRS System Address.	Standard	valid	08/03/2010 05:57	05/03/2010 05:57
postmaster@mycompany.com	Postmaster team	Example account	valid	08/04/2010 03:52	08/04/2010 03:52
support@mycompany.com	Support team	Example account	valid	08/04/2010 03:51	08/04/2010 03:51

*Figure: System Email Addresses management.*

If you create a new mail address (see Figure below) you can select the queue or sub queue to be linked with it. This link enables the system to sort incoming messages via the address in the To: field of the mail into the right queue.

You are logged in as Miguel Hidalgo y Costilla

DASHBOARD TICKETS STATISTICS CUSTOMERS ADMIN

**System Email Addresses Management**

Add System Email Address

Email address: misc@mycompany.com

Display name: Misc team

The display name and email address will be shown on mail you send.

Queue: Misc

Valid: valid

Comment: Just an email example

Submit Cancel

Powered by OTRS 3.0.x CVS

Top of page

Figure: Adding a system Email Address.

## Note

As with other OTRS entities, email addresses cannot be deleted, only deactivated by setting the Valid option to *invalid* or *invalid-temporarily*.

# Notifications

OTRS allows notifications to be sent to agents and customers, on the occurrence of certain events. Agents can set the system events for their own notifications via the preferences link.

Through the "Agent Notifications" link on the Admin page, you can manage the notifications of your system (see Figure below). You can use filters to list only certain notifications.

Filter for Language

Filter for Notification

Note

Notifications are sent to an agent or a customer.

LANGUAGE	NOTIFICATION
Arabic (Saudi Arabia)	Agent:AddNote
Arabic (Saudi Arabia)	Agent:Escalation
Arabic (Saudi Arabia)	Agent:EscalationNotifyBefore
Arabic (Saudi Arabia)	Agent:FollowUp
Arabic (Saudi Arabia)	Agent:LockTimeout
Arabic (Saudi Arabia)	Agent:Move
Arabic (Saudi Arabia)	Agent>NewTicket
Arabic (Saudi Arabia)	Agent:OwnerUpdate
Arabic (Saudi Arabia)	Agent:PendingReminder
Arabic (Saudi Arabia)	Agent:ResponsibleUpdate
Bulgarian (Български)	Agent:AddNote
Bulgarian (Български)	Agent:Escalation
Bulgarian (Български)	Agent:EscalationNotifyBefore
Bulgarian (Български)	Agent:FollowUp
Bulgarian (Български)	Agent:LockTimeout
Bulgarian (Български)	Agent:Move
Bulgarian (Български)	Agent>NewTicket
Bulgarian (Български)	Agent:OwnerUpdate
Bulgarian (Български)	Agent:PendingReminder
Bulgarian (Български)	Agent:ResponsibleUpdate
Català	Agent:AddNote
Català	Agent:Escalation
Català	Agent:EscalationNotifyBefore
Català	Agent:FollowUp
Català	Agent:LockTimeout
Català	Agent:Move
Català	Agent>NewTicket

Figure: Notification management.

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You can customize the subject and the text of the notifications. Click on the notification you want to change from the list, and its content will get loaded for editing (see Figure). Please note that there is a notification with the same name for each of the available languages.

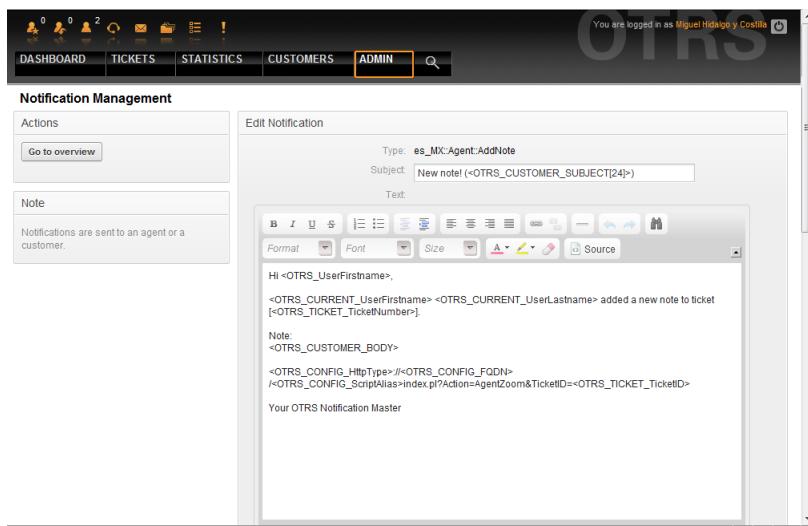


Figure: Customizing a Notification.

Just as with signatures and salutations, it is possible to dynamically create the content of a notification, by using special variables. You can find a list of variables at the bottom of the screen shown in the Figure.

It is also possible to create notifications based on events. You can specify in detail when and to whom you want such a notification to be sent. You can choose from a wide variety of parameters, such as: recipient group(s), agent(s), role(s), email address(es), type of event triggering the notification, ticket-type, state, priority, queue, lock, service, SLA, etc.

In order to see a list of all event based notifications, click on the link "Notifications (Event)" on the Admin page (see Figure).



Figure: Event based Notification management.

As shown in Figure, you can create a new notification by clicking on the Add button (see Figure).

The screenshot shows the 'Notification Management' section under the 'ADMIN' tab. The 'Add Notification' form is open. It has fields for 'Name' (with a required asterisk), 'Recipient groups' (listing 'Agent (All with write permissions)', 'Agent (Owner)', 'Agent (Responsible)', and 'Customer'), 'Recipient agents' (listing several user accounts like 'Hidalgo y Costilla Miguel (miguel.hidalgo)') and 'Recipient roles' (listing various roles such as 'admin', 'fill-up-group11004052', etc.). There are also fields for 'Recipient email addresses' and 'Event' (listing 'ArticleBounce', 'ArticleCreate', 'ArticleFreeTextUpdate', and 'ArticleSend').

*Figure: Registering an Event based Notification management.*

Please note that the content of the event based notifications can also be dynamically created by using the special variables listed at the bottom of the screen shown in the Figure.

## SMIME

OTRS can process incoming S/MIME encoded messages and sign outgoing mails. Before this feature can be used, you need to activate it and change some config parameters in the SysConfig.

The "S/MIME Certificates" link on the Admin page allows you to manage your S/MIME certificates (see Figure below). You can add or remove certificates, and also search through the SMIME data.

The screenshot shows the 'S/MIME Management' section under the 'ADMIN' tab. On the left, there's a sidebar with actions like 'Search', 'Add private key', and 'Add certificate'. Below that is a 'Note' section with instructions about managing certificates. The main area is titled 'Results' and contains a table with columns: TYPE, SUBJECT, HASH/FINGERPRINT, CREATE/EXPIRES, and DELETE. The table currently shows 'No data found.' At the bottom, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

*Figure: S/MIME management.*

## PGP

OTRS handles PGP keys, which allows you to encrypt/decrypt messages and to sign outgoing messages. Before this feature can be used, you need to activate it and change some config parameters in the SysConfig.

Through the "PGP Keys" link on the Admin page, it is possible to manage the key ring of the user who shall be used for PGP with OTRS (see Figure below), e.g. the local OTRS user or the web server user. It is possible to add and remove keys and signatures, and you can search through all data in your key ring.

Figure: PGP management.

## States

Through the "States" link on the Admin page, you can manage the different ticket states you want to use in the system (see Figure below).

*Figure: State management.*

After a default setup, there are some states defined:

- closed successful
- closed unsuccessful
- merged
- new
- open
- pending auto close+
- pending auto close-
- pending reminder
- removed

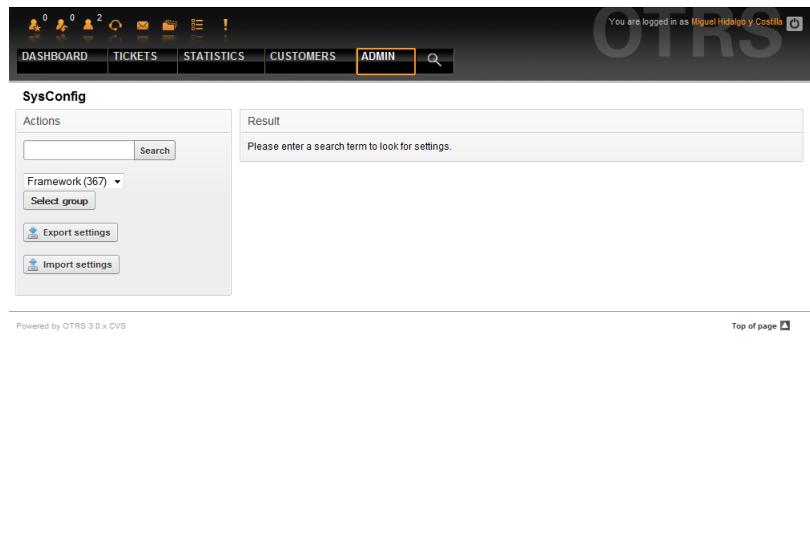
Every state is linked to a type, which needs to be specified if a new state is created. By default the state types are:

- closed
- merged
- new
- open
- pending auto
- pending reminder
- removed

## SysConfig

The SysConfig link leads to the section where many OTRS configuration options are maintained.

The SysConfig link on the Admin page loads the graphical interface for system configuration (see Figure below). You can upload your own configuration files for the system, as well as backup all your current settings into a file. Almost all configuration parameters of the OTRS framework and installed applications can be viewed and changed through this interface. Since all configuration parameters are sorted into groups and sub groups, it is possible to navigate quickly through the multitude of the parameters. It is also possible to perform a full-text search through all the configuration parameters.

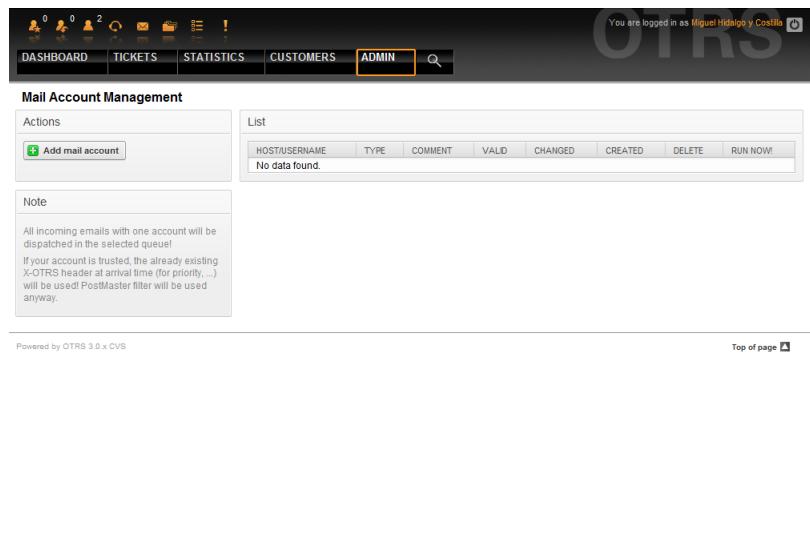


*Figure: The graphical interface for system configuration (SysConfig).*

The graphical interface for system configuration is described in more detail in the chapter "Configuring the system through the web interface".

## Using mail accounts

There are several possibilities to transport new emails into the ticket system. One way is to use a local MTA and the otrs.PostMaster.pl script that pipes the mails directly into the system. Another possibility is the use of mail accounts which can be administrated through the web interface. The "PostMaster Mail Accounts" link on the Admin page loads the management console for the mail accounts (see Figure below). OTRS supports the mail protocols: POP3, POP3S, IMAP and IMAPS.

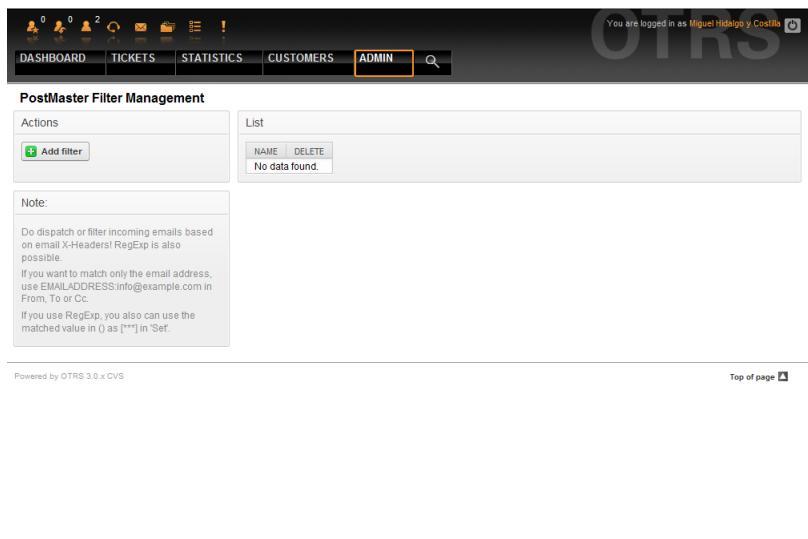


*Figure: Mail account management.*

See the section about PostMaster Mail Accounts for more details.

# Filtering incoming email messages

OTRS has the capability to filter incoming email messages. As an example, it is possible to put certain emails automatically into specified queues, or set a specific state or ticket type for some mails. The filters apply to all incoming mail. You can maintain your filters via the link "PostMaster Filter" on the Admin page (see Figure below).



*Figure: PostMaster filter management.*

A filter consists of one or more criteria that must match for the defined actions to be executed on the email. Filter criteria may be defined for the headers or the body of an email, e.g. search for specific header entries, such as a sender address, or on strings in the body. Even regular expressions can be used for extended pattern matching. If your filter matches, you can set fields using the X-OTRS headers in the GUI. These values will be applied when creating the ticket or follow-up message in OTRS. The Table 5-4 lists the different X-OTRS headers and their meaning.

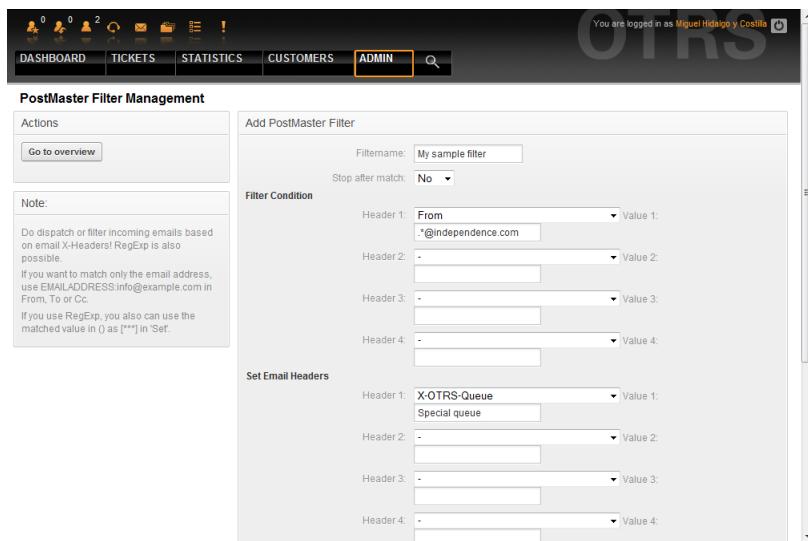
Note: You also can use X-OTRS-FollowUp-\* headers to set values for follow up emails.

**Table 5.4. Function of the different X-OTRS-headers**

Name	Possible values	Description
X-OTRS-Priority:	1 very low, 2 low, 3 normal, 4 high, 5 very high	Sets the priority of a ticket.
X-OTRS-Queue:	Name of a queue in the system.	Sets the queue where the ticket shall be sorted. If set in X-OTRS header, all other filter rules that try to sort a ticket into a specific queue are ignored. If you use a sub-queue, specify it as "Parent::Sub".
X-OTRS-Lock:	lock, unlock	Sets the lock state of a ticket.
X-OTRS-Ignore:	Yes or True	If this X-OTRS header is set to "Yes", the incoming message will completely be ignored and never delivered to the system.

Name	Possible values	Description
X-OTRS-State:	new, open, closed successful, closed unsuccessful, ...	Sets the next state of the ticket.
X-OTRS-State-PendingTime:	e. g. 2010-11-20 00:00:00	Sets the pending time of a ticket (you also should sent a pending state via X-OTRS-State).
X-OTRS-Type:	default (depends on your setup)	Sets the type of a ticket (if Ticket::Type is activated).
X-OTRS-Service:	(depends on your setup)	Sets the service of a ticket (if Ticket::Service is active). If you want to set a sub-service you should specify it as "Parent::Sub".
X-OTRS-SLA:	(depends on your setup)	Sets the SLA of a ticket (if Ticket::Service support is active).
X-OTRS-CustomerUser:	CustomerUser	Sets the customer user for the ticket.
X-OTRS-CustomerNo:	CustomerNo	Sets the customer ID for this ticket.
X-OTRS-SenderType:	agent, system, customer	Sets the type of the ticket sender.
X-OTRS-ArticleType:	email-external, email-internal, email-notification-ext, email-notification-int, phone, fax, sms, webrequest, note-internal, note-external, note-report	Sets the article type for the incoming ticket.
X-OTRS-DynamicField- <i>&lt;DynamicFieldName&gt;</i> :	Depends on Dynamic Field configuration (Text: Notebook, Date: 2010-11-20 00:00:00, Integer: 1)	Saves an additional info value for the ticket on <i>&lt;DynamicFieldName&gt;</i> Dynamic Field.
X-OTRS-Loop:	True	If this X-OTRS header is set, no auto answer is delivered to the sender of the message (mail loop protection).

You should specify a name for every filter rule. Filter criteria can be specified in the section "Filter Condition". Choose via the listboxes for "Header 1", "Header 2" and so on for the parts of the messages where you would like to search, and specify on the right side the values you wish to filter on. In the section "Set Email Headers", you can choose the actions that are triggered if the filter rules match. You can select for "Header 1", "Header 2" and so on to select the X-OTRS-Header and set the associated values (see Figure below).



*Figure: Add a PostMaster filter.*

### **Example 5.1. Sort spam mails into a specific queue**

A useful filter rule could be to let OTRS automatically move mails marked for spam with a spam detection tool such as SpamAssassin, into the "Junk" queue. SpamAssassin adds the "X-Spam-Flag" header to every checked mail. When the mail is marked as spam, the Header is set to "Yes". So the filter criteria would be "X-Spam-Flag: Yes". To create a filter rule with this criteria you can insert the name as, for example, "spam-mails". In the section for "Filter Condition", choose "X-Spam-Flag:" for "Header 1" from the listbox. Insert "Yes" as value for this header. Now the filter criteria is specified. To make sure that all spam mails get directed into the "Junk" queue, choose in the section for "Set Email Headers", the "X-OTRS-Queue:" entry for "Header 1". Specify "Junk" as value for this header. Finally add the new filter rule to activate it for new messages into the system.

There are additional modules, that can be used to filter incoming messages more specifically. These modules might be useful on larger, more complex systems.

## **Executing automated jobs with the GenericAgent**

The GenericAgent is a tool to execute tasks automatically. In its absence such tasks would need to be done by a human person, a real agent. The GenericAgent, for example, can close or move tickets, send notifications on escalated tickets, etc.

Click the link "GenericAgent" on the Admin page (see Figure below). A table with currently automated jobs is displayed which can be edited to switch to executing jobs manually, or removing them.

This screenshot shows the 'Generic Agent' section of the OTRS Admin interface. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, and ADMIN. The ADMIN link is highlighted. On the right side of the header, it says 'You are logged in as Miguel Hidalgo y Costilla'. Below the header, the page title 'Generic Agent' is displayed. On the left, there's a sidebar with 'Actions' and a button labeled 'Add job'. The main content area is titled 'List' and contains a table with three rows of data:

NAME	LAST RUN	VALID	DELETE	RUN NOW!
Sample job 1		valid		<a href="#">Run this task</a>
Sample job 2		valid		<a href="#">Run this task</a>
Sample job 3		valid		<a href="#">Run this task</a>

At the bottom of the page, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

Figure: Job list for the GenericAgent.

Click the "Add job" button to create a new job. You first need to supply a name for the job, as also the times when the job should be executed. Different criteria to select the tickets to work on and the new properties of those tickets can also be set (see Figure below).

This screenshot shows the 'Job Settings' screen for creating a new job. The top part of the interface is identical to the previous screenshot, showing the navigation bar and the 'Generic Agent' section. The main content area is titled 'Job Settings' and contains a form for defining a new job:

- \* Job name: Sample job 4
- Valid: Yes
- Schedule minutes: A dropdown menu showing values 00, 10, 20, 30, 40, 50, with 20 selected.
- Schedule hours: A dropdown menu showing values 00, 01, 02, 03, 04, 05, with 05 selected.
- Schedule days: A dropdown menu showing days of the week: Fri, Mon, Sat, Sun, Thu, Tue, Wed, with Sat selected.
- A note at the bottom states: 'Currently this generic agent job will not run automatically. To enable automatic execution select at least one value from minutes, hours and days!'

Figure: Creating a job for the GenericAgent.

On completing the job creation, all affected tickets by the job are listed. This list helps you verify that the job has the expected behavior. No changes are made to these tickets yet. The job will actually be activated only when it is saved into the job list.

## Admin email

OTRS administrators can send messages to specific users or groups. The "Admin Notification" link on the Admin page opens the screen where the agents and groups that should be notified can be selected (see Figure below).

Figure: Admin notification.

It is possible to specify the sender, subject and body text of the notification. You can also select the agents, groups and roles who should receive the message.

## Session management

You can see all logged in users and their session details by clicking the "Session Management" link in the admin area (see Figure below).

SESSION	TYPE	USER	KILL
105b77fe29e2a3d4f78ad8780bc5817717	Agent	Miguel Hidalgo y Costilla	[Kill this session](#)
10849c1d96241ef6b5e9def4085dd0a7	Customer	Leona Vicario	[Kill this session](#)
10e5cdcfb565e19ac078598e9fb55941	Customer	Ignacio López Rayón	[Kill this session](#)

 At the bottom of the page, there are links for 'Powered by OTRS 3.0.x CVS' and 'Top of page'."/>

Figure: Session management.

Some statistics about all active sessions are displayed, e.g. how many agents and customer users are logged in, number of active sessions. Any individual session can be removed by clicking on the *Kill this session* link on the right-hand side of the list. You also have the option to *Kill all sessions*, which can be useful if you'd like to bring the system down. Detailed information for every session is available, too (see Figure below).

The screenshot shows the 'Session Management' section of the OTRS Admin interface. At the top, there are session statistics: 0 users, 0 sessions, 2 users online, and 1 ticket. Below this is a navigation bar with links: DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search bar. The main content area is titled 'Session Management' and contains a table with session details. The table has two columns: 'KEY' and 'VALUE'. Key entries include:

KEY	VALUE
ChangeTime	2010-08-03 06:01:50
CreateTime	2010-08-03 06:01:50
OutOfficeEndDay	4
OutOfficeEndMonth	8
OutOfficeEndYear	2010
OutOfficeStartDay	3
OutOfficeStartMonth	8
OutOfficeStartYear	2010
SessionID	105b77fe2de2a3d4f78ed8780bc6817717
UserChallengeToken	44305789205c0299e0c213b1b072eb6
UserEmail	miguel.hidalgo@freedom.com
UserFirstname	Miguel
UserID	2
UsersGroupRo[admin]	Yes
UsersGroupRo[users]	Yes
UsersGroupRo[stats]	Yes
UsersGroup[admin]	Yes
UsersGroup[stats]	Yes
UsersGroup[users]	Yes
UserLanguage	en
UserLastLogin	1280935411
UserLastLoginTimestamp	2010-08-04 10:23:31
UserLastIP	xxxxxx
UserLastRequest	1280935483
UserLastname	Hidalgo y Costilla
UserLogin	miguel.hidalgo
UserPwd	xxxxxx

Figure: Session details.

## System Log

The "System Log" link on the Admin page shows the log entries of the system, reverse chronologically sorted with most recent first (see Figure below).

The screenshot shows the 'System Log' section of the OTRS Admin interface. At the top, there are session statistics: 0 users, 0 sessions, 2 users online, and 1 ticket. Below this is a navigation bar with links: DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search bar. The main content area is titled 'System Log' and contains a table with log entries. The table has four columns: TIME, PRIORITY, FACILITY, and MESSAGE. The log entries show various system events and user authentication logs:

TIME	PRIORITY	FACILITY	MESSAGE
Aug 4 2010 10:23:51	notice	OTRS-CGI-10	Removed SessionID 10b2c771b4115052ca665a75596997c7b3.
Aug 4 2010 10:23:31	notice	OTRS-CGI-10	User: miguel.hidalgo authentication ok (REMOTE_ADDR: 192.168.56.1).
Aug 4 2010 10:23:12	notice	OTRS-CGI-10	Removed SessionID 102d146b9b92158482b556deb742695ab7.
Aug 4 2010 10:12:36	notice	OTRS-CGI-10	CustomerUser: ignacio.lopez Authentication ok (REMOTE_ADDR: 192.168.56.1).
Aug 4 2010 10:12:17	notice	OTRS-CGI-10	CustomerUser: leona.vicario Authentication ok (REMOTE_ADDR: 192.168.56.1).
Aug 4 2010 10:11:05	notice	OTRS-CGI-10	Removed SessionID 107bdfaba2f0ed4abe496b1f69fc31921.
Aug 4 2010 10:11:05	notice	OTRS-CGI-10	User: agustin.deltrubide authentication ok (REMOTE_ADDR: 192.168.56.1).

Figure: System Log.

Each line in the log contains a time stamp, the log priority, the system component and the log entry itself.

## Note

System logs are available via the web interface only on Linux / Unix systems. On Windows systems, you can see the logs using a text editor and opening the file [install\_dir]\otrs\var\log\otrs.log.

## SQL queries via the SQL box

The "SQL Box" link on the Admin page opens a screen that lets you query the content of the tables in the OTRS database (see Figure below). It is not possible to change the content of the tables, only select queries are allowed.

The screenshot shows the 'SQL Box' interface within the OTRS Admin section. On the left, there's a note area stating: 'Here you can enter SQL to send it directly to the application database.' The main area is titled 'Options' and contains fields for 'SQL' (set to 'SELECT \* FROM'), 'Limit' (set to 40), and 'Result format' (set to 'HTML'). Below these is a 'Run Query' button. At the bottom of the interface, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

*Figure: SQL Box.*

## Package Manager

Using the "Package Manager" link on the Admin page, you can install and manage packages that extend the functionality of OTRS (see Figure below). See the Additional applications section for a discussion on the extensions that are available from the OTRS repositories.

The screenshot shows the 'Package Manager' interface within the OTRS Admin section. On the left, there's an 'Actions' panel with buttons for 'Install Package' (highlighted) and 'Browse...', and a dropdown menu for 'Master' with 'http://ftp.otrs.org/' selected. Below that is a 'Update repository information' button. The main area is divided into two sections: 'Online Repository' and 'Local Repository'. The 'Online Repository' section lists a single package: 'iPhoneHandle' version '0.9.4' by 'OTRS AG' with a 'Description' of 'The iPhoneHandle Package.' and an 'ACTION' column showing an 'Install' link. The 'Local Repository' section shows a message 'No data found.'

*Figure: Package Manager.*

The Package Manager shows the OTRS addon packages you currently have installed on your server, together with their version numbers.

You can install packages from a remote host by selecting the repository in the *Online Repository* section, and clicking the *Update repository information* button. The available packages are displayed in the corresponding table. The right side of the screen shows the available packages. To install a package, click on *Install*. After installation, the package is displayed in the *Local Repository* section.

To upgrade an installed package, the list of available packages in the online repository will show *Upgrade* in the Action column for any package that has a higher version than the one locally installed. Just click Upgrade and it will install the upgrade on your system.

In some cases, such as when your OTRS system is not connected to the Internet, you can also install packages you have downloaded to a local disk. Click the *Browse* button on the Actions side bar, and select the .opm file on your disk. Click *Open* and then *Install Package*. After installation the package is displayed in the *Local Repository* section. You can use the same steps for updating a package that is already installed.

In special cases, you might want to configure the Package Manager, e.g., to use a proxy or to use a local repository. Just take a look at the available options in SysConfig under Framework::Core::Package.

## Web Services

The Web Services link leads to the graphical interface where web services (for the OTRS Generic Interface) are created and maintained (see Figure below).

The screenshot shows the OTRS Admin interface with a dark header bar containing navigation links: DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is highlighted), and a search icon. Below the header, a banner displays the user's name: You are logged in as Miguel Hidalgo y Costilla. The main content area is titled "GenericInterface Web Service Management - Overview" and includes a breadcrumb trail: » Web Services. On the left, there is a sidebar with an "Actions" section containing a button labeled "+ Add web service". The main panel is titled "Web Service List" and contains a table with columns: NAME, DESCRIPTION, REMOTE SYSTEM, PROVIDER TRANSPORT, REQUESTER TRANSPORT, and VALIDITY. A message at the top of the table says "No data found." At the bottom of the page, there are footer links: Powered by OTRS 3.0.x CVS and Top of page.

Figure: The graphical interface for web services.

The graphical interface for web services configuration is described in more detail in the section "Web Service Graphical Interface".

## Dynamic Fields

Dynamic Fields is the place where you setup and manage custom fields for tickets and articles (see figure below).

**Dynamic Fields Management - Overview**

NAME	LABEL	ORDER	TYPE	OBJECT
Field1	My Field 1	1	Text	Ticket
Field2	My Field 2	2	Textarea	Ticket
Field3	My Field 3	3	Checkbox	Ticket
Field4	My Field 4	4	Dropdown	Ticket
Field5	My Field 5	5	Multiselect	Ticket
Field6	My Field 6	6	Date	Ticket
Field7	My Field 7	7	Date / Time	Ticket

**Actions**

Article  
Ticket

Add new field for object: Article  
Add new field for object: Ticket

**Hint**

To add a new field, select the field type from one of the object's list, the object defines the boundary of the field and it can't be changed after the field creation.

Powered by OTRS 3.1.x CVS

Figure: The dynamic fields overview screen with some dynamic fields.

The dynamic fields configuration is described in more detail in the section "Dynamic Fields Configuration".

Each dynamic field type has its own configuration settings and therefore its own configuration screen.

### Note

In the OTRS framework, dynamic fields can only be linked to tickets and articles by default, but they can be extended to other objects as well.

---

# Chapter 6. System Configuration

## OTRS config files

All OTRS configuration files are stored in the directory `Kernel` and in its subdirectories. There is no need to manually change any other file than `Kernel/Config.pm`, because the rest of the files will be changed when the system gets upgraded. Just copy the configuration parameters from the other files into `Kernel/Config.pm` and change them as per your needs. This file will never be touched during the upgrade process, so your manual settings are safe.

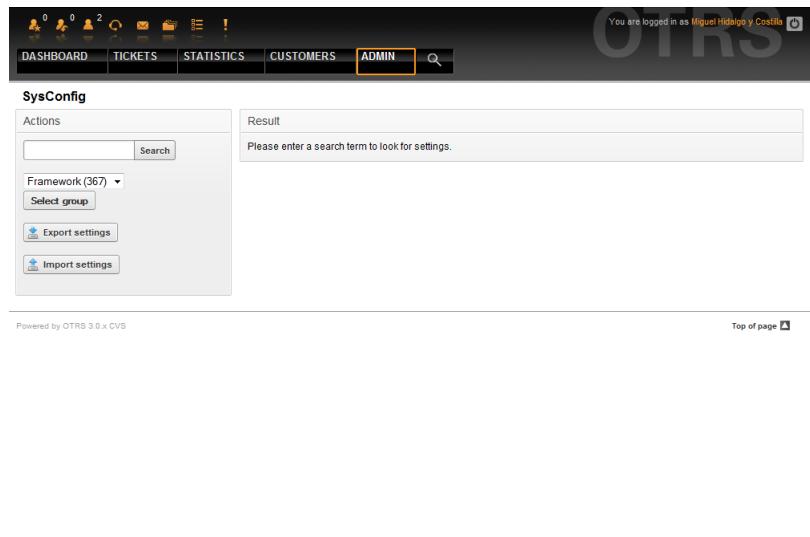
The file `Kernel/Config/Defaults.pm` contains the parameters of the central OTRS framework. It defines all basic system settings such as the mail configuration, database connection, default charset and standard language. The file `Kernel/Config/Files/Ticket.pm` contains all configuration parameters for the trouble ticket system.

In the directory `Kernel/Config/Files` there are some other files that are parsed when the OTRS login page is accessed. If additional applications like the FAQ or the File Manager are installed, the configuration files for those can also be found in the mentioned path.

If the OTRS web interface is accessed, all `.xml` files in the `Kernel/Config/Files` directory are parsed in alphabetical order, and the settings for the central framework and additional applications will be loaded. Afterwards, the settings in the two files `Kernel/Config/Files/ZZZAAuto.pm` and `Kernel/Config/Files/ZZZAuto.pm` will be evaluated. Both files are used by the graphical interface for system configuration and should never be changed manually. Lastly, the file `Kernel/Config.pm` that contains your individual settings and manually changed configuration parameters, will be parsed. Reading the configuration files in this order makes sure that your specific configuration settings are used by the system.

## Configuring the system through the web interface

Since OTRS 2.0, nearly all configuration parameters of the central framework or additional installed applications, can be changed easily with the graphical interface for system configuration. Log in as OTRS administrator and follow the `SysConfig` link on the Admin page to execute the new configuration tool (see Figure below).



*Figure: The graphical interface for system configuration.*

OTRS currently has over 600 configuration parameters, and there are different ways to quickly access a specific one. With the full text search, all configuration parameters can be scanned for one or more keywords. The full text search not only searches through the names of the configuration parameters, but also through the descriptions of the parameters. This allows an element to be found easily even if its name is unknown.

Furthermore, all configuration parameters are sorted in main groups and sub groups. The main group represents the application that the configuration parameter belongs to, e.g. "Framework" for the central OTRS framework, "Ticket" for the ticket system, "FAQ" for the FAQ system, and so on. The sub groups can be accessed if the application is selected from the groups listbox and the "Select group" button is pressed.

Every configuration parameter can be turned on or off via a checkbox. If the parameter is turned off, the system will ignore this parameter or use a default. It is possible to switch a changed configuration parameter back to the system default using the Reset link. The Update button submits all changes to system configuration parameters.

If you want to save all the changes you made to your system's configuration, for example to setup a new installation quickly, you can use the "Export settings" button, which will create a .pm file. To restore your own settings, just press the "Import settings" and select the .pm created before.

### Note

For security reasons, the configuration parameters for the database connection cannot be changed in the SysConfig section. They have to be set manually in Kernel/Config.pm.

---

# **Chapter 7. Sending/Receiving emails**

## **Sending emails**

### **Via Sendmail (default)**

OTRS can send out emails via Sendmail [<http://www.sendmail.org/>], Postfix [<http://www.postfix.org/>], Qmail [<http://www.qmail.org>] or Exim [<http://www.exim.org>]). The default configuration is to use Sendmail and should work out-of-the-box.

You can configure the sendmail settings via the graphical configuration frontend (Framework::Core::Sendmail)

### **Via SMTP server or smarthost**

OTRS can send emails via SMTP (Simple Mail Transfer Protocol / RFC 821 [<http://www.ietf.org/rfc/rfc821.txt>]) or Secure SMTP. You will want to use this on non-UNIX platforms (e.g. Windows).

The SMTP server settings can be configured via the SysConfig (Framework::Core::Sendmail). If you don't see SMTPS available as an option, the required Perl modules are missing. In that case, please refer to "Installation of Perl modules required for OTRS" for instructions.

## **Receiving emails**

### **Mail accounts configured via the OTRS GUI**

OTRS is able to receive emails from POP3, POP3S, IMAP, and IMAPS mail accounts.

Configure your mail accounts via the PostMaster Mail Accounts link on the Admin page.

If a new mail account is to be created (see Figure below), then its mail server name, login name and password must be specified. Also, you need to select the mail server type, which can be POP3, POP3S, IMAP or IMAPS. If you don't see your server type available as an option, the required Perl modules are missing on your system. In that case, please refer to "Installation of Perl modules required for OTRS" for instructions.

The screenshot shows the OTRS Admin interface with the 'ADMIN' tab selected. On the left, there's a sidebar with 'Mail Account Management' and a note about X-OTRS headers. The main area is a form for adding a mail account, specifically a POP3 account. The form fields are: Type (POP3), Username (miguel.hidalgo), Password (redacted), Host (mail.independence.com), Trusted (Yes), Dispatching (Dispatching by email To: field), Queue (Postmaster), Valid (valid), and Comment (Example of mail account). At the bottom are 'Submit' and 'Cancel' buttons.

*Figure: Adding a mail account.*

If you select Yes for the value of the Trusted option, any X-OTRS headers attached to an incoming message are evaluated and executed. Because the X-OTRS header can execute some actions in the ticket system, you should set the Trusted option to Yes only for known senders. X-OTRS-Headers are used by the filter module in OTRS. The X-OTRS headers are explained in this table in more detail. Any postmaster filter rules created are executed, irrespective of the Trusted option's setting.

The distribution of incoming messages can be controlled if they need to be sorted by queue or by the content of the "To:" field. For the Dispatching field, if "Dispatching by selected queue" is selected, all incoming messages will be sorted into the specified queue. The address where the mail was sent to is disregarded in this case. If "Dispatching by email To: field" is selected, the system checks if a queue is linked with the address in the To: field of the incoming mail. You can link an address to a queue in the E-mail address management section of the Admin page. If the address in the To: field is linked with a queue, the new message will be sorted into the linked queue. If no link is found between the address in the To: field and any queue, then the message flows into the "Raw" queue in the system, which is the PostmasterDefaultQueue after a default installation.

All data for the mail accounts are saved in the OTRS database. The `otrs.PostMasterMailbox.pl` script, which is located in the `bin` directory of your OTRS installation, uses the settings in the database and fetches the mail. You can execute `./bin/otrs.PostMasterMailbox.pl` manually to check if all your mail settings are working properly.

On a normal installation, the mail will be fetched every 10 minutes by the `postmaster_mailbox` cron job. For further information about modifying cron jobs, please refer to the "Setting up the cron jobs for OTRS" section.

## Note

When fetching mail, OTRS deletes the mail from the POP or IMAP server. There is no option to also keep a copy on the server. If you want to retain a copy on the server, you should create forwarding rules on your mail server. Please consult your mail server documentation for details.

## Via command line program and procmail (`otrs.PostMaster.pl`)

If you cannot use mail accounts to get the email into OTRS, the command line program `bin/otrs.PostMaster.pl` might be a way around the problem. It takes the mails via STDIN and pipes them directly into OTRS. That means email will be available in your OTRS system if the MDA (mail delivery agent, e.g. procmail) executes this program.

To test `bin/otrs.PostMaster.pl` without an MDA, execute the command of the following script.

```
linux:/opt/otrs# cd bin
linux:/opt/otrs/bin# cat ../doc/sample_mails/test-email-1.box | ./otrs.PostMaster.pl
linux:/opt/otrs/bin#
```

*Script: Testing PostMaster without the MDA.*

If the email is shown in the QueueView, then your setup is working.

Procmail is a very common e-mail filter in Linux environments. It is installed on most systems. If not, have a look at the *procmail homepage* [<http://www.procmail.org/>].

To configure procmail for OTRS (based upon a procmail configured MTA such as sendmail, postfix, exim or qmail), use the `~otrs/.procmailrc.dist` file and copy it to `.procmailrc` and add the lines of the script below.

```
SYS_HOME=$HOME
PATH=/bin:/usr/bin:/usr/local/bin
# --
# Pipe all email into the PostMaster process.
# --
:0 :
| $SYS_HOME/bin/otrs.PostMaster.pl
```

*Script: Configuring procmail for OTRS.*

All email sent to the local OTRS user will be piped into `bin/otrs.PostMaster.pl` and then shown in your QueueView.

## Fetching emails via POP3 or IMAP and fetchmail for `otrs.PostMaster.pl`

In order to get email from your mail server, via a POP3 or IMAP mailbox, to the OTRS machine/ local OTRS account and to procmail, use `fetchmail` [<http://fetchmail.berlios.de/>].

### Note

A working SMTP configuration on the OTRS machine is required.

You can use the `.fetchmailrc.dist` in the home directory of OTRS and copy it to `.fetchmailrc`. Modfiy/change it for your needs (see the Example 7-1 below).

### Example 7.1. .fetchmailrc

```
#poll (mailserver) protocol POP3 user (user) password (password) is  
(localuser)  
poll mail.example.com protocol POP3 user joe password mama is otrs
```

Don't forget to set the .fetchmailrc to 710 ("chmod 710 .fetchmailrc")!

With the .fetchmailrc from the Example 7-1 above, all email will be forwarded to the local OTRS account, if the command **fetchmail -a** is executed. Set up a cronjob with this command if you want to fetch the mails regularly.

## Filtering/dispatching by OTRS/PostMaster modules (for more complex dispatching)

If you use the bin/otsr.PostMaster.pl or bin/otsr.PostMasterMailbox.pl method, you can insert or modify X-OTRS header entries with the PostMaster filter modules. With the X-OTRS headers, the ticket system can execute some actions on incoming mails, sort them into a specific queue, change the priority or change the customer ID, for example. More information about the X-OTRS headers are available in the section about adding mail accounts from the OTRS Admin page.

There are some default filter modules:

### Note

The job name (e.g. \$Self->{'PostMaster::PreFilterModule'}->{'JobName'}) needs to be unique!

Kernel::System::PostMaster::Filter::Match is a default module to match on some email header (e.g. From, To, Subject, ...). It can set new email headers (e.g. X-OTRS-Ignore: yes or X-OTRS-Queue: spam) if a filter rule matches. The jobs of the Example 7-2 can be inserted in Kernel/Config.pm

### Example 7.2. Example jobs for the filter module Kernel::System::PostMaster::Filter::Match

```
# Job Name: 1-Match  
# (block/ignore all spam email with From: noreply@)  
$Self->{'PostMaster::PreFilterModule'}->{'1-Match'} = {  
    Module => 'Kernel::System::PostMaster::Filter::Match',  
    Match => {  
        From => 'noreply@',  
    },  
    Set => {  
        'X-OTRS-Ignore' => 'yes',  
    },  
};  
# Job Name: 2-Match  
# (sort emails with From: sales@example.com and Subject: **ORDER**  
# into queue 'Order')  
$Self->{'PostMaster::PreFilterModule'}->{'2-Match'} = {
```

```
Module => 'Kernel::System::PostMaster::Filter::Match',
Match => {
    To => 'sales@example.com',
    Subject => '**ORDER**',
},
Set => {
    'X-OTRS-Queue' => 'Order',
},
};
```

Kernel::System::PostMaster::Filter::CMD is a default module to pipe the email into an external command. The output is given to STDOUT and if the result is true, then set new email header (e.g. X-OTRS-Ignore: yes or X-OTRS-Queue: spam). The Example 7-3 can be used in Kernel/Config.pm

### **Example 7.3. Example job for the filter module Kernel::System::PostMaster::Filter::CMD**

```
# Job Name: 5-SpamAssassin
# (SpamAssassin example setup, ignore spam emails)
$Self->{ 'PostMaster::PreFilterModule' }->{ '5-SpamAssassin' } = {
    Module => 'Kernel::System::PostMaster::Filter::CMD',
    CMD => '/usr/bin/spamassassin | grep -i "X-Spam-Status: yes"',
    Set => {
        'X-OTRS-Ignore' => 'yes',
    },
};
```

Of course it's also possible to develop your own PostMaster filter modules.

---

# Chapter 8. Time related functions

## Setting up business hours, holidays and time zones

Some functions in OTRS, like escalations and automatic unlocking of tickets, depend on a proper configuration of business hours, time zones and holidays. You can define these via the SysConfig interface, in Framework > Core::Time. You can also specify different sets of business hours, holidays and time zones as separate 'Calendars' in Framework > Core::Time::Calendar1 through Framework > Core::Time::Calendar9. Calendars can be defined by queue settings, or on SLA levels. This means that, for example, you can specify a calendar with 5 x 8 business hours for your 'standard' SLA, but create a separate calendar with 7 x 24 support for your 'gold' SLA; as well as set a calendar for your 'Support-USA' queue with a different time window than your 'Support-Japan' queue. OTRS can handle up to 99 different calendars.

### Business Hours

Set up the working hours for your system in SysConfig Framework > Core::Time::TimeWorkingHours, or for your specific calendar in the calendar's configuration. OTRS can handle a granularity of one hour. Checking the marks in the boxes 8, 9, 10 ... 18 corresponds with business hours of 8 AM - 6 PM.

Only during business hours can tickets escalate, notifications for escalated and pending tickets be sent, and tickets be unlocked.

### Fixed date holidays

Holidays that are on a fixed date every year, such as New Year's Day or the Fourth of July, can be specified in TimeVacationDays, or in the corresponding section for the calendars 1-9.

Tickets will not escalate nor get unlocked on dates defined in TimeVacationDays.

#### Note

By default, OTRS ships with the *German* holidays installed.

### TimeVacationDaysOneTime

Holidays such as Easter that do not have a yearly fixed date but instead vary each year, can be specified in TimeVacationDaysOneTime.

Tickets will not escalate and will not be unlocked on dates defined in TimeVacationDaysOneTime.

#### Note

OTRS does not ship with any One-Time holidays pre-installed. This means that you need to add holidays, such as Easter or Thanksgiving, to the system when configuring OTRS.

# Automated Unlocking

Locked tickets can be automatically unlocked by the system. This feature might be useful if, for example, an agent has locked tickets that need to be processed, but he can't work on them for some reason, say because he is out of the office on an emergency. The automated unlock feature unlocks tickets after a given time to ensure that no locked tickets will be forgotten, thereby allowing other agents to process them.

The amount of time before a ticket is unlocked can be specified in the queue settings for every queue. The module `bin/otrs.UnlockTickets.pl`, which is executed periodically as a cron job, performs the automated unlocking of tickets.

Notifications on unlocked tickets are sent out only to those agents that have the queue with the unlocked tickets set in "My queues", and that have activated the notification on unlocked tickets in their personal preferences.

Tickets will be unlocked if all of the following conditions are met:

- There is an *unlock timeout* defined for the queue the ticket is in.
- The ticket is set to *locked*.
- The ticket state is *open*.

The unlock timer will be reset if an agent adds a new external article to the ticket. It can be of any of the following types: *email-external*, *phone*, *fax*, *sms*, or *note-external*.

Also, if the last article in the ticket is created by an agent, and a customer adds another one, either via web or email response, the unlock timer will be reset.

The last event that will reset the unlock timer is when the ticket is assigned to another agent.

# Chapter 9. Ticket Responsibility & Ticket Watching

From OTRS 2.1 on, it is possible to assign a person as being responsible for a ticket, additionally to its owner. Moreover, all activities connected with the ticket can be watched by someone other than the ticket owner. These two functionalities are implemented with the `TicketResponsible` and `TicketWatcher` features, and facilitate the assignment of tasks and working within hierarchical team structures.

## Ticket Responsibility

The ticket responsibility feature facilitates the complete processing of a ticket by an agent other than the ticket owner. Thus an agent who has locked a ticket can pass it on to another agent, who is not the ticket owner, in order for the second to respond to a customer request. After the request has been dealt with, the first agent can withdraw the ticket responsibility from the second agent.

With the configuration parameter `Ticket::Responsible`, the ticket responsibility feature can be activated. This will cause 3 new links to appear in the ticket activities menu of a zoomed ticket in the agent interface.

Ticket responsibility can be assigned by calling up the ticket content and clicking on the "Responsible" link in the ticket activities menu of a zoomed ticket in the agent interface (see the Figure below).

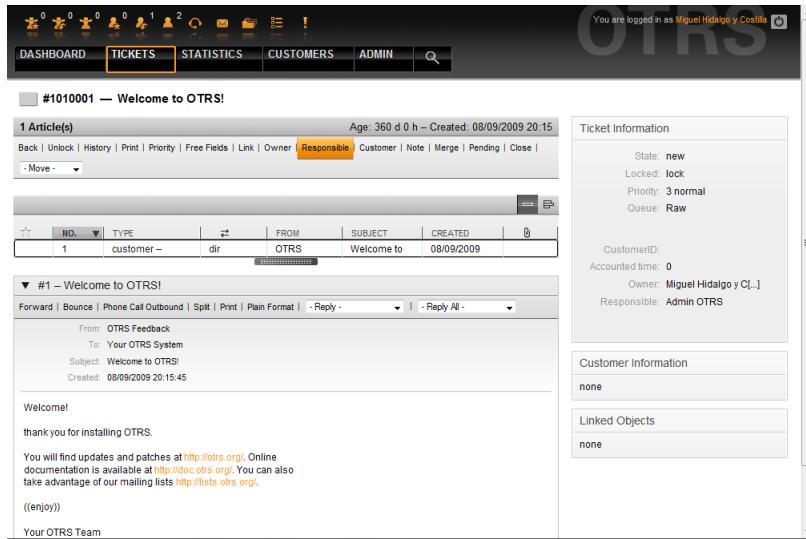


Figure: Changing the Responsibility of a ticket in its zoomed view.

After clicking on "Responsible", a pop-up dialog to change the responsibility of that ticket will open (see Figure below). This dialog can also be used to send a message to the new responsible agent.

## Ticket Responsibility & Ticket Watching

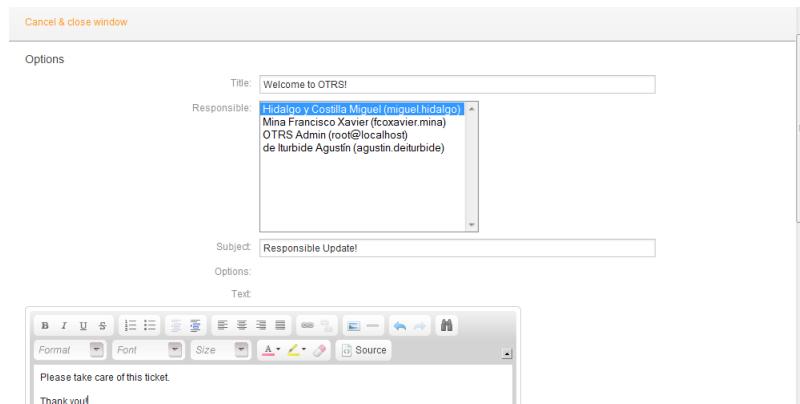


Figure: Pop-up dialog to change a ticket's responsibility.

The list of all tickets for which an agent is responsible, can be accessed through the Responsible view of the OTRS agent interface, as soon as the ticket responsibility feature gets activated.

## Ticket watching

From OTRS 2.1 on, select agents such as supervisors can watch certain tickets within the system without processing them, by using the TicketWatcher feature.

The TicketWatcher feature can be activated with the configuration parameter `Ticket::Watcher` which adds new links to your actions toolbar. Using `Ticket::WatcherGroup`, one or more user groups with permission to watch tickets can also be defined.

In order to watch a ticket, go to its zoomed view and click on the "Subscribe" link in the ticket activities menu (see Figure below).

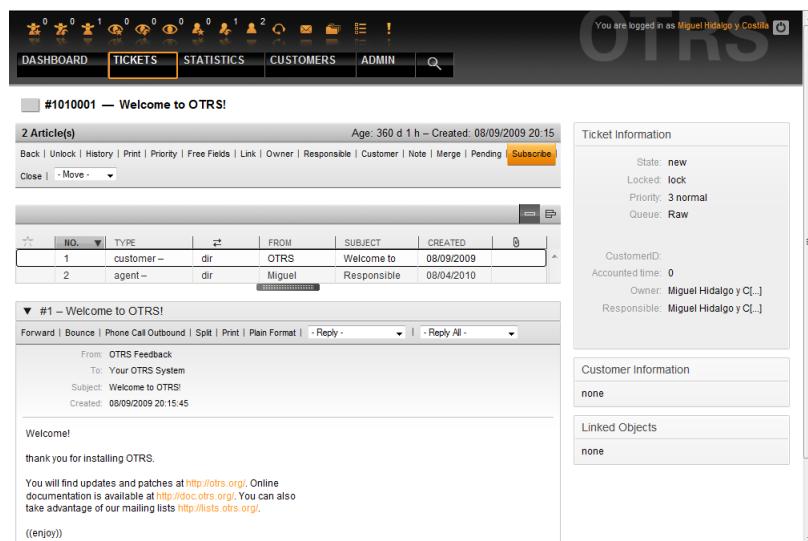


Figure: Subscribing to watching a ticket in its zoomed view.

If you no longer want to watch a specific ticket, go to its zoomed view and click on the "Unsubscribe" link in the ticket activities menu (see Figure below).

## Ticket Responsibility & Ticket Watching

**Ticket Information**

- State: new
- Locked: lock
- Priority: 3 normal
- Queue: Raw

**CustomerID:**

- Accounted time: 0
- Owner: Miguel Hidalgo y Costilla
- Responsible: Miguel Hidalgo y Costilla

**Customer Information**

- none

**Linked Objects**

- none

*Figure: Unsubscribing from watching a ticket in its zoomed view.*

The list of all watched tickets can be accessed through the Watched view of the OTRS agent interface (see Figure below), as soon as the ticket watcher feature gets activated.

**My Watched Tickets: All**

All 1 New Article 0 Pending 0 Reminder Reached 0

Bulk	TICKET#	AGE	FROM / SUBJECT	STATE	LOCKED	QUEUE	OWNER	CUSTOMERID
	1010001	367 d 6 h	OTRS Feedback Welcome to OTRS!	new	lock	Raw	Miguel Hidalgo y Costilla	

Powered by OTRS 3.0.x CVS

Top of page

*Figure: Watched tickets view.*

---

# Chapter 10. Customizing the PDF output

This section handles the configurable options for PDF output in OTRS.

If you use the Print action from anywhere within the OTRS interface, this generates a formatted PDF file. You can deactivate this by modifying the configuration parameter PDF to create HTML output instead.

You can adjust the look of the files generated by OTRS by creating your own logo and adding it to PDF::LogoFile. You can use PDF::PageSize to define the standard page size of the generated pdf file (DIN-A4 or Letter), and also PDF::MaxPage to specify the maximum number of pages for a pdf file, which is useful if a user generates a huge output file by mistake.

The Perl CPAN modules PDF::API2 and Compress::Zlib must be installed for the generation of pdf files. In many distributions they are available as packages and can be easily installed, using the respective package manager. In case this is not possible, they have to be installed with CPAN. For further information about installing Perl modules, please refer to the "Installation of Perl modules" section.

---

# Chapter 11. Using external backends

## Customer data

OTRS works with many customer data attributes such as username, email address, phone number, etc. These attributes are displayed in both the Agent and the Customer frontends, and also used for the authentication of customers.

Customer data used or displayed within OTRS is highly customizable. The following information is however always needed for customer authentication:

- User login
- Email address
- Customer ID

Use configuration parameters of the following script in your `Kernel/Config.pm` file, if you want to display customer information in your agent interface.

```
# Ticket::Frontend::CustomerInfo*
# (show customer info on Compose (Phone and Email), Zoom and
# Queue view)
$self->{'Ticket::Frontend::CustomerInfoCompose'} = 1;
$self->{'Ticket::Frontend::CustomerInfoZoom'} = 1;
$self->{'Ticket::Frontend::CustomerInfoQueue'} = 0;
```

*Script: Kernel/Config.pm configuration parameters.*

## Customer user backend

You can use two types of customer backends, DB and LDAP. If you already have another customer backend (e.g. SAP), it is of course possible to write a module that uses it.

### Database (Default)

Example 11-1 shows the configuration of a DB customer backend, which uses customer data stored in the OTRS database.

#### Example 11.1. Configuring a DB customer backend

```
# CustomerUser (customer database backend and settings)
$self->{CustomerUser} = {
    Name => 'Database Datasource',
    Module => 'Kernel::System::CustomerUser::DB',
    Params => {
        # if you want to use an external database, add the required
        settings
    #
    # DSN => 'DBI:odbc:yourdsn',
    # DSN =>
        'DBI:mysql:database=customerdb;host=customerdbhost',
```

```

#           User => '',
#           Password => '',
Table => 'customer_user',
# if your frontend is unicode and the charset of your
# customer database server is iso-8859-1, use these
options.
#           SourceCharset => 'iso-8859-1',
#           DestCharset => 'utf-8',

# CaseSensitive will control if the SQL statements need
LOWER()
#       function calls to work case insensitively. Setting
this to
#       1 will improve performance dramatically on large
databases.
CaseSensitive => 0,
},
# customer unique id
CustomerKey => 'login',

# customer #
CustomerID => 'customer_id',
CustomerValid => 'valid_id',
CustomerUserListFields => ['first_name', 'last_name', 'email'],
CustomerUserSearchFields => ['login', 'last_name', 'customer_id'],
CustomerUserSearchPrefix => '',
CustomerUserSearchSuffix => '*',
CustomerUserSearchListLimit => 250,
CustomerUserPostMasterSearchFields => ['email'],
CustomerUserNameFields => ['title', 'first_name', 'last_name'],
CustomerUserEmailUniqCheck => 1,
#       # show not own tickets in customer panel, CompanyTickets
#       CustomerUserExcludePrimaryCustomerID => 0,
#       # generate auto logins
#       AutoLoginCreation => 0,
#       AutoLoginCreationPrefix => 'auto',
#       # admin can change customer preferences
#       AdminSetPreferences => 1,
#       # cache time to live in sec. - cache any database queries
#       CacheTTL => 0,
#       # just a read only source
#       ReadOnly => 1,
Map => [
    # note: Login, Email and CustomerID needed!
    # var, frontend, storage, shown (1=always,2=lite), required,
storage-type, http-link, readonly, http-link-target
    [ 'UserTitle',      'Title',      'title',      1, 0, 'var',
'', 0 ],
    [ 'UserFirstname',  'Firstname',  'first_name', 1, 1, 'var',
'', 0 ],
    [ 'UserLastname',   'Lastname',   'last_name',  1, 1, 'var',
'', 0 ],
    [ 'UserLogin',      'Username',   'login',      1, 1, 'var',
'', 0 ],
]

```

```

        [ 'UserPassword',      'Password',      'pw',           0, 0, 'var',
'', 0 ],
        [ 'UserEmail',         'Email',          'email',         1, 1, 'var',
'', 0 ],

#           [ 'UserEmail',         'Email',          'email',         1, 1, 'var',
'$Env{"CGIHandle"}?Action=AgentTicketCompose&ResponseID=1&TicketID=
$data{"TicketID"}&ArticleID=$data{"ArticleID"}', 0 ],
        [ 'UserCustomerID',   'CustomerID',   'customer_id',  0, 1, 'var',
'', 0 ],

#           [ 'UserCustomerIDs', 'CustomerIDs', 'customer_ids', 1, 0,
'var', '', 0 ],
        [ 'UserPhone',          'Phone',          'phone',         1, 0,
'var', '', 0 ],
        [ 'UserFax',            'Fax',            'fax',          1, 0,
'var', '', 0 ],
        [ 'UserMobile',         'Mobile',         'mobile',        1, 0,
'var', '', 0 ],
        [ 'UserStreet',         'Street',         'street',       1, 0,
'var', '', 0 ],
        [ 'UserZip',             'Zip',            'zip',          1, 0,
'var', '', 0 ],
        [ 'UserCity',            'City',            'city',          1, 0,
'var', '', 0 ],
        [ 'UserCountry',        'Country',        'country',      1, 0,
'var', '', 0 ],
        [ 'UserComment',        'Comment',        'comments',     1, 0,
'var', '', 0 ],
        [ 'ValidID',             'Valid',          'valid_id',    0, 1,
'int', '', 0 ],
        ],
# default selections
Selections => {
    UserTitle => {
        'Mr.' => 'Mr.',
        'Mrs.' => 'Mrs.',
    },
},
};


```

If you want to customize the customer data, change the column headers or add new ones to the `customer_user` table in the OTRS database. As an example, the script below shows how to add a new field for room number.

```

linux:~# mysql -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 116 to server version: 5.0.18-Debian_7-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> use otrs;

```

```
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
mysql> ALTER TABLE customer_user ADD room VARCHAR (250);
Query OK, 1 rows affected (0.01 sec)
Records: 1  Duplicates: 0  Warnings: 0

mysql> quit
Bye
linux:~#
```

*Script: Adding a room field to the customer\_user table.*

Now add the new column to the MAP array in Kernel/Config.pm, as shown in the following script.

```
# var, frontend, storage, shown (1=always,2=lite), required,
storage-type, http-link, readonly
[...]
[ 'UserRoom',      'Room',      'room',      0, 1, 'var', '',
0 ],
```

*Script: Adding a room field to the Kernel/Config.pm file.*

It is also possible to edit all this customer information via the Customers link in the Agent interface.

## Customer with multiple IDs (Company tickets)

It is possible to assign more than one customer ID to a customer. This can be useful if a customer must access tickets of other customers, e.g. a supervisor wants to watch the tickets of his assistants. If a customer can access the tickets of another customer, the company ticket feature of OTRS is used. Company tickets can be accessed via the "Company Tickets" link in the customer panel.

To use company tickets, a new column with the IDs that should be accessible for a customer, has to be added to the customer\_user table in the OTRS database (see Script below).

```
linux:~# mysql -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 124 to server version: 5.0.18-Debian_7-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> use otrs;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> ALTER TABLE customer_user ADD customer_ids VARCHAR (250);
Query OK, 1 rows affected (0.02 sec)
Records: 1  Duplicates: 0  Warnings: 0
```

```
mysql> quit
Bye
linux:~#
```

*Script: Adding a customer\_ids field to the customer\_user table.*

Now the new column has to be added to the MAP array in `Kernel/Config.pm`, as shown in the script below.

```
# var, frontend, storage, shown (1=always,2=lite), required,
storage-type, http-link, readonly
[...]
[ 'UserCustomerIDs', 'CustomerIDs', 'customer_ids', 1, 0, 'var',
'', 0 ],
```

*Script: Adding a UserCustomerIDs field to the Kernel/Config.pm file.*

Now, the new column for the multiple customer IDs can be edited via the Agent interface, in the section for the customer management.

To ensure that one customer can access the tickets of other customers, add the IDs of these other users into the new field for the multiple customer IDs. Each ID has to be separated by a semicolon (see Example 11-2 below).

### **Example 11.2. Using company tickets with a DB backend**

The customers A, B and C exist in your system, and A wants to have access to the tickets of B and C via the customer panel. B and C should have no access to the tickets of other users.

To realize this setup, change the `customer_user` table and the mapping in `Kernel/Config.pm` as described above. Then load the settings for customer A via the Customers link in the Agent interface or via the Admin page. If the settings are displayed, add into the field for `CustomerIDs` the values "B;C;".

## **LDAP**

If you have a LDAP directory with your customer data, you can use it as the customer backend with OTRS, as shown in Example 11-3.

### **Example 11.3. Configuring an LDAP customer backend**

```
# CustomerUser
# (customer ldap backend and settings)
$self->{CustomerUser} = {
    Name => 'LDAP Data Source',
    Module => 'Kernel::System::CustomerUser::LDAP',
    Params => {
        # ldap host
        Host => 'bay.csuhayward.edu',
        # ldap base dn
        BaseDN => 'ou=seas,o=csuh',
```

```

# search scope (one|sub)
SSCOPE => 'sub',
# The following is valid but would only be necessary if the
# anonymous user does NOT have permission to read from the
LDAP tree
    UserDN => '',
    UserPw => '',
    # in case you want to add always one filter to each ldap
query, use
        # this option. e. g. AlwaysFilter => '(mail=*)' or
AlwaysFilter => '(objectclass=user)'
    AlwaysFilter => '',
        # if both your frontend and your LDAP are unicode, use
this:
    SourceCharset => 'utf-8',
    DestCharset => 'utf-8',
    # if your frontend is unicode and the charset of your
    # ldap server is iso-8859-1, use these options.
    # SourceCharset => 'iso-8859-1',
    # DestCharset => 'utf-8',
    # Net::LDAP new params (if needed - for more info see
perldoc Net::LDAP)
    Params => {
        port => 389,
        timeout => 120,
        async => 0,
        version => 3,
    },
},
# customer unique id
CustomerKey => 'uid',
# customer #
CustomerID => 'mail',
CustomerUserListFields => ['cn', 'mail'],
CustomerUserSearchFields => ['uid', 'cn', 'mail'],
CustomerUserSearchPrefix => '',
CustomerUserSearchSuffix => '*',
CustomerUserSearchListLimit => 250,
CustomerUserPostMasterSearchFields => ['mail'],
CustomerUserNameFields => ['givenname', 'sn'],
# show not own tickets in customer panel, CompanyTickets
CustomerUserExcludePrimaryCustomerID => 0,
# add an ldap filter for valid users (expert setting)
# CustomerUserValidFilter => '(! (description=locked))',
# administrator can't change customer preferences
AdminSetPreferences => 0,
# # cache time to live in sec. - cache any database queries
# CacheTTL => 0,
Map => [
    # note: Login, Email and CustomerID are mandatory!
    # var, frontend, storage, shown (1=always,2=lite), required,
storage-type, http-link, readonly
    [ 'UserTitle',         'Title',       'title',           1, 0,
'var', '', 0 ],

```

```

        [ 'UserFirstname',   'Firstname',    'givenname',      1, 1,
'var', '', 0 ],
        [ 'UserLastname',   'Lastname',     'sn',           1, 1,
'var', '', 0 ],
        [ 'UserLogin',      'Username',    'uid',          1, 1,
'var', '', 0 ],
        [ 'UserEmail',      'Email',       'mail',          1, 1,
'var', '', 0 ],
        [ 'UserCustomerID', 'CustomerID', 'mail',          0, 1,
'var', '', 0 ],
#        [ 'UserCustomerIDs', 'CustomerIDs', 'second_customer_ids', 1,
0, 'var', '', 0 ],
        [ 'UserPhone',       'Phone',       'telephonenumber', 1, 0,
'var', '', 0 ],
        [ 'UserAddress',    'Address',    'postaladdress',  1, 0,
'var', '', 0 ],
        [ 'UserComment',    'Comment',    'description',    1, 0,
'var', '', 0 ],
        ],
};


```

If additional customer attributes are stored in your LDAP directory, such as a manager's name, a mobile phone number, or a department, and if you want to display this information in OTRS, just expand the MAP array in `Kernel/Config.pm` with the entries for these attributes, as shown in the following script.

```

# var, frontend, storage, shown (1=always,2=lite), required,
storage-type, http-link, readonly
[...]
[ 'UserPhone',       'Phone',       'telephonenumber', 1, 0, 'var',
'', 0 ],

```

*Script: Adding new fields to the Kernel/Config.pm file.*

## Customer with multiple IDs (Company tickets)

It is possible to assign more than one Customer ID to a customer, when using an LDAP backend. To use company tickets, a new field has to be added to the LDAP directory that contains the IDs accessible by the customer.

If the new field in the LDAP directory has been created, the new entry has to be added to the MAP array in `Kernel/Config.pm`, as shown in the script below.

```

# var, frontend, storage, shown (1=always,2=lite), required,
storage-type, http-link, readonly
[...]
[ 'UserCustomerIDs', 'CustomerIDs', 'customer_ids', 1, 0, 'var',
'', 0 ],

```

*Script: Maping new fields to the Kernel/Config.pm file.*

The field for the multiple customer IDs has to be edited directly in the LDAP directory. OTRS can only read from LDAP, not write to it.

To ensure access by a customer to the tickets of other customers, add the customer IDs of the customers whose tickets should be accessed to the new field in your LDAP directory. Each ID has to be separated by a semicolon (see Example 11-4 below).

### Example 11.4. Using Company tickets with an LDAP backend

The customers A, B and C exist in your system and A wants to have access to the tickets of B and C via the customer panel. B and C should have no access to tickets of other users.

To realize this setup, change the LDAP directory and the mapping in `Kernel/Config.pm` as described above. Then add into the field for CustomerIDs the values "B;C;" for customer A in your LDAP directory.

## Use more than one customer backend with OTRS

If you want to utilize more than one customer data source used with OTRS (e.g. an LDAP and a database backend), the `CustomerUser` config parameter should be expanded with a number, e.g. "`CustomerUser1`", "`CustomerUser2`" (see Example 11-5 below).

### Example 11.5. Using more than one customer backend with OTRS

The following configuration example shows usage of both an LDAP and a database customer backend with OTRS.

```
# 1. Customer user backend: DB
# (customer database backend and settings)
$Self->{CustomerUser1} = {
    Name => 'Customer Database',
    Module => 'Kernel::System::CustomerUser::DB',
    Params => {
        # if you want to use an external database, add the
        # required settings
        # DSN => 'DBI:odbc:yourdsn',
        # DSN => 'DBI:mysql:database=customerdb;host=customerdbhost',
        # User => '',
        # Password => '',
        Table => 'customer_user',
    },
    # customer unique id
    CustomerKey = 'login',
    # customer #
    CustomerID = 'customer_id',
    CustomerValid = 'valid_id',
    CustomerUserListFields => ['first_name', 'last_name', 'email'],
    CustomerUserSearchFields => ['login', 'last_name', 'customer_id'],
    CustomerUserSearchPrefix => '',
    CustomerUserSearchSuffix => '*',
    CustomerUserSearchListLimit => 250,
    CustomerUserPostMasterSearchFields => ['email'],
    CustomerUserNameFields => ['title', 'first_name', 'last_name'],
    CustomerUserEmailUniqCheck => 1,
    # show not own tickets in customer panel, CompanyTickets
    # CustomerUserExcludePrimaryCustomerID => 0,
```

```

#      # generate auto logins
#      AutoLoginCreation => 0,
#      AutoLoginCreationPrefix => 'auto',
#      # admin can change customer preferences
#      AdminSetPreferences => 1,
#      # cache time to live in sec. - cache any database queries
#      CacheTTL => 0,
#      # just a read only source
#      ReadOnly => 1,
#      Map => [
#
#          # note: Login, Email and CustomerID needed!
#          # var, frontend, storage, shown (1=always,2=lite), required,
#          storage-type, http-link, readonly, http-link-target
#              [ 'UserTitle',         'Title',         'title',         1, 0, 'var',
#                ', 0 ],
#              [ 'UserFirstname',     'Firstname',     'first_name',   1, 1, 'var',
#                ', 0 ],
#              [ 'UserLastname',     'Lastname',     'last_name',    1, 1, 'var',
#                ', 0 ],
#              [ 'UserLogin',        'Username',     'login',        1, 1, 'var',
#                ', 0 ],
#              [ 'UserPassword',     'Password',     'pw',           0, 0, 'var',
#                ', 0 ],
#              [ 'UserEmail',        'Email',        'email',        1, 1, 'var',
#                ', 0 ],
#              [ 'UserCustomerID',   'CustomerID',   'customer_id',  0, 1, 'var',
#                ', 0 ],
#              [ 'UserPhone',         'Phone',        'phone',        1, 0, 'var',
#                ', 0 ],
#              [ 'UserFax',           'Fax',          'fax',          1, 0, 'var',
#                ', 0 ],
#              [ 'UserMobile',        'Mobile',       'mobile',       1, 0, 'var',
#                ', 0 ],
#              [ 'UserStreet',        'Street',       'street',      1, 0, 'var',
#                ', 0 ],
#              [ 'UserZip',           'Zip',          'zip',          1, 0, 'var',
#                ', 0 ],
#              [ 'UserCity',          'City',         'city',         1, 0, 'var',
#                ', 0 ],
#              [ 'UserCountry',       'Country',     'country',     1, 0, 'var',
#                ', 0 ],
#              [ 'UserComment',       'Comment',     'comments',    1, 0, 'var',
#                ', 0 ],
#              [ 'ValidID',           'Valid',        'valid_id',    0, 1, 'int',
#                ', 0 ],
#            ],
#            # default selections
#            Selections => {
#              UserTitle => {
#                'Mr.' => 'Mr.',
#                'Mrs.' => 'Mrs.',
#              },
#            },

```

```
};

# 2. Customer user backend: LDAP
# (customer ldap backend and settings)
$self->{CustomerUser2} = {
    Name => 'LDAP Datasource',
    Module => 'Kernel::System::CustomerUser::LDAP',
    Params => {
        # ldap host
        Host => 'bay.csuhayward.edu',
        # ldap base dn
        BaseDN => 'ou=seas,o=csuh',
        # search scope (one|sub)
        SSCOPE => 'sub',
        # The following is valid but would only be necessary if the
        # anonymous user does NOT have permission to read from the
        LDAP tree
        UserDN => '',
        UserPw => '',
        # in case you want to add always one filter to each ldap
        query, use
        # this option. e. g. AlwaysFilter => '(mail=*)' or
        AlwaysFilter => '(objectclass=user)'
        AlwaysFilter => '',
        # if both your frontend and your LDAP are unicode, use this:
        # SourceCharset => 'utf-8',
        # DestCharset => 'utf-8',
        # if your frontend is e. g. iso-8859-1 and the character set
        of your
        # ldap server is utf-8, use these options:
        # SourceCharset => 'utf-8',
        # DestCharset => 'iso-8859-1',

        # Net::LDAP new params (if needed - for more info see perldoc
        Net::LDAP)
        Params => {
            port => 389,
            timeout => 120,
            async => 0,
            version => 3,
        },
    },
    # customer unique id
    CustomerKey => 'uid',
    # customer #
    CustomerID => 'mail',
    CustomerUserListFields => ['cn', 'mail'],
    CustomerUserSearchFields => ['uid', 'cn', 'mail'],
    CustomerUserSearchPrefix => '',
    CustomerUserSearchSuffix => '*',
    CustomerUserSearchListLimit => 250,
    CustomerUserPostMasterSearchFields => ['mail'],
    CustomerUserNameFields => ['givenname', 'sn'],
    # show not own tickets in customer panel, CompanyTickets
```

```
CustomerUserExcludePrimaryCustomerID => 0,
# add a ldap filter for valid users (expert setting)
# CustomerUserValidFilter => '!(!(description=locked))',
# admin can't change customer preferences
AdminSetPreferences => 0,
Map => [
    # note: Login, Email and CustomerID needed!
    # var, frontend, storage, shown (1=always,2=lite), required,
    storage-type, http-link, readonly
    [ 'UserTitle',      'Title',      'title',      1, 0,
    'var', '', 0 ],
    [ 'UserFirstname',  'Firstname',  'givenname',  1, 1,
    'var', '', 0 ],
    [ 'UserLastname',   'Lastname',   'sn',        1, 1,
    'var', '', 0 ],
    [ 'UserLogin',     'Username',   'uid',       1, 1,
    'var', '', 0 ],
    [ 'UserEmail',     'Email',      'mail',       1, 1,
    'var', '', 0 ],
    [ 'UserCustomerID', 'CustomerID', 'mail',       0, 1,
    'var', '', 0 ],
    #           [ 'UserCustomerIDs', 'CustomerIDs', 'second_customer_ids', 1,
    0, 'var', '', 0 ],
    [ 'UserPhone',     'Phone',      'telephonenumbers', 1, 0,
    'var', '', 0 ],
    [ 'UserAddress',   'Address',    'postaladdress', 1, 0,
    'var', '', 0 ],
    [ 'UserComment',   'Comment',    'description',  1, 0,
    'var', '', 0 ],
    ],
};

It is possible to integrate up to 10 different customer backends. Use the customer management interface in OTRS to view or edit (assuming write access is enabled) all customer data.
```

## Backends to authenticate Agents and Customers

OTRS offers the option to authenticate agents and customers against different backends.

### Authentication backends for Agents

#### DB (Default)

The backend to authenticate agents which is used by default is the OTRS database. Agents can be added and edited via the agent management interface in the Admin page (see Example 11-6 below).

#### Example 11.6. Authenticate agents against a DB backend

```
$Self->{ 'AuthModule' } = 'Kernel::System::Auth::DB';
```

## LDAP

If an LDAP directory has all your agent data stored, you can use the LDAP module to authenticate your users in OTRS (see Example 11-7 below). This module has only read access to the LDAP tree, which means that you cannot edit your user data via the agent management interface.

### Example 11.7. Authenticate agents against an LDAP backend

```
# This is an example configuration for an LDAP auth. backend.
# (Make sure Net::LDAP is installed!)
$self->{'AuthModule'} = 'Kernel::System::Auth::LDAP';
$self->{'AuthModule::LDAP::Host'} = 'ldap.example.com';
$self->{'AuthModule::LDAP::BaseDN'} = 'dc=example,dc=com';
$self->{'AuthModule::LDAP::UID'} = 'uid';

# Check if the user is allowed to auth in a posixGroup
# (e. g. user needs to be in a group xyz to use otrs)
$self->{'AuthModule::LDAP::GroupDN'} =
  'cn=otrsallow,ou=posixGroups,dc=example,dc=com';
$self->{'AuthModule::LDAP::AccessAttr'} = 'memberUid';
# for ldap posixGroups objectclass (just uid)
# $self->{'AuthModule::LDAP::UserAttr'} = 'UID';
# for non ldap posixGroups objectclass (with full user dn)
# $self->{'AuthModule::LDAP::UserAttr'} = 'DN';

# The following is valid but would only be necessary if the
# anonymous user do NOT have permission to read from the LDAP tree
$self->{'AuthModule::LDAP::SearchUserDN'} = '';
$self->{'AuthModule::LDAP::SearchUserPw'} = '';

# in case you want to add always one filter to each ldap query, use
# this option. e. g. AlwaysFilter => '(mail=*)' or AlwaysFilter =>
# '(objectclass=user)'
$self->{'AuthModule::LDAP::AlwaysFilter'} = '';

# in case you want to add a suffix to each login name, then
# you can use this option. e. g. user just want to use user but
# in your ldap directory exists user@domain.
#   $self->{'AuthModule::LDAP::UserSuffix'} = '@domain.com';

# Net::LDAP new params (if needed - for more info see perldoc
# Net::LDAP)
$self->{'AuthModule::LDAP::Params'} = {
  port => 389,
  timeout => 120,
  async => 0,
  version => 3,
};
```

The configuration parameters shown in the script below can be used to synchronize the user data from your LDAP directory into your local OTRS database. This reduces the number of requests to your LDAP server and speeds up the authentication with OTRS. The data synchronization is done when the agent authenticates the first time. Although the data can be synchronized into

the local OTRS database, the LDAP directory is the last instance for the authentication, so an inactive user in the LDAP tree can't authenticate to OTRS, even when the account data is already stored in the OTRS database. The agent data in the LDAP directory can't be edited via the web interface of OTRS, so the data has to be managed directly in the LDAP tree.

```
# defines AuthSyncBackend (AuthSyncModule) for AuthModule
# if this key exists and is empty, there won't be a sync.
# example values: AuthSyncBackend, AuthSyncBackend2
$Self->{'AuthModule::UseSyncBackend'} = 'AuthSyncBackend';

# agent data sync against ldap
$Self->{'AuthSyncModule'} = 'Kernel::System::Auth::Sync::LDAP';
$Self->{'AuthSyncModule::LDAP::Host'} = 'ldap://ldap.example.com/';
$Self->{'AuthSyncModule::LDAP::BaseDN'} = 'dc=otrs, dc=org';
$Self->{'AuthSyncModule::LDAP::UID'} = 'uid';
$Self->{'AuthSyncModule::LDAP::SearchUserDN'} = 'uid=sys, ou=user,
dc=otrs, dc=org';
$Self->{'AuthSyncModule::LDAP::SearchUserPw'} = 'some_pass';
$Self->{'AuthSyncModule::LDAP::UserSyncMap'} = {
    # DB -> LDAP
    UserFirstname => 'givenName',
    UserLastname   => 'sn',
    UserEmail      => 'mail',
};

[...]

# AuthSyncModule::LDAP::UserSyncInitialGroups
# (sync following group with rw permission after initial create of
# first agent
# login)
$Self->{'AuthSyncModule::LDAP::UserSyncInitialGroups'} = [
    'users',
];
```

*Script: Synchronizing the user data from the LDAP directory into the OTRS database.*

## HTTPBasicAuth for Agents

If you want to implement a "single sign on" solution for all your agents, you can use HTTP basic authentication (for all your systems) and the HTTPBasicAuth module for OTRS (see Example 11-8 below).

### Example 11.8. Authenticate Agents using HTTPBasic

```
# This is an example configuration for an apache ($ENV{REMOTE_USER})
# auth. backend. Use it if you want to have a singe login through
# apache http-basic-auth
$Self->{'AuthModule'} = 'Kernel::System::Auth::HTTPBasicAuth';

# Note:
#
# If you use this module, you should use as fallback
# the following configuration settings if the user is not authorized
```

```
# apache ($ENV{REMOTE_USER})
$self->{LoginURL} = 'http://host.example.com/not-authorised-for-
otrs.html';
$self->{LogoutURL} = 'http://host.example.com/thanks-for-using-
otrs.html';
```

## Radius

The configuration parameters shown in Example 11-9 can be used to authenticate agents against a Radius server.

### Example 11.9. Authenticate Agents against a Radius backend

```
# This is example configuration to auth. agents against a radius
server
$self->{'AuthModule'} = 'Kernel::System::Auth::Radius';
$self->{'AuthModule::Radius::Host'} = 'radiushost';
$self->{'AuthModule::Radius::Password'} = 'radiussecret';
```

## Authentication backends for Customers

### Database (Default)

The default user authentication backend for customers in OTRS is the OTRS database. With this backend, all customer data can be edited via the web interface of OTRS (see Example 11-10 below).

### Example 11.10. Customer user authentication against a DB backend

```
# This is the auth. module against the otrs db
$self->{'Customer::AuthModule'} = 'Kernel::System::CustomerAuth::DB';
$self->{'Customer::AuthModule::DB::Table'} = 'customer_user';
$self->{'Customer::AuthModule::DB::CustomerKey'} = 'login';
$self->{'Customer::AuthModule::DB::CustomerPassword'} = 'pw';
##$self->{'Customer::AuthModule::DB::DSN'} =
# "DBI:mysql:database=customerdb;host=customerdbhost";
##$self->{'Customer::AuthModule::DB::User'} = "some_user";
##$self->{'Customer::AuthModule::DB::Password'} = "some_password";
```

## LDAP

If you have an LDAP directory with all your customer data, you can use the LDAP module to authenticate your customers to OTRS (see Example 11-11 below). Because this module has only read-access to the LDAP backend, it is not possible to edit the customer data via the OTRS web interface.

### Example 11.11. Customer user authentication against an LDAP backend

```
# This is an example configuration for an LDAP auth. backend.
# (make sure Net::LDAP is installed!)
$self->{'Customer::AuthModule'} =
'Kernel::System::CustomerAuth::LDAP';
```

```
$Self->{'Customer::AuthModule::LDAP::Host'} = 'ldap.example.com';
$self->{'Customer::AuthModule::LDAP::BaseDN'} = 'dc=example,dc=com';
$self->{'Customer::AuthModule::LDAP::UID'} = 'uid';

# Check if the user is allowed to auth in a posixGroup
# (e. g. user needs to be in a group xyz to use otrs)
$self->{'Customer::AuthModule::LDAP::GroupDN'} =
    'cn=otrsallow,ou=posixGroups,dc=example,dc=com';
$self->{'Customer::AuthModule::LDAP::AccessAttr'} = 'memberUid';
# for ldap posixGroups objectclass (just uid)
$self->{'Customer::AuthModule::LDAP::UserAttr'} = 'UID';
# for non ldap posixGroups objectclass (full user dn)
#$self->{'Customer::AuthModule::LDAP::UserAttr'} = 'DN';

# The following is valid but would only be necessary if the
# anonymous user does NOT have permission to read from the LDAP tree
$self->{'Customer::AuthModule::LDAP::SearchUserDN'} = '';
$self->{'Customer::AuthModule::LDAP::SearchUserPw'} = '';

# in case you want to add always one filter to each ldap query, use
# this option. e. g. AlwaysFilter => '(mail=*)' or AlwaysFilter =>
# '(objectclass=user)'
$self->{'Customer::AuthModule::LDAP::AlwaysFilter'} = '';

# in case you want to add a suffix to each customer login name, then
# you can use this option. e. g. user just want to use user but
# in your ldap directory exists user@domain.
#$self->{'Customer::AuthModule::LDAP::UserSuffix'} = '@domain.com';

# Net::LDAP new params (if needed - for more info see perldoc
# Net::LDAP)
$self->{'Customer::AuthModule::LDAP::Params'} = {
    port => 389,
    timeout => 120,
    async => 0,
    version => 3,
};
```

## HTTPBasicAuth for customers

If you want to implement a "single sign on" solution for all your customer users, you can use HTTPBasic authentication (for all your systems) and use the HTTPBasicAuth module with OTRS (no login is needed with OTRS any more). See Example 11-12 below.

### Example 11.12. Customer user authentication with HTTPBasic

```
# This is an example configuration for an apache ($ENV{REMOTE_USER})
# auth. backend. Use it if you want to have a singe login through
# apache http-basic-auth
$self->{'Customer::AuthModule'} =
    'Kernel::System::CustomerAuth::HTTPBasicAuth';

# Note:
```

```
# If you use this module, you should use the following
# config settings as fallback, if user isn't login through
# apache ($ENV{REMOTE_USER})
$Self->{CustomerPanelLoginURL} = 'http://host.example.com/not-
authorised-for-otrs.html';
$Self->{CustomerPanelLogoutURL} = 'http://host.example.com/thanks-for-
using-otrs.html';
```

## Radius

The settings shown in Example 11-13 can be used to authenticate your customers against a Radius server.

### Example 11.13. Customer user authentication against a Radius backend

```
# This is a example configuration to auth. customer against a radius
server
$Self->{'Customer::AuthModule'} = 'Kernel::System::Auth::Radius';
$Self->{'Customer::AuthModule::Radius::Host'} = 'radiushost';
$Self->{'Customer::AuthModule::Radius::Password'} = 'radiussecret';
```

## Customize the customer self-registration

It is possible to customize the self-registration for new customers, accessible via the customer.pl panel. New optional or required fields, like room number, address or state can be added.

The following example shows how you can specify a required field in the customer database, in this case to store the room number of a customer.

## Customizing the web interface

To display the new field for the room number in the customer.pl web interface, the .dtl file responsible for the layout in this interface has to be modified. Edit the Kernel/Output/HTML/Standard/CustomerLogin.dtl file, adding the new field around line 80 (see Script below).

```
[...]
<div class="NewLine">
    <label for="Room">$Text{"Room{CustomerUser}"}</label>
    <input title="$Text{"Room Number"}" name="Room" type="text"
id="UserRoom" maxlength="50" />
</div>
[...]
```

*Script: Displaying a new field in the web interface.*

## Customer mapping

In the next step, the customer mapping has to be expanded with the new entry for the room number. To ensure that the changes are not lost after an update, put the "CustomerUser" settings from the Kernel/Config/Defaults.pm into the Kernel/Config.pm. Now change the MAP array and add the new room number field, as shown in the script below.

```

# CustomerUser
# (customer database backend and settings)
$Self->{CustomerUser} = {
    Name => 'Database Backend',
    Module => 'Kernel::System::CustomerUser::DB',
    Params => {
        # if you want to use an external database, add the
        # required settings
        DSN => 'DBI:odbc:yourdsn',
        DSN => 'DBI:mysql:database=customerdb;host=customerdbhost',
        User => '',
        Password => '',
        Table => 'customer_user',
    },
    # customer unique id
    CustomerKey => 'login',
    # customer #
    CustomerID => 'customer_id',
    CustomerValid => 'valid_id',
    CustomerUserListFields => ['first_name', 'last_name', 'email'],
    # CustomerUserListFields => ['login', 'first_name', 'last_name',
    'customer_id', 'email'],
    CustomerUserSearchFields => ['login', 'last_name', 'customer_id'],
    CustomerUserSearchPrefix => '',
    CustomerUserSearchSuffix => '*',
    CustomerUserSearchListLimit => 250,
    CustomerUserPostMasterSearchFields => ['email'],
    CustomerUserNameFields => ['title', 'first_name', 'last_name'],
    CustomerUserEmailUniqCheck => 1,
    # show not own tickets in customer panel, CompanyTickets
    # CustomerUserExcludePrimaryCustomerID => 0,
    # generate auto logins
    # AutoLoginCreation => 0,
    # AutoLoginCreationPrefix => 'auto',
    # admin can change customer preferences
    # AdminSetPreferences => 1,
    # cache time to live in sec. - cache database queries
    # CacheTTL => 0,
    # just a read only source
    # ReadOnly => 1,
    Map => [
        # note: Login, Email and CustomerID needed!
        # var, frontend, storage, shown (1=always,2=lite), required,
        storage-type, http-link, readonly, http-link-target
        [ 'UserTitle',      'Title',      'title',      1, 0, 'var',
        '', 0 ],
        [ 'UserFirstname',  'Firstname',  'first_name',  1, 1, 'var',
        '', 0 ],
        [ 'UserLastname',   'Lastname',   'last_name',   1, 1, 'var',
        '', 0 ],
        [ 'UserLogin',      'Username',   'login',      1, 1, 'var',
        '', 0 ],
    ]
}

```

```

        [ 'UserPassword',      'Password',      'pw',           0, 0, 'var',
'', 0 ],          [ 'UserEmail',       'Email',       'email',        1, 1, 'var',
'', 0 ],          [ 'UserCustomerID', 'CustomerID', 'customer_id', 0, 1, 'var',
'', 0 ],          [ 'UserPhone',       'Phone',       'phone',        1, 0, 'var',
'', 0 ],          [ 'UserFax',         'Fax',         'fax',          1, 0, 'var',
'', 0 ],          [ 'UserMobile',       'Mobile',       'mobile',        1, 0, 'var',
'', 0 ],          [ 'UserRoom',        'Room',        'room',         1, 0, 'var',
'', 0 ],          [ 'UserStreet',       'Street',       'street',        1, 0, 'var',
'', 0 ],          [ 'UserZip',          'Zip',          'zip',          1, 0, 'var',
'', 0 ],          [ 'UserCity',          'City',          'city',         1, 0, 'var',
'', 0 ],          [ 'UserCountry',       'Country',       'country',       1, 0, 'var',
'', 0 ],          [ 'UserComment',       'Comment',       'comments',     1, 0, 'var',
'', 0 ],          [ 'ValidID',          'Valid',          'valid_id',    0, 1, 'int',
'', 0 ],          ],
# default selections
Selections => {
    UserTitle => {
        'Mr.' => 'Mr.',
        'Mrs.' => 'Mrs.',
    },
},
};

Script: Changing the map array.
```

## Customize the customer\_user table in the OTRS DB

The last step is to add the new room number column to the customer\_user table in the OTRS database (see Script below). In this column, the entries for the room numbers will be stored.

```

linux:~# mysql -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 6 to server version: 5.0.18-Debian_7-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> use otrs;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
mysql> ALTER TABLE customer_user ADD room VARCHAR (200);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> quit
Bye
linux:~#
```

*Script: Adding a new column to the customer\_user table.*

Now the new field for the room should be displayed in the customer.pl panel. New customers should have to insert their room number if they register a new account. If you use apache and use mod\_perl for OTRS, you should restart the web server to activate the changes.

---

# **Chapter 12. States**

## **Predefined states**

OTRS allows you to change predefined ticket states and their types, or even add new ones. Two attributes are important for a state: the state name and the state type.

The default states of OTRS are: 'closed successful', 'closed unsuccessful', 'merged', 'new', 'open', 'pending auto close+', 'pending auto close-', 'pending reminder' and 'removed'.

### **New**

Tickets are usually in this state when created from incoming e-mails.

### **Open**

This is the default state for tickets assigned to queues and agents.

### **Pending reminder**

After the pending time has expired, the ticket owner will receive a reminder email concerning the ticket. If the ticket is not locked, the reminder will be sent to all agents in the queue. Reminder tickets will only be sent out during business hours, and are repeatedly sent every 24 hours until the ticket state is changed by the agent. Time spent by the ticket in this status will still add towards the escalation time calculation.

### **Pending auto close-**

Tickets in this status will be set to "Closed Unsuccessful" if the pending time has expired. Time spent by the ticket in this status will still add towards the escalation time calculation.

### **Pending auto close+**

Tickets in this status will be set to "Closed Successful" if the pending time has expired. Time spent by the ticket in this status will still add towards the escalation time calculation.

### **Merged**

This is the state for tickets that have been merged with other tickets.

### **Closed Successful**

This is the end state for tickets that have been successfully resolved. Depending on your configuration, you may or may not be able to reopen closed tickets.

### **Closed Unsuccessful**

This is the end state for tickets that have NOT been successfully resolved. Depending on your configuration, you may or may not be able to reopen closed tickets.

# Customizing states

Every state has a name (state-name) and a type (state-type). Click on the States link on the Admin page and press the button "Add state" to create a new state. You can freely choose the name of a new state. The state types can not be changed via the web interface. The database has to be directly modified if you want to add new types or change existing names. The default state types should typically not be modified as this can yield unpredictable results. For instance, escalation calculations and the unlock feature are based on specific state types.

The name of an already existing state can be changed, or new states added through this screen. If the state "new" has been changed via the web interface, this change also has to be configured via the config file `Kernel/Config.pm` or via the SysConfig interface. The settings specified in the script below have to be modified to ensure that OTRS works with the changed state for "new".

```
[...]
# PostmasterDefaultState
# (The default state of new tickets.) [default: new]
$Self->{PostmasterDefaultState} = 'new';

# CustomerDefaultState
# (default state of new customer tickets)
$Self->{CustomerDefaultState} = 'new';
[...]
```

*Script: Modifying the Kernel/Config.pm settings.*

If a new state type should be added, the `ticket_state_type` table in the OTRS database needs to be modified with a database client program, as shown in the script below.

```
linux:~# mysql -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 23 to server version: 5.0.16-Debian_1-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> use otrs;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> insert into ticket_state_type (name,comments) values
  ('own','Own
state type');
Query OK, 1 row affected (0.00 sec)

mysql> quit
Bye
linux:~#
```

*Script: Modifying the OTRS database.*

Now it is possible to use the new state type you just created. After a state has been linked with this new state type, the OTRS configuration also has to be changed to ensure that the new state is usable. Just modify the following options via SysConfig:

Ticket -> Frontend::Agent::Ticket::ViewPhoneNew > AgentTicketPhone###StateDefault - to define the default next state for new phone tickets.

Ticket -> Frontend::Agent::Ticket::ViewPhoneNew > AgentTicketPhone###StateType - to define the available next states for new phone tickets.

Ticket -> Frontend::Agent::Ticket::ViewEmailNew > AgentTicketEmail###StateDefault - to define the default next state for new email tickets.

Ticket -> Frontend::Agent::Ticket::ViewEmailNew > AgentTicketEmail###StateType - to define the available next states for new email tickets.

Ticket -> Frontend::Agent::Ticket::ViewPhoneOutbound > AgentTicketPhoneOutbound###State - to define the default next state for new phone articles.

Ticket -> Frontend::Agent::Ticket::ViewPhoneOutbound > AgentTicketPhoneOutbound###StateType - to define the available next states for new phone articles.

Ticket:Frontend::Agent::Ticket::ViewMove:Ticket::DefaultNextMoveStateType - to define the default next state after moving a ticket.

Ticket -> Frontend::Agent::Ticket::ViewBounce > StateDefault - to define the default next state after bouncing a ticket.

Ticket -> Frontend::Agent::Ticket::ViewBounce > StateType - to define the available next states in the bounce screen.

Ticket -> Frontend::Agent::Ticket::ViewBulk > StateDefault - to define the default next state in a bulk action.

Ticket -> Frontend::Agent::Ticket::ViewBulk > StateType - to define the available next states in the bulk action screen.

Ticket -> Frontend::Agent::Ticket::ViewClose > StateDefault - to define the default next state after closing a ticket.

Ticket -> Frontend::Agent::Ticket::ViewClose > StateType - to define the available next states in the close screen.

Ticket -> Frontend::Agent::Ticket::ViewCompose > StateDefault - to define the default next state in the Compose (reply) screen.

Ticket -> Frontend::Agent::Ticket::ViewCompose > StateType - to define the available next states in the Compose (reply) screen.

Ticket -> Frontend::Agent::Ticket::ViewForward > StateDefault - to define the default next state after forwarding a ticket.

Ticket -> Frontend::Agent::Ticket::ViewForward > StateType - to define the available next states in the Forward screen.

Ticket -> Frontend::Agent::Ticket::ViewForward > StateDefault - to define the default next state of a ticket in the free text screen.

Ticket -> Frontend::Agent::Ticket::ViewForward > StateType - to define the available next states in the free text screen.

Ticket -> Core::PostMaster > PostmasterDefaultState - to define the state of tickets created from emails.

Ticket -> Core::PostMaster > PostmasterFollowUpState - to define the state of tickets after a follow-up has been received.

Ticket -> Core::PostMaster > PostmasterFollowUpStateClosed - to define the state of tickets after a follow-up has been received on an already closed ticket.

Ticket -> Core::Ticket > ViewableStateType - to define the state types that are displayed at various places in the system, for example in the Queueview.

Ticket -> Core::Ticket > UnlockStateType - to define the state types for unlocked tickets.

Ticket -> Core::Ticket > PendingReminderStateType - to define the state type for reminder tickets.

Ticket -> Core::Ticket > PendingAutoStateType - to define the state type for Pending Auto tickets.

Ticket -> Core::Ticket > StateAfterPending - to define the state a ticket is set to after the Pending Auto timer of the configured state has expired.

---

# Chapter 13. Modifying ticket priorities

OTRS comes with five default priority levels that can be modified via the "Priorities" link on the Admin page. When creating a customized list of priorities, please keep in mind that they are sorted alphabetically in the priority selection box in the user interface. Also, OTRS orders tickets by internal database IDs in the QueueView.

## Note

As with other OTRS entities, priorities may not be deleted, only deactivated by setting the Valid option to *invalid* or *invalid-temporarily*.

## Important

If a new priority was added or if an existing one was changed, you might also want to modify some values in SysConfig:

- Ticket:Core::Postmaster::PostmasterDefaultPriority - defines the default priority for all incoming emails.
- Ticket:Frontend::Agent::Ticket::ViewPhoneNew:Priority - defines the default priority in the New Phone Ticket screen for agents.
- Ticket:Frontend::Agent::Ticket::ViewEmailNew:Priority - defines the default priority in the New Email Ticket screen for agents.
- Ticket:Frontend::Customer::Ticket::ViewNew:PriorityDefault - defines the default priority in the New Ticket screen in the Customer frontend.

---

# Chapter 14. Creating your own themes

You can create your own themes so as to use the layout you like in the OTRS web frontend. To create own themes, you should customize the output templates to your needs.

More information on the syntax and structure of output templates can be found in the Developer Manual at <http://doc.otrs.org>, especially in the chapter on *templates* [<http://doc.otrs.org/developer/3.1/en/html/hacking.html#TemplatingMechanism>].

As an example, perform the following steps to create a new theme called "Company":

1. Create a directory called `Kernel/Output/HTML/Company` and copy all files that you like to change, from `Kernel/Output/HTML/Standard` into the new folder.

## Important

Only copy over the files you actually change. OTRS will automatically get the missing files from the Standard theme. This will make upgrading at a later stage much easier.

2. Customize the files in the directory `Kernel/Output/HTML/Company`, and change the layout to your needs.
3. To activate the new theme, add them in SysConfig under Frontend::Themes.

Now the new theme should be useable. You can select it via your personal preferences page.

## Warning

Do not change the theme files shipped with OTRS, since these changes will be lost after an update. Create your own themes only by performing the steps described above.

---

# **Chapter 15. Localization of the OTRS frontend**

OTRS offers multi-language support for its web interface.

Procedures for localization for the OTRS framework, steps to be followed to create a new language translation, as well as procedures for translation customizations, can be found in the "Language Translations" [<http://doc.otrs.org/developer/3.1/en/html/contributing.html#translate>] chapter from the developer manual on <http://doc.otrs.org>.

---

# Chapter 16. PGP

OTRS has the capability to sign or encrypt outgoing messages with PGP. Further, encrypted incoming messages can be decrypted. Encryption and decryption are done with the GPL tool GnuPG. To setup GnuPG for OTRS, the following steps have to be performed:

1. Install GnuPG, via the package manager of your operating system.
2. Configure GnuPG for use with OTRS. The necessary directories for GnuPG and a private key have to be created. The command shown in the script below has to be executed as user 'otrs' from a shell.

```
linux:~# su otrs
linux:/root$ cd
linux:~$ pwd
/opt/otrs
linux:~$ gpg --gen-key
gpg (GnuPG) 1.4.2; Copyright (C) 2005 Free Software Foundation,
Inc.

This program comes with ABSOLUTELY NO WARRANTY.
This is free software, and you are welcome to redistribute it
under certain conditions. See the file COPYING for details.

gpg: directory `/opt/otrs/.gnupg' created
gpg: new configuration file `/opt/otrs/.gnupg/gpg.conf' created
gpg: WARNING: options in `/opt/otrs/.gnupg/gpg.conf' are not yet
active during t
his run
gpg: keyring `/opt/otrs/.gnupg/secring.gpg' created
gpg: keyring `/opt/otrs/.gnupg/pubring.gpg' created
Please select what kind of key you want:
 (1) DSA and Elgamal (default)
 (2) DSA (sign only)
 (5) RSA (sign only)
Your selection? 1
DSA keypair will have 1024 bits.
ELG-E keys may be between 1024 and 4096 bits long.
What keysize do you want? (2048)
Requested keysize is 2048 bits
Please specify how long the key should be valid.
 0 = key does not expire
 <n> = key expires in n days
 <n>w = key expires in n weeks
 <n>m = key expires in n months
 <n>y = key expires in n years
Key is valid for? (0)
Key does not expire at all
Is this correct? (y/N) y

You need a user ID to identify your key; the software constructs
the user ID
from the Real Name, Comment and Email Address in this form:
```



```
      uid                               Ticket System (Private pgp key for ticket
system with addre
      ss support@example.com) <support@example.com>
      sub   2048g/52B97069 2006-02-03

linux:~$
```

*Script: Configuring GnuPG.*

As shown in the script below, the default settings can be applied for most of the required parameters. Only the values for the key owner have to be entered correctly, with a proper password specified for the key.

3. Now OTRS has to be made ready to use PGP. From the Admin console, open the SysConfig interface and search for "PGP". Select the sub group Crypt::PGP from the search results.

In the screen for the PGP settings, PGP should be activated for OTRS (first option). Also, the path to the gpg program should be set and checked.

The next config setting (PGP::Options) may also require changing. Via this config setting, the parameters that are used for every execution of gpg by the 'otrs' user can be specified. In particular, the directory of the config files for GnuPG of the 'otrs' user is important. In the example /opt/otrs/.gnupg is used. This directory was created earlier during the PGP configuration.

Via the next config option (PGP::Key::Password) it is possible to specify the pairs of key IDs and their passwords for own private keys. Because communication partners from outside write to the ticket system with their messages encrypted with your public key, OTRS can decrypt these messages with the ID/passwords specified here.

How to get the id of your own private key? The ID of your own private key is already shown during the key generation (see step 1 from above). It is also possible to get the ID if the command specified in the following script is executed as user 'otrs':

```
linux:~# su otrs
linux:/root$ cd
linux:~$ pwd
/opt/otrs
linux:~$ gpg --list-keys
/opt/otrs/.gnupg/pubring.gpg
-----
pub    1024D/7245A970 2006-02-03
uid                               Ticket System (Private pgp key for ticket
system with
      address support@example.com) <support@example.com>
      sub   2048g/52B97069 2006-02-03

linux:~$
```

*Script: Getting the ID of your own private key.*

The ID of the private key can be found in the line that starts with "sub". It is a hexadecimal string that is eight characters long, in the example above it is "52B97069". The password you have to specify for this key in the ticket system is the same that was given during key generation.

After this data is inserted, the "Update" button can be used to save the settings. OTRS is ready to receive and decrypt encoded messages now.

4. Finally, import a customer's public key. This ensures that encrypted messages can be sent out to this customer. There are two ways to import a public key of a customer.

The first way is to specify the public key of a customer in the customer management interface.

The second way is to specify the key via the PGP settings, reachable from the Admin page. On the right section of this screen, all already imported public keys of customers are displayed. After PGP has been activated and configured for OTRS, your own public key should also be listed there. In the left area of the PGP setting screen it is possible to search for keys. Also, a new public key can be uploaded into the system from a file.

The files with the public key that need to be imported into OTRS have to be GnuPG compatible key files. In most cases, the key stored in a file is an "ASCII armored key". OTRS can deal with this format.

---

# Chapter 17. S/MIME

At first glance, encryption with S/MIME seems a little more complicated than with PGP. First, you have to establish a Certification Authority (CA) for the OTRS system, following which the procedures are very much like those needed with PGP: configure OTRS, install your own certificate, import other public certificates as needed, etc.

The S/MIME configuration is conducted outside the OTRS web interface for the most part, and should be carried out in a shell by the 'otrs' user. The MIME configuration under Linux is based on SSL (OpenSSL). Therefore, check first of all whether the OpenSSL package is installed on your system. The OpenSSL package includes a script called CA.pl, with which the most important steps of certificate creation can be performed. To simplify the procedure, find out where in the filesystem the CA.pl script is stored and enter the location temporarily into the PATH variable of the shell (see Script below).

```
otrs@linux:~> rpm -ql openssl | grep CA
/usr/share/ssl/misc/CA.pl
otrs@linux:~> export PATH=$PATH:/usr/share/ssl/misc
otrs@linux:~> which CA.pl
/usr/share/ssl/misc/CA.pl
otrs@linux:~> mkdir tmp; cd tmp
otrs@linux:~/tmp>
```

*Script: Configuring S/MIME.*

The script above shows that a new temporary directory ~/tmp has been created, in which the certificate is to be generated.

To create a certificate, perform the following operations in the command line (we assume that the OTRS administrator has to create a SSL certificate for test and learning purposes. In case you already have a certified SSL certificate for the encryption, use it and skip these steps):

1. Establish your own Certification Authority for SSL. You need it to certify the request for your own SSL certificate (see Script below).

```
otrs@linux:~/tmp> CA.pl -newca
CA certificate filename (or enter to create)

Making CA certificate ...
Generating a 1024 bit RSA private key
...+++++
.....+++++
writing new private key to './demoCA/private/cakey.pem'
Enter PEM pass phrase:
Verifying - Enter PEM pass phrase:
-----
You are about to be asked to enter information that will be
incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name
or a DN.
There are quite a few fields but you can leave some blank
```

```
For some fields there will be a default value,  
If you enter '.', the field will be left blank.  
----  
Country Name (2 letter code) [AU]:DE  
State or Province Name (full name) [Some-State]:OTRS-state  
Locality Name (eg, city) []:OTRS-town  
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Your  
company  
Organizational Unit Name (eg, section) []:  
Common Name (eg, YOUR name) []:OTRS Admin  
Email Address []:otrs@your-domain.tld  
otrs@linux:~/tmp> ls -la demoCA/  
total 8  
-rw-r--r-- 1 otrs otrs 1330 2006-01-08 17:54 cacert.pem  
drwxr-xr-x 2 otrs otrs 48 2006-01-08 17:53 certs  
drwxr-xr-x 2 otrs otrs 48 2006-01-08 17:53 crl  
-rw-r--r-- 1 otrs otrs 0 2006-01-08 17:53 index.txt  
drwxr-xr-x 2 otrs otrs 48 2006-01-08 17:53 newcerts  
drwxr-xr-x 2 otrs otrs 80 2006-01-08 17:54 private  
-rw-r--r-- 1 otrs otrs 17 2006-01-08 17:54 serial  
otrs@linux:~/tmp>
```

*Script: Establishing a Certification Authority for SSL.*

2. Generate a certificate request (see Script below).

```
otrs@linux:~/tmp> CA.pl -newreq  
Generating a 1024 bit RSA private key  
.....+++++  
....+++++  
writing new private key to 'newreq.pem'  
Enter PEM pass phrase:  
Verifying - Enter PEM pass phrase:  
----  
You are about to be asked to enter information that will be  
incorporated  
into your certificate request.  
What you are about to enter is what is called a Distinguished Name  
or a DN.  
There are quite a few fields but you can leave some blank  
For some fields there will be a default value,  
If you enter '.', the field will be left blank.  
----  
Country Name (2 letter code) [AU]:DE\keyreturn  
State or Province Name (full name) [Some-State]:OTRS-state  
Locality Name (eg, city) []:OTRS-town  
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Your  
company  
Organizational Unit Name (eg, section) []:  
Common Name (eg, YOUR name) []:OTRS admin  
Email Address []:otrs@your-domain.tld
```

```
Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:
Request (and private key) is in newreq.pem
otrs@linux:~/tmp> ls -la
total 4
drwxr-xr-x  6 otrs otrs  232 2006-01-08 17:54 demoCA
-rw-r--r--  1 otrs otrs 1708 2006-01-08 18:04 newreq.pem
otrs@linux:~/tmp>
```

*Script: Creating a certificate request.*

3. Signing of the certificate request. The certificate request can either be signed and thereby certified by your own CA, or made more credible by being signed by another external certified CA (see Script below).

```
otrs@linux:~/tmp> CA.pl -signreq
Using configuration from /etc/ssl/openssl.cnf
Enter pass phrase for ./demoCA/private/cakey.pem:
Check that the request matches the signature
Signature ok
Certificate Details:
    Serial Number:
        fd:85:f6:9f:14:07:16:c8
    Validity
        Not Before: Jan  8 17:04:37 2006 GMT
        Not After : Jan  8 17:04:37 2007 GMT
    Subject:
        countryName          = DE
        stateOrProvinceName = OTRS-state
        localityName         = OTRS-town
        organizationName    = Your Company
        commonName           = OTRS administrator
        emailAddress         = otrs@your-domain.tld
    X509v3 extensions:
        X509v3 Basic Constraints:
            CA:FALSE
        Netscape Comment:
            OpenSSL Generated Certificate
    X509v3 Subject Key Identifier:
01:D9:1E:58:C0:6D:BF:27:ED:37:34:14:D6:04:AC:C4:64:98:7A:22
    X509v3 Authority Key Identifier:
keyid:10:4D:8D:4C:93:FD:2C:AA:9A:B3:26:80:6B:F5:D5:31:E2:8E:DB:A8
        DirName:/C=DE/ST=OTRS-state/L=OTRS-town/O=Your
        Company/
        CN=OTRS admin/emailAddress=otrs@your-domain.tld
        serial:FD:85:F6:9F:14:07:16:C7
```

```
Certificate is to be certified until Jan 8 17:04:37 2007 GMT (365
days)
Sign the certificate? [y/n]:y

1 out of 1 certificate requests certified, commit? [y/n]y
Write out database with 1 new entries
Data Base Updated
Signed certificate is in newcert.pem
otrs@linux:~/tmp>
```

*Script: Signing of the certificate request.*

4. Generate your own certificate, and all data going with it, using the signed certificate request (see Script below).

```
otrs@linux:~/tmp> CA.pl -pkcs12 "OTRS Certificate"
Enter pass phrase for newreq.pem:
Enter Export Password:
Verifying - Enter Export Password:
otrs@linux:~/tmp> ls -la
total 12
drwxr-xr-x  6 otrs otrs  328 2006-01-08 18:04 demoCA
-rw-r--r--  1 otrs otrs 3090 2006-01-08 18:13 newcert.p12
-rw-r--r--  1 otrs otrs 3791 2006-01-08 18:04 newcert.pem
-rw-r--r--  1 otrs otrs 1708 2006-01-08 18:04 newreq.pem
otrs@linux:~/tmp>
```

*Script: Generating a new certificate.*

Now that these operations have been performed, the S/MIME setup must be completed in OTRS.

This part of the setup is carried out in the Admin page, choosing the link "SMIME". In case the general S/MIME support in OTRS has not yet been enabled, the mask points this out to the administrator and provides an appropriate link for enabling it.

With the SysConfig group "Crypt::SMIME", you can also enable and configure the general S/MIME support.

Here you can activate S/MIME support, and define the paths for the OpenSSL command and the directory for the certificates. The key file created above must be stored in the directory indicated here. Otherwise OpenSSL cannot use it.

The next step is performed in the S/MIME configuration on the OTRS Admin page. Here, you can import the private key(s) of the OTRS system and the public keys of other communication partners. Enter the public key that has been created in the beginning of this section and added to OTRS.

Obviously, all public S/MIME keys of communication partners can be imported using the customer administration tool as well.

---

# Chapter 18. Access Control Lists (ACLs)

## Introduction

From OTRS 2.0 on, Access Control Lists (ACLs) can be used to control access to tickets, modules, queues, etc., or to influence actions on tickets (closing, moving, etc.) in certain situations. ACLs can be used to supplement the existing permission system of roles and groups. Using ACLs, rudimentary workflows within the system can be mapped, based on ticket attributes.

As yet, ACLs cannot be created using the SysConfig interface. They must be directly entered into the `Kernel/Config.pm` file. This chapter has some ACL examples which will walk you through the process of defining ACL definitions, and a reference of all possible important ACL settings.

## Examples

### Example 18.1. ACL allowing movement into a queue of only those tickets with ticket priority 5.

This example shows you the basic structure of an ACL. First, it needs to have a name. In this case, it is "ACL-Name-2". Note that the ACLs will be numerically sorted before execution, so you should use the names carefully.

Secondly, you have a "Properties" section which is a filter for your tickets. All the criteria defined here will be applied to a ticket to determine if the ACL must be applied or not. In our example, a ticket will match if it is in the queue "Raw" and has priority "5 very high". This is also affected by changes in the form (e.g. if the ticket is the queue "raw" and had a priority "3 normal", but then priority drop-down is selected and the priority is changed now to "5 very high" will also match).

Lastly, a section "Possible" defines modifications to the screens. In this case, from the available queues, only the queue "Alert" can be selected in a ticket screen.

```
# ticket acl
$self->{TicketAcl}->{'100-Example-ACL'} = {
    # match properties
    Properties => {
        # current ticket match properties
        Ticket => {
            Queue => ['Raw'],
            Priority => ['5 very high'],
        }
    },
    # return possible options (white list)
    Possible => {
        # possible ticket options (white list)
        Ticket => {
            Queue => ['Alert'],
        },
    },
};
```

### **Example 18.2. ACL allowing movement into a queue of only those tickets with ticket priority 5 stored in the database.**

This example is very similar to the last one, but in this case only tickets in the queue "Raw" and with a priority "5 very high", both stored in the database will match. This kind of ACLs does not consider changes in the form before the ticket is really updated in the database.

```
# ticket acl
$self->{TicketAcl}->{'100-Example-ACL'} = {
    # match properties
    PropertiesDatabase => {
        # current ticket match properties
        Ticket => {
            Queue => ['Raw'],
            Priority => ['5 very high'],
        }
    },
    # return possible options (white list)
    Possible => {
        # possible ticket options (white list)
        Ticket => {
            Queue => ['Alert'],
        },
    },
};

Please note that PropertiesDatabase is available since OTRS 3.1.5.
```

### **Example 18.3. ACL disabling the closing of tickets in the raw queue, and hiding the close button.**

Here you can see how a ticket field (state) can be filtered with more than one possible value to select from. It is also possible to limit the actions that can be executed for a certain ticket. In this case, the ticket cannot be closed.

```
$self->{TicketAcl}->{'101-Second-Example-ACL'} = {
    # match properties
    Properties => {
        # current ticket match properties
        Ticket => {
            Queue => ['Raw'],
        }
    },
    # return possible options (white list)
    Possible => {
        # possible ticket options (white list)
        Ticket => {
            State => ['new', 'open', 'pending reminder'],
        },
        # possible action options
        Action => {
            AgentTicketBounce      => 1,
            AgentTicketClose       => 0,
        }
};
```

```

        AgentTicketCompose      => 1,
        AgentTicketCustomer    => 1,
        AgentTicketForward     => 1,
        AgentTicketFreeText    => 1,
        AgentTicketHistory     => 1,
        AgentTicketLink         => 1,
        AgentTicketLock         => 1,
        AgentTicketMerge        => 1,
        AgentTicketMove         => 1,
        AgentTicketNote         => 1,
        AgentTicketOwner        => 1,
        AgentTicketPending      => 1,
        AgentTicketPhone        => 1, # only used to hide the
Split action
        AgentTicketPhoneInbound => 1,
        AgentTicketPhoneOutbound=> 1,
        AgentTicketPrint        => 1,
        AgentTicketPriority     => 1,
        AgentTicketResponsible  => 1,
        AgentTicketWatcher      => 1,
        AgentTicketZoom          => 1,
        AgentLinkObject          => 1, # only used to hide the
Link action
    },
},
};

;

```

#### **Example 18.4. ACL removing always state closed successful.**

This example shows how it is possible to define negative filters (the state "closed successful" will be removed). You can also see that not defining match properties for a ticket will match any ticket, i. e. the ACL will always be applied. This may be useful if you want to hide certain values by default, and only enable them in special circumstances (e. g. if the agent is in a specific group).

```

$self->{TicketAcl}->{'102-Third-ACL-Example'} = {
    # match properties
    Properties => {
        # current ticket match properties (match always)
    },
    # return possible options
    PossibleNot => {
        # possible ticket options
        Ticket => {
            State => ['closed successful'],
        },
    },
};

```

#### **Example 18.5. ACL only showing Hardware services for tickets that are created in queues that start with "HW".**

This example also shows you how you can use regular expressions for matching tickets and for filtering the available options.

```
$Self->{TicketAcl}->{'Only-Hardware-Services-for-HW-Queues'} = {
    # match properties
    # note we don't have "Ticket => {" because there's no ticket yet
    Properties => {
        Queue => {
            Name => ['[RegExp]HW'],
        }
    },
    # return possible options
    Possible => {
        # possible ticket options
        Ticket => {
            Service => ['[RegExp]^Hardware'],
        },
    },
};
```

## Reference

In the example below there is a list of all parameters which can be used for ACLs.

### **Example 18.6. Reference showing all possible important ACL settings.**

```
# ticket acl
$self->{TicketAcl}->{'200-ACL-Reference'} = {
    # match properties (current values from the form)
    Properties => {

        # the used frontend module
        Frontend => {
            Action => ['AgentTicketPhone', 'AgentTicketEmail'],
        },
        # the logged in agent
        User => {
            UserLogin => ['some login'],
            # ...
            Group_rw => [
                'hotline',
            ],
            # ...
            Role => [
                'admin',
            ],
            # ...
        },
        # the logged in customer
        CustomerUser => {
            UserLogin => ['some login'],
            # ...
            Group_rw => [
                'hotline',
            ],
        },
    },
};
```

```
],
# ...
Role => [
    'admin',
],
# ...
} ,

#
# ticket properties
#

Queue => {
    Name      => ['Raw'],
    QueueID   => ['some id'],
    GroupID   => ['some id'],
    Email     => ['some email'],
    RealName  => ['OTRS System'],
    # ...
},
Service => {
    ServiceID => ['some id'],
    Name       => ['some name'],
    ParentID   => ['some id'],
    # ...
},
Type => {
    ID      => ['some id'],
    Name    => ['some name'],
    # ...
},
Priority = {
    ID      => ['some id'],
    Name    => ['some name'],
    # ...
},
SLA = {
    SLAID   => ['some id'],
    Name     => ['some name'],
    Calendar => ['some calendar'],
    # ...
},
State = {
    ID      => ['some id'],
    Name    => ['some name'],
    TypeName => ['some state type name'],,
   TypeID   => ['some state type id'],
    # ...
},
Owner => {
    UserLogin => ['some login'],
    # ...
    Group_rw => [
        'some group',

```

```

],
# ...
Role => [
    'admin',
],
# ...
},
Responsible => {
    UserLogin => ['some login'],
    # ...
    Group_rw => [
        'some group',
],
# ...
Role => [
    'admin',
],
# ...
},
DynamicField => {
    # keys must be in DynamicField_<field_name> format
    DynamicField_Field1      => ['some value'],
    DynamicField_OtherField   => ['some value'],
    DynamicField_TicketFreeText2 => ['some value'],
    # ...
},
# alternatively, ticket properties can be specified in the
ticket hash
Ticket => {
    Queue          => ['Raw'],
    State          => ['new', 'open'],
    Priority       => ['some priority'],
    Lock           => ['lock'],
    CustomerID     => ['some id'],
    CustomerUserID => ['some id'],
    Owner          => ['some owner'],
    DynamicField_Field1 => ['some value'],      # Must be the
untranslated values
                                                #     specified
in the dynamic field
                                                #     definition
and not the IDs
    DynamicField_MyField => ['some value'],
    # ...
},
# match properties (existing values from the database)
# This section is available since OTRS 3.1.5.
PropertiesDatabase => {
    # See section "Properties", the same config can be used here.
    # ...
}

```

```

# return possible options (white list)
Possible => {
    # possible ticket options (white list)
    Ticket => {
        Queue => ['Hotline', 'Coordination'],
        State => ['some state'],
        Priority => ['5 very high'],
        DynamicField_Field1 => ['some value'],
        DynamicField_MyField => ['some value'],
        # ...
        NewOwner => ['some owner'],
        OldOwner => ['some owner'],
        # ...
    },
    # possible action options (white list)
    Action => {
        AgentTicketBounce      => 1,
        AgentTicketClose       => 1,
        AgentTicketCompose     => 0,
        AgentTicketCustomer   => 0,
        AgentTicketForward    => 0,
        AgentTicketFreeText   => 1,
        AgentTicketHistory    => 1,
        AgentTicketLink        => 0,
        AgentTicketLock        => 1,
        AgentTicketMerge       => 0,
        AgentTicketMove        => 1,
        AgentTicketNote        => 1,
        AgentTicketOwner       => 1,
        AgentTicketPending     => 1,
        AgentTicketPhone       => 1, # only used to hide the
Split action
        AgentTicketPhoneInbound => 0,
        AgentTicketPhoneOutbound => 1,
        AgentTicketPrint       => 1,
        AgentTicketPriority    => 0,
        AgentTicketResponsible => 1,
        AgentTicketWatcher     => 1,
        AgentTicketZoom         => 1,
        AgentLinkObject         => 1, # only used to hide the
Link action
    },
},
# remove options (black list)
PossibleNot => {
    # See section "Possible"
    # ...
},
};


```

## Note

While matching ACLs if CustomerUserID parameter sent, the ACL mechanism will compare the defined ACLs using the supplied CustomerUserID to gather the CustomerUser details to fill the CustomerUser hash and it also overrides the Customer information in the Ticket hash for the Properties match. On the other hand this calculations are also made for the PropertiesDatabase part, but using the Ticket Customer as the basis to gather the data.

Notice that in Customer Interface, the CustomerUserID is always sent with the current logged Customer User.

Be aware that in ticket search screens (AgentTicketSearch and CustomerTicketSearch) the only affected attributes by ACLs are the Dynamic Fields. This means that this screens you can not restrict any other attribute like ticket type, state, queue, etc.

# Chapter 19. Stats module

The OTRS stats module holds features to track operational statistics and generate custom reports associated with OTRS usage. The OTRS system uses the term "stat" generically to refer to a report presenting various indicators.

Proper configuration of the OTRS stats module is associated with a multitude of requirements and considerations. These include the various OTRS modules to be evaluated, user permission settings, indicators to be calculated and their complexity levels, ease of configuration of the stats module, speed and efficiency of calculations, and support of a rich set of output variants.

Statistical elements, i.e. files which supplement the functionality of the stats module for specific requirements, can be integrated for calculating complex statistics.

## Handling of the module by the agent

When signed on as an agent, the navigation bar displays the link "Statistics". This has various submenu options, as shown in Figure.

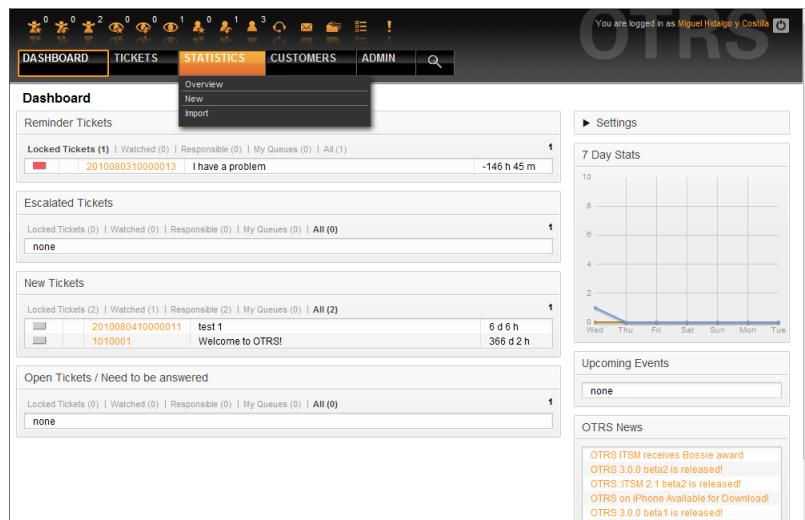


Figure: Statistics menu options.

The different options provided in the statistics menu are:

- *Overview*. Presents a list of different pre-configured reports.
- *New*. Requires rw rights.
- *Import*. Requires rw rights.

## Overview

Selecting the "Statistics" link in the navigation bar, and then the submenu link "Overview", calls up the Overview screen. The Overview screen presents a list of all pre-configured reports the agent can use (see Figure below).

The screenshot shows the 'STATISTICS' tab selected in the top navigation bar. Below it, a table titled 'Overview: Stats' lists 11 standard reports. Each report entry includes a Stat# (number), Title (description), Object (type of statistic), and Description (brief description). The table has three columns: STAT#, TITLE, and OBJECT. The descriptions in the TITLE column are truncated.

STAT#	TITLE	OBJECT	DESCRIPTION
10001	List of the most time-consuming tickets	Ticketlist	List of tickets closed last month which required t[...]
10002	Changes of status in a monthly overview	Ticketlist	Monthly overview, which reports status changes per[...]
10003	List of tickets created last month	Ticketlist	List of all tickets created last month. Order by af[...]
10004	List of open tickets, sorted by time left until solution deadline expires	Ticketlist	List of open tickets, sorted by time left until solut[...]
10005	List of tickets closed, sorted by solution time	Ticketlist	List of tickets closed last month, sorted by solut[...]
10006	List of open tickets, sorted by time left until escalation deadline expires	Ticketlist	List of open tickets, sorted by time left until escl[...]
10007	List of tickets closed last month	Ticketlist	List of all tickets closed last month. Order by agf[...]
10008	Overview about all tickets in the system	TicketAccumulation	Current state of all tickets in the system without[...]
10009	List of tickets closed, sorted by response time	Ticketlist	List of tickets, closed last month, sorted by resp[...]
10010	List of open tickets, sorted by time left until response deadline expires	Ticketlist	List of open tickets, sorted by time left until res[...]
10011	New Tickets	TicketAccumulation	Total number of new tickets per day and queue whic[...]

Results: 1-11 - Total hits: 11 - Page: 1

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*Figure: Overview of the standard reports.*

The following information is provided for each of the standard reports listed in the Overview:

- *Stat#*. Unique report number.
- *Title*. Title of the report.
- *Object*. Object used for generating the statistic. In the case of a static statistic, no object is displayed as no dynamic object is used for its generation.
- *Description*. A brief description of the report.

When the stats module is installed, it comes preloaded with a few sample reports imported into the system. These are shown as a list on the Overview page. If the Overview list extends to more than a single page, the agent can browse through the different pages. The list of reports can be sorted as desired, by clicking the desired column header in the list. To generate a particular report, click on the stat number associated with the report in the Overview list. This brings up the "View" interface for the report.

## Generate and view reports

The view user interface provides the stat's configuration settings (see Figure below).

The screenshot shows the OTRS Stats module interface. At the top, there's a navigation bar with links for DASHBOARD, TICKETS, STATISTICS (which is highlighted in orange), CUSTOMERS, and ADMIN. A search bar is also present. On the left, a sidebar titled 'View: Stat# 10001' contains 'Actions' (Go to overview, Edit, Delete, Export config) and a 'Note' section. The main content area is titled 'Stat Details' and displays the following information:

- Stat#:** 10001
- Title:** List of the most time-consuming tickets
- Object:** Ticketlist
- Description:** List of tickets closed last month which required the most time to process.  
NOTE: Please check the output and configuration of the statistics carefully to make sure that it produces the results you expect. If necessary, change the configuration before using the statistics in a production environment.
- Format:** CSV (dropdown menu)
- Sum rows:** No
- Sum columns:** No
- Cache:** No
- Valid:** valid
- Created:** 08/10/2010 22:45:05
- Created by:** Miguel Hidalgo y Costilla
- Changed:** 08/10/2010 22:45:05
- Changed by:** Miguel Hidalgo y Costilla

Figure: Viewing a specific report.

Configuration settings for a particular report can be set within the range of options in the View screen. Either the report creator or any others with the appropriate permissions can make the settings.

The page shows the following:

- Possible actions:
  - *Go to overview.* Link back to the Overview list of reports.
  - *Edit.* Edit the current report structure (rw rights required).
  - *Delete.* Delete the current report (rw rights required).
  - *Export config.* Export a report configuration, via file download (rw rights required).

**Usage:** Export and Import functions allow for the convenient creation and testing of reports on test systems and subsequent easy integration into the production system.

- Report details:
  - *Stat#.* Number of the report.
  - *Title.* Title of the report.
  - *Object.* Object used for generating the report.
  - *Description.* Description on the report's purpose.
- *Format.* Report output format which, depending on the configuration, can be any of the following output formats:
  - CSV.
  - Print.
  - Graph-lines.

- Graph-bars.
- Graph-hbars.
- Graph-points.
- Graph-lines-points.
- Graph-area.
- Graph-pie.
- *Graphsize*. Size in pixels for the graphic / chart. This option is only given when the report configuration allows a chart. All generally usable graphic sizes are configured by the OTRS administrator in SysConfig. The agent can then pre-select all relevant formats, while configuring the report.
- *Sum rows*. Indicates whether the report is amended by a column, whose cells state the sums of the respective rows.
- *Sum columns*. Indicates whether the report is amended by a row, whose cells state the sum of the respective columns.
- *Cache*. Indicates whether the generated report is cached in the filesystem.
- *Valid*. This can be set to "invalid" if a report must not be run temporarily for any reason. The "Start" button in the bottom of the right panel is then no longer displayed. The report can no longer be generated.
- *Created*. Creation time of the report.
- *Created by*. Name of the agent who created the report.
- *Changed*. Time when the report was last modified.
- *Changed by*. Name of the agent who altered the report last.
- *X-axis*. Using this function, the agent can switch the x and y axes (only when activated by the OTRS administrator).
- The general information is followed by information about the report itself. There are two different report (or stat) views:
  - *Static stat view*. Static report generators can be integrated into the stats module (see Figure below).

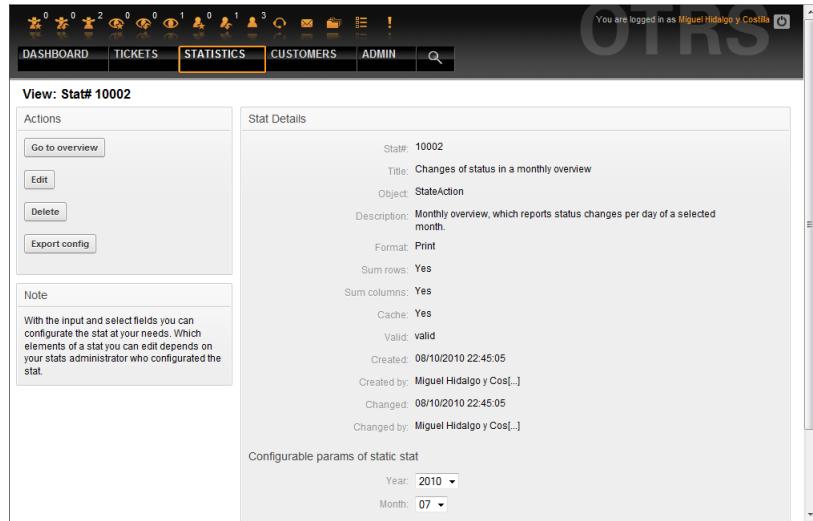


Figure: Viewing a static report.

- *Dynamic stat view* (see Figure above). They can be displayed in two different ways:
  - *Unchangeable settings*. The originator of the report has no permission for modifying this fields.
  - *Changeable settings*. The configuration settings of such reports can be changed by the agent.

Pressing the "Start" button (at the bottom of the screen) is the last step to generate the report. There are two possible reasons for this button to not be displayed:

1. The report was set to invalid and thus, deactivated.
2. The report was not configured cleanly and is, therefore, not yet executable. In this case, the necessary information can be found in the OTRS notification section (below the navigation bar).

If the settings on the View page are incorrect, this page is shown again after the "Start" button was pushed, and information about which input was incorrect is provided in the notification section.

## Edit / New

Agents with write rights can edit an existing report configuration by calling up the edit user interface of the stats module. Alternately, they may create a new report. The associated screens can be reached in the following manner:

1. Edit: Via the "Edit" button in the stat view.
2. New: Via the "New" link in the Statistics menu from the navigation bar, or the "Add" button from the Overview page.

The stats are edited with a wizard in four steps:

1. General specifications.
2. Definition of the element for the X-axis.

3. Specification of the value series.
4. Selecting the restrictions to limit the report.

Steps 2 through 4 are only needed for the generation of reports with dynamic stats. For a static stat, only the general information (point 1) is required.

Information about how to handle the page is provided on each of these screens, below the Actions panel in a Hints panel.

If incorrect inputs are entered, the previously processed user interface is displayed again and with information about the incorrect input. This information can be found in the OTRS notification section. The next input user interface is only displayed after the current form has been filled out correctly.

1. *General specifications.* It is the first page of the Edit wizard (see Figure below).

The screenshot shows the OTRS web interface with the 'STATISTICS' module selected. The title bar says 'Edit: Stat# 10001'. Below the title bar is a progress bar with four numbered circles (1, 2, 3, 4). The main content area is titled 'General Specifications (1/4)'. It contains the following fields:

- Title:** List of the mosttime-consuming tickets
- Description:** List of tickets closed last month which required the most time to process.  
NOTE: Please check the output
- Dynamic-Object:** TicketList
- Permissions:** admin (selected), stats, users
- Result format:** CSV (selected), Print, graph-area, graph-bars, graph-hbars
- Graph size:** 1200x800

A note at the bottom of the form says: "You can select one or more groups to define access for different agents."

Figure: Editing the general specifications of a report.

In the screen showed in Figure, there are a great number of common specifications and settings that can be edited:

- *Title.* Should reflect the stat's purpose in a concise manner.
- *Description.* More descriptive information about the report definition, type of configuration parameters, etc.
- *Dynamic object.* If the OTRS installation provides various dynamic objects, one of them can be chosen. The objects meet the requirements of the particular modules.
- *Static file.* Usually this selection is not shown, as only static files which are not yet assigned to any reports are displayed. If "Static file" is displayed, however, it is important to tick the option field and select a generation mode (dynamic with a dynamic object or static with a file). If a static file is selected, the input user interfaces 2 through 4 are not shown as the static file contains all required configuration settings.
- *Permission settings.* Facilitate a restriction of the groups (and therefore, agents) who can later view and generate the preconfigured reports. Thus the various reports can be allocated

to the different departments and work groups who need them. It is possible to allocate one report to various groups.

Example 1: The "stats" group was selected. The report is viewable for all users having at least ro rights for the "stats" group. This access is available by default.

Example 2: A group named "sales" was selected. All users with ro rights for the "sales" group can see the stat in the view mode and generate it. However, the report will not be available for viewing by other users.

- *Format*. Output format of the stat: Depending on the configuration, one or more of the following formats can be chosen:
  - CSV.
  - Print.
  - graph-lines.
  - graph-bars.
  - graph-hbars.
  - graph-points.
  - graph-lines-points.
  - graph-area.
  - graph-pie.
- *Graphsize*. Select the chart size in pixels. This selection is only necessary if a graphical output format has been chosen under "Format". All graphic sizes that can generally be used are defined by the OTRS administrator in SysConfig. When configuring the report, the agent can pre-select all relevant formats.
- *Sum rows*. Indicates whether the report is amended by a column, whose cells contain the sum of the respective row.
- *Sum columns*. Indicates whether the report is amended by a row, whose cells contain the sum of the respective column.
- *Cache*. Specifies if the generated report should be cached in the filesystem. This saves computing power and time if the report is called up again, but it should only be used if the report's content is no longer changing.

Caching is automatically prevented if the report contains no time designation values, or if a time designation value points to the future.

If a cached report is edited, all cached data is deleted.

- *Valid*. This can be set to "invalid" if a pre-configured report must not be run temporarily for any reason. The "Start" button in the bottom of the right panel is then no longer displayed. The report can no longer be generated.

2. *Definition of the element for the X-axis.* It is the configuration of the element used for the depiction of the X-axis or, if tables are used, of the column name applied to the X-axis (see Figure).

*Figure: Definition of the element for the X-axis.*

First of all, an element is selected using the option field. Then two or more attributes of the element must be selected. If no attributes are selected, all attributes are used including those added after the configuration of the report.

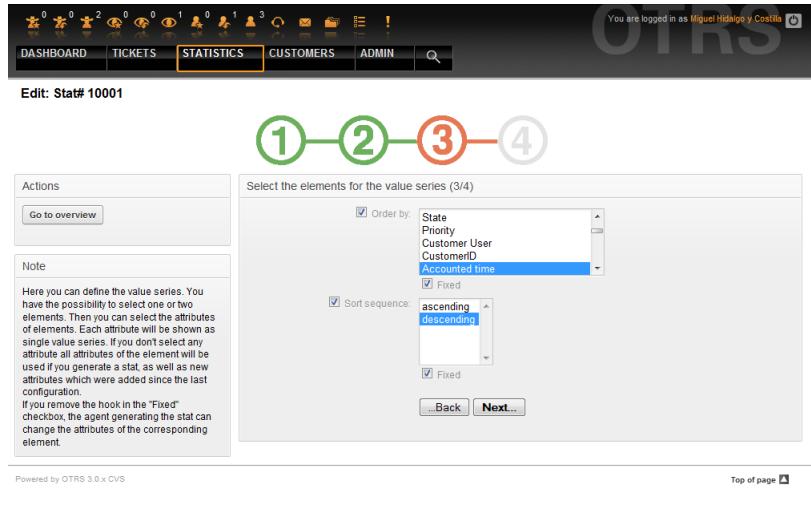
If the "Fixed" setting is disabled, the agent generating the report can change the attributes of the respective element in the "View" user interface.

Time elements are different as time period and scale have to be stated. Type and number of elements result from the used dynamic object and vary depending on it.

If all input is correct, the "Next" button leads to the "Value series" form. It is also possible to go back to editing earlier sections.

### 3. *Specification of the value series.*

In the third step of the report configuration, the value series are defined (see Figure below). They will later form the individual graphs or the various series within a tabular view.



*Figure: Definition of the value series.*

If an element is selected, each chosen attribute will correspond to a value series (see the Example 19-1 below).

### **Example 19.1. Definition of a value series - one element**

Element Queue:

- Value series 1 = Raw
- Value series 2 = Junk
- ....

If two elements are selected, each selected attribute of the first element is combined with an attribute of the second element to form a value series (see Example 19-2 below).

### **Example 19.2. Definition of a value series - two elements**

Element 1 queue, Element 2 status:

- Value chain 1 = Raw - open
- Value series 2 = Raw - successfully closed
- Value series 3 = Junk - open
- Value series 4 = Junk - successfully closed

Selection of three or more elements is not allowed.

Additionally the same conditions apply to the selection of the attributes and the "Fixed" checkbox as to the "X-axis" selection:

- If no attributes of the element are selected, all attributes are used, including those added after the configuration of the report.

- If the "Fixed" setting is disabled, the agent generating the report can change the attributes of the respective element.
4. *Setting restrictions to the report.* This is the fourth and final step of the configuration (see Figure below). The restrictions serve to limit the results to the selected criteria. In many cases, no restrictions at all may be set up.

The screenshot shows the 'Edit: Stat# 10001' screen in the OTRS Statistics module. The top navigation bar includes links for DASHBOARD, TICKETS, STATISTICS (which is highlighted), CUSTOMERS, ADMIN, and a search bar. The main area is titled 'Edit: Stat# 10001'. On the left, there's a sidebar with 'Actions' (containing 'Go to overview') and a 'Note' section. The main content area is titled 'Select the restrictions to characterize the stat (4/4)' and contains four dropdown menus labeled 1 through 4:

- 1 Limit:** A dropdown menu with options 5, 10, 20, 50, and 100. The number 5 is currently selected.
- 2 Queue:** A dropdown menu listing 'Junk', 'Misc', 'Postmaster', 'Raw', 'Support', and a checked 'Fixed' option.
- 3 State:** A dropdown menu listing 'closed', 'successful', 'closed', 'unsuccessful', 'merged', 'new', 'open', and a checked 'Fixed' option.
- 4 State Type:** A dropdown menu listing 'closed' and 'merged'.

Figure: Definition of restrictions.

After all the restrictions are set up, the configuration of the report is completed by pressing the "Finish" button.

## Import

The Import user interface (see Figure below) can be accessed by choosing from the navigation bar, the link "Statistics", then "Import". Alternately, pressing the Import button on the Overview screen achieves the same result. "rw" rights to the report are required.

The screenshot shows the 'Import Stat' interface in the OTRS Statistics module. The top navigation bar is identical to the previous figure. The main area is titled 'Import Stat' and contains a single form field: 'File:' with a 'Browse...' button. Below the file input are two buttons: 'Import' (highlighted in orange) and 'Cancel'. At the bottom of the page, there are footer links for 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

Figure: The Import user interface.

Facilitates the import of reports and is, when combined with the export function of the module, a very handy functionality. Stats can be created and tested conveniently on test systems, then imported into the production system.

The import is effected by an easy file upload. The "View" user interface of the imported report is opened automatically afterwards.

## Administration of the stats module by the OTRS administrator

This section provides information about the tasks and responsibilities of the OTRS administrator dealing with the statistics module.

### Permission settings, Groups and Queues

No new queues and/or groups are created when the stats module is installed.

The default configuration of the module registration gives all agents with "stats" group permissions access to the stats module.

Access according to permission settings:

- *rw*. Allows configuring statistics and reports.
- *ro*. Permits generating pre-configured statistics and reports.

The OTRS administrator decides whether agents with the permission to generate pre-configured reports are allocated *ro* rights in the "stats" group, or if their respective groups are added in the module registration in SysConfig.

### SysConfig

The SysConfig groups Framework::Core::Stats, Framework::Core::Stats::Graph and Framework::Frontend::Agent::Stats contain all configuration parameters for the basic set-up of the statistics module. Moreover, the configuration parameter \$Self->{'Frontend::Module'}->{'AgentStats'} controls the arrangement and registration of the modules and icons within the statistics module.

## Administration of the stats module by the system administrator

Generally, no system administrator is needed for the operation, configuration and maintenance of the statistics module. However, a little background information for the system administrator is given at this point.

### Note

File paths refer to subdirectories of the OTRS home directory (in most cases /opt/otrs).

## Data base table

All report configurations are implemented and administrated in XML, and therefore stored in the database table "xml\_storage". Other modules whose content is presented in xml format use this table as well.

## List of all files

The following files are necessary for the stats module to work accurately:

- Kernel/System/Stats.pm
- Kernel/Modules/AgentStats.pm
- Kernel/System/CSV.pm
- Kernel/Output/HTML/Standard/AgentStatsOverview.dtl
- Kernel/Output/HTML/Standard/AgentStatsDelete.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditSpecification.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditRestrictions.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditXaxis.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditValueSeries.dtl
- Kernel/Output/HTML/Standard/AgentStatsImport.dtl
- Kernel/Output/HTML/Standard/AgentStatsPrint.dtl
- Kernel/Output/HTML/Standard/AgentStatsView.dtl
- Kernel/System/Stats/Dynamic/Ticket.pm
- bin/otrs.GenerateStats.pl

## Caching

Whether the results of a statistic are to be cached or not can be setup in the configuration. Cached report results are stored as files in the `var/tmp` directory of the OTRS installation (in most cases `/opt/otrs/var/tmp`).

Cached stats can be recognized by the "Stats" prefix.

If the data is lost, no major damage is caused. The next time the report is called up, the stats module will not find the file any more and so will generate a new report. Of course this will probably take a little longer to run.

## otrs.GenerateStats.pl

This file is saved in the `bin` directory. It facilitates the generation of report in the command line.

As an example, see the command line call in the following script.

```
bin> perl otrs.GenerateStats.pl -n 10004 -o /output/dir
```

*Script: Generating a report from the command line.*

A report from the stat configuration "Stat# 10004" is generated and saved as csv in the `/output/dir` directory.

The generated report can also be sent as an e-mail. More information can be called up with the command in the script below.

```
bin> perl otrs.GenerateStats.pl --help
```

*Script: Getting information about the otrs.GenerateStats.pl file.*

## Automated stat generation - Cronjob

It usually does not make sense to generate reports manually via the command line, as the stats module has a convenient graphical user interface. However, generating reports manually does make sense when combined with a Cronjob.

Imagine the following scenario: On the first day of every month, the heads of department want to receive a report for the past month. By combining a cronjob and command line call the reports can be sent to them automatically by e-mail.

## Static stats

The stats module facilitates the generation of static statistics. For every static stat a file exists in which its content is precisely defined.

This way, very complex stats can be generated. The disadvantage is that they are not particularly flexible.

The files are saved in the directory `Kernel/System/Stats/Static/`.

## Using old static stats

Prior OTRS versions 1.3 and 2.0 already facilitated the generation of stats / reports. Various reports for OTRS versions 1.3 and 2.0 which have been specially developed to meet customers' requirements can be used in recent OTRS versions too.

The files must merely be moved from the `Kernel/System/Stats/` path to `Kernel/System/Stats/Static/`. Additionally the package name of the respective script must be amended by `::Static`.

The following example shows how the first path is amended.

```
package Kernel::System::Stats::AccountedTime;
```

```
package Kernel::System::Stats::Static::AccountedTime;
```

## Default stats

"It is not always necessary to reinvent the wheel..."

The stats module provides various default reports. Reports which are of interest for all OTRS users will in future be added to the default reports set of the stats module package. Default reports are saved in the stats module xml format in the `scripts/test/sample/` directory.

# Chapter 20. Generic Interface

The OTRS Generic Interface consists of a multiple layer framework that lets OTRS communicate with other systems via a web service. This communication could be in two different directions:

- *OTRS as Provider*: OTRS acts as a server listening to requests from the External System, processing the information, performing the requested action, and answering the request.
- *OTRS as Requester*: OTRS acts as a client collecting information, sending the request to the Remote System, and waiting for the response.

## Generic Interface Layers

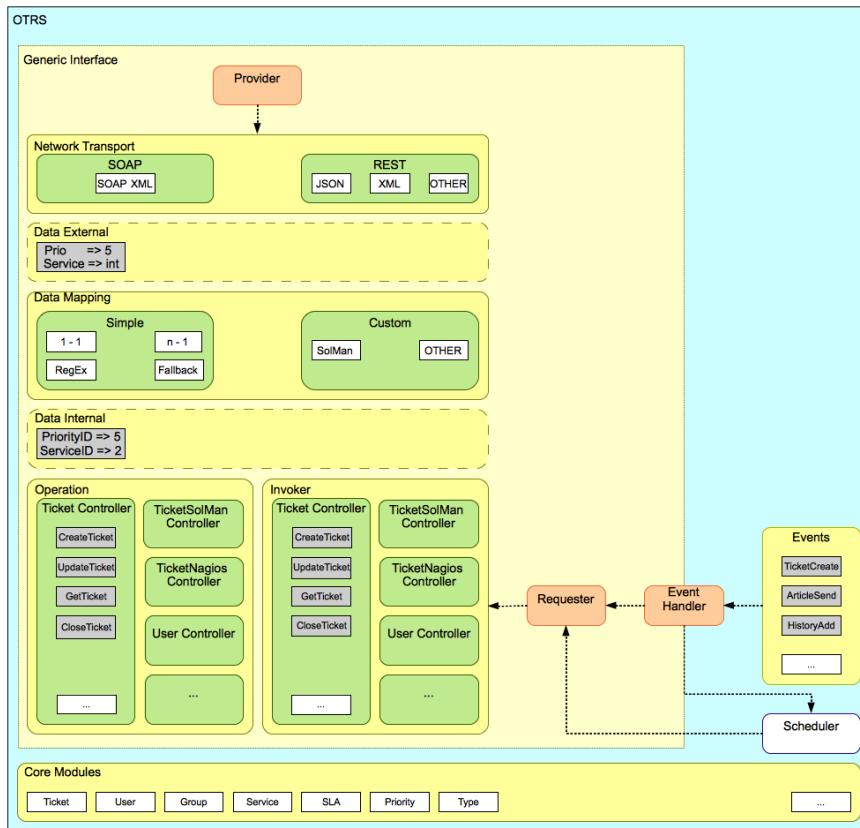
Generic Interface is build based on a layer model, to be flexible and easy to customize.

A layer is a set of files, which control how the Generic Interface performs different parts of a web service. Using the right configuration one can build different web services for different External Systems without creating new modules.

### Note

If the Remote System does not support the current bundled modules of the Generic Interface, special modules need to be developed for that specific web service.

The list of provided Generic Interface modules shipped with OTRS will be updated and increased over time.



*Figure: The graphical interface layers.*

## Network Transport

This layer is responsible for the correct communication with the Remote System. It receives requests and generates responses when acting as provider, and generates requests and receives responses when acting as requester.

Provider communication is handled by a new web server handle called "nph-genericinterface.pl".

Requester communication could be initiated during an event triggered by a Generic Interface module or any other OTRS module. This event is caught by the event handler and depending on the configuration the event will be processed directly by the requester object or delegated to the Scheduler (a separated deamon designed to process tasks asynchronously).

## Data Mapping

This layer is responsible for translating data structures between OTRS and the Remote System (data internal and data external layers). Usually Remote Systems have different data structures than OTRS (including different values and names for those values), and here resides the importance of the layer to change the received information into something that OTRS can understand and on the opposite way send the information to each Remote System using their data dictionaries.

*Example:* "Priority" (OTRS) might be called "Prio" in a remote system and it could be that value "1 Low" (OTRS) should be mapped to "Information" on the remote system.

## Controller

Controllers are collections of similar Operations or Invokers. For example, a Ticket controller might contain several standard ticket operations. Custom controllers can be implemented, for example a "TicketExternalCompany" controller which may contain similar functions as the standard Ticket controller, but with a different data interface, or function names (to adapt to the Remote System function names) or complete different code.

One application for Generic Interface could be to synchronize information with one Remote System that only can talk with another Remote System of the same kind. In this case new controllers needs to be developed and the Operations and Invokers has to emulate the Remote System behavior in such way that the interface that OTRS exposes is similar to the Remote System's interface.

## Operation (OTRS as a provider)

An Operation is a single action that can be performed within OTRS. All operations have the same programming interface, they receive the data into one specific parameter, and return a data structure with a success status, potential error message and returning data.

Normally operations uses the already mapped data (internal) to call core modules and perform actions in OTRS like: Create a Ticket, Update a User, Invalidate a Queue, Send a Notification, etc. An operation has full access to the OTRS API to perform the action.

## Invoker (OTRS as a requester)

An Invoker is an action that OTRS performs against a Remote System. Invokers use the OTRS Core modules to process and collect the needed information to create the request. When the

information is ready it has to be mapped to the Remote System format in order to be sent to the Remote System, that will process the information execute the action and send the response back, to either process the success or handle errors.

# Generic Interface Communication Flow

Generic Interface has a defined flow to perform actions as a provider and as a requester.

This flows are described below:

## OTRS as Provider

### Remote Request:

1. HTTP request
  - OTRS receives HTTP request and pass it through the layers.
  - The provider module is in charge to execute and control this actions.
2. Network Transport
  - The network transport module decodes the data payload and separates the operation name from the rest of the data.
  - The operation name and the operation data are returned to the provider.
3. *Data External*
  - Data as sent from the remote system (This is not a module-based layer).
4. Mapping
  - The data is transformed from the External System format to the OTRS internal format as specified in the mapping configuration for this operation (Mapping for incoming request data).
  - The already transformed data is returned to the provider.
5. *Data Internal*
  - Data as transformed and prepared to be passed to the operation (This is not a module based layer).
6. Operation
  - Receives and validates data.
  - Performs user access control.
  - Executes the action.

### OTRS Response:

1. Operation

- Returns result data to the provider.

2. *Data Internal*

- Data as returned from operation.

3. Mapping

- The data is transformed back to the Remote system format as specified in the mapping configuration (Mapping for outgoing response data).
- The already transformed data is returned to the provider.

4. *Data external*

- Data as transformed and prepared to be passed to Network Transport as response.

5. Network Transport

- Receives the data already in the Remote System format.
- Constructs a valid response for this network transport type.

6. HTTP response

- The response is sent back to the web service client.
- In the case of an error, an error response is sent to the remote system (e.g. SOAP fault, HTTP error, etc).

## OTRS as Requester

### OTRS Request:

1. Event Trigger Handler

- Based on the web service configuration determines if the request will be synchronous or asynchronous.
  - Synchronous
    - A direct call to the Requester is made in order to create a new request and pass it through the layers.
  - Asynchronous
    - Create a new Generic Interface (Requester) task for the OTRS Scheduler (by delegating the request execution to the Scheduler, the user experience could be highly improved, otherwise all time needed to prepare the request and the remote execution will be added to the OTRS Events that trigger those requests).
    - In its next cycle the Scheduler process reads the new task and creates a call to the Requester that will create a new request and pass it through the layers.

2. Invoker

- Receives data from the event.
- Validates received data (if needed).
- Call core modules to complement the data (if needed).
- Return the request data structure or send a Stop Communication signal to the requester, to gracefully cancel the request.

3. *Data Internal*

- Data as passed from the invoker (This is not a module based layer).

4. Mapping

- The data is transformed to the Remote system format as specified in the mapping configuration (Mapping for outgoing response data).
- The already transformed data is returned to the requester.

5. *Data External*

- Data as transformed and prepared for sending to the remote system.

6. Network Transport

- Receives the remote operation name and the data already transformed to the Remote System format from the requester.
- Constructs a valid request for the network transport.
- Sends the request to the remote system and waits for the response

## Remote Response:

1. Network transport

- Receives the response and decodes the data payload.
- Returns the data to the requester.

2. *Data External*

- Data as received from the Remote System

3. Mapping

- The data is transformed form the External System format to the OTRS internal format as specified in the mapping configuration for this operation (Mapping for incoming response data).
- The already transformed data is returned to the requester.

4. *Data Internal*

- Data as transformed and ready to be passed back to the requester.

## 5. Invoker

- Receives return data.
- Handles the data as needed by specifically by each Invoker (included error handling if any).
- Return the Invoker result and data to the Requester.

## 6. Event Handler or Scheduler

- Receives the data from the Requester, in the case of the Scheduler this data might contain information to Re-Schedule the task immediately or in the future.

# Web Services

A Web Service is a communication method between two systems, in our case OTRS and a Remote System.

The heart of the Web Service is its configuration, where is defined what actions the web service can perform internally (Operation), what can actions the OTRS request can perform Remote System (Invokers), how data is converted from one system to the other (Mapping), and over which protocol the communication will take place (Transport)

The Generic Interface is the framework that makes it possible to create Web Services for OTRS in a pre-defined way, using already made building blocks that are independent from each other and interchangeable.

# Web Service Graphical Interface

The web service graphical user interface (GUI) is a tool that allows to construct complex web service configurations in a friendly and nice interface. It allows to:

- Create and Delete web services.
- Import and Export configurations (in YAML file format) for existing web services.
- View, Revert and Export old configurations for existing web services in the Web Service History screen.
- Track all communication logs for each web service in the Debugger screen.

# Web Service Overview

The "Web Services" link in the main screen of Admin Interface (in the System Administration box) leads to the web services overview screen, where you are able to manage your web service configurations. You can add new web services or change the configuration of the existing ones from this screen.

Every web service configuration screen has in the upper part of the screen a navigation path in a "bread crumbs" style. This navigation path is useful to know exactly in which part of the web service configuration we are, and also we can jump back to any level of the configuration at any time (this action will not save any changes).

## Note

To create a new web service, press the button "Add web service", and provide the needed information.

*Figure: Web services overview.*

## Web Service Add

The only required field in this part is the web service "Name" that needs to be unique in the system and non empty. Other fields are also necessary for the configuration like the "Debug Threshold" and "Validity" but these fields are already filled with the default value for each list.

The default value for "Debug Threshold" is "debug", under this configuration all communication logs are registered in the database, each Debug Threshold value is more restrictive and discard communication logs set for lower values.

### Debug Threshold levels (from lower to upper)

- Debug
- Info
- Notice
- Error

It is also possible to define the network transport protocol for "OTRS as Provider" and "OTRS as requester".

Click on the "Save" button to register the new web service in the database or click "Cancel" to discard this operation. You will now be returned to the web service overview screen.

If you already have a web service configuration file in YAML format you can click on the "Import web service" button on the left side of the screen. For more information on importing web services please check the next section "Web Service Change".

## Note

To change or add more details to a web service, click on the web service name in the web service overview screen.

The screenshot shows the 'GenericInterface Web Service Management - Add' screen. The top navigation bar includes links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN (which is selected), and a search icon. The main content area has a title 'GenericInterface Web Service Management - Add' and a breadcrumb trail '» Web Services » New Webservice'. On the left, there's a sidebar with 'Actions' containing 'Go to overview' and 'Import web service' buttons, and a 'Hint' section with instructions. The main form is divided into sections: 'Details' (General tab) with fields for Name (mandatory), Description, Remote system, Debug threshold (set to 'Debug'), and Validity (set to 'valid'); 'OTRS as provider' (with Network transport settings); and 'OTRS as requester' (with Network transport settings). At the bottom are 'Save' and 'Cancel' buttons.

*Figure: Web services add.*

## Web Service Change

On this screen you have a complete set of functions to handle every part of a web service. On the left side in the action column you can find some buttons that allows you to perform all possible actions on a web service:

- Clone web service.
- Export web service.
- Import web service.

- Configuration History.
- Delete web service.
- Debugger.

### Note

"Configuration history" and "Debugger" will lead you to different screens.

## Web Service Clone

To clone a web service, you need to click on the "Clone web service" button, a dialog will be shown where you can use the default name or set a new name for the (cloned) web service.

### Note

*Remember* the name of the web service must be unique within the system.

Click on "Clone" button to create the web service clone or "Cancel" to close the dialog.

The screenshot shows the 'GenericInterface Web Service Management - Change' interface. In the top navigation bar, the 'ADMIN' tab is selected. On the left, there's a sidebar with actions like 'Go to overview', 'Clone web service' (which is highlighted), 'Export web service', 'Import web service', 'Configuration history', 'Delete web service', and 'Debugger'. Below this is a 'Hint' section with instructions. The main content area has tabs for 'General', 'Operations', and 'Invokers'. A modal dialog box is open over the main content, titled 'Clone webservice'. It contains a field labeled '\*Name:' with the value 'Test' and another field with the value 'Test-1311280714521'. There are dropdowns for 'Debug threshold' (set to 'Debug') and 'Validity' (set to 'valid'). At the bottom of the dialog are 'Clone' and 'Cancel' buttons. The background of the main screen shows the 'Web Services' list with one item named 'Test'.

Figure: Web service clone.

## Web Service Export

The "Export web service" button gives you the opportunity to dump the configuration of the current web service into a YAML file, download it and store it on your file system. This can be specially

useful if you want to migrate the web service from one server to another, for example from a testing environment to a production system.

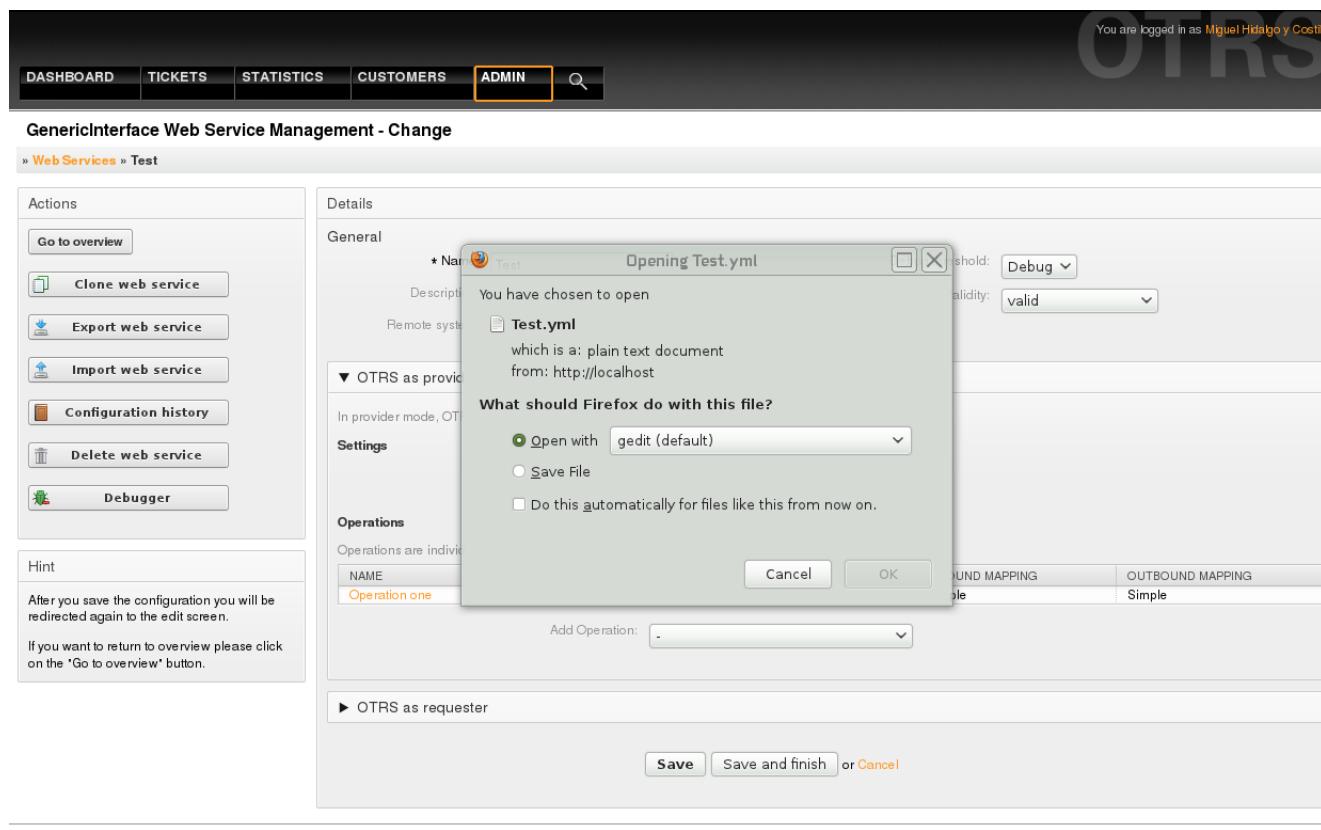
## Warning

All stored passwords in the web service configuration will be exported as plain text.

Right after clicking the "Export web service" button a save dialog of your browser will appear, just like when you click on a file download link on a web page.

## Note

Each browser on each operating system has its own save dialog screen and style, depending on the browser and its configuration it is possible that no dialog is shown and the file is saved to a default directory on your file system. Please check your browser documentation for more specific instructions if needed.



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Top of page

*Figure: Web services export.*

## Web Service Import

A valid web service configuration YAML file is required to use the import web service feature. Click on the "Import web service" button, browse for the configuration file or provide the complete path in the input box.

Click "Import" button to create a new web service from a file or "Cancel" to close the dialog.

## Note

The web service name will be taken from the configuration file name (e.g. if the file name is MyWebservice.yml the resulting web service will be named MyWebservice). If a web service is registered in the system with the same name as the web service that you want to import, the system will lead you to the web service change screen to let you change the name of the imported web service.

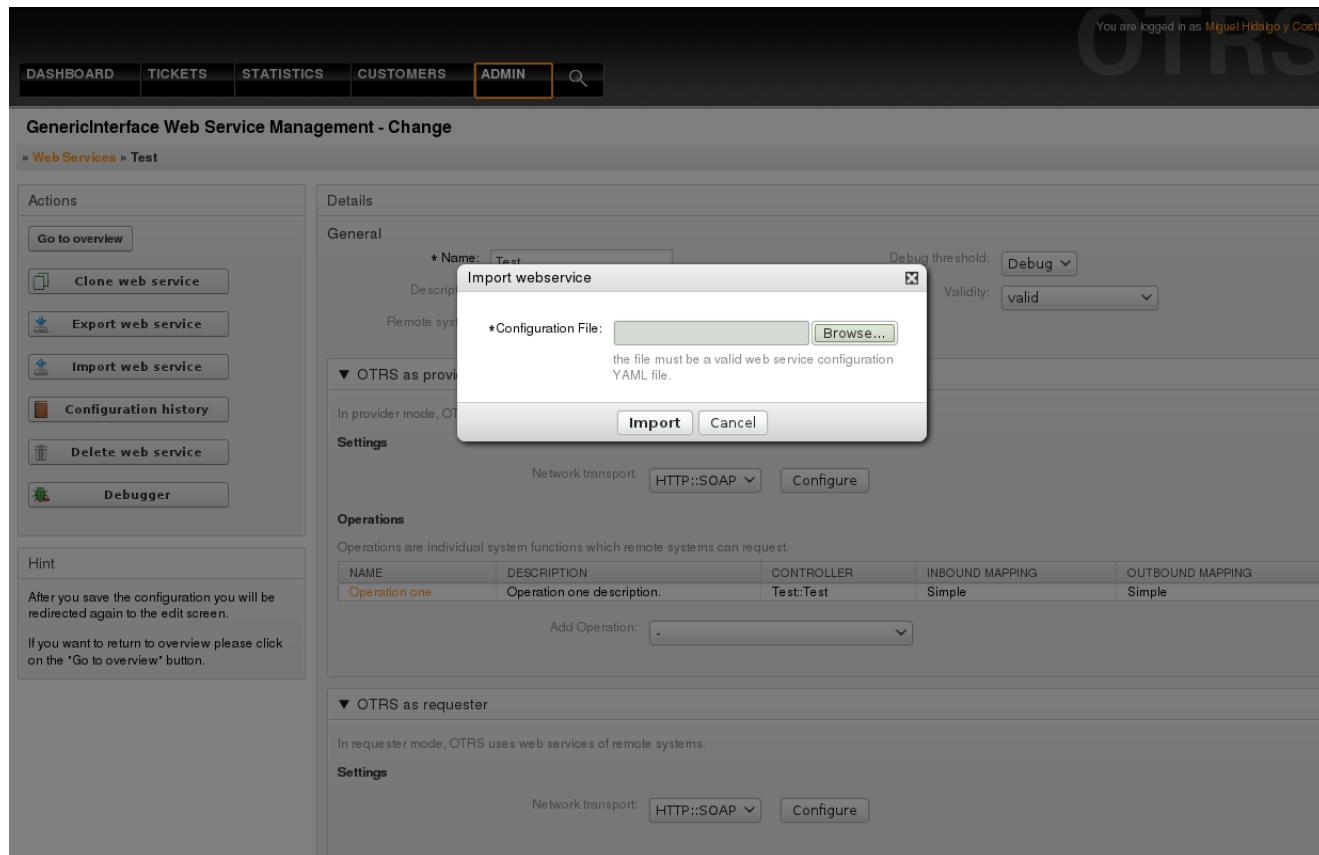


Figure: Web services import.

## Web Service History

Every change to the web service configuration creates a new entry in the web service history (as a journal). The web service history screen displays a list of all configuration versions for a web service. Each row (version) in the "Configuration History List" represents a single revision in the web service history.

Click on one of the rows to show the whole configuration as it was on that particular date / time. The configuration will be shown in the "History details" section of this screen. Here you are also able to export the selected web service configuration version or to restore that version into the current web service configuration.

The "Export web service configuration" behaves exactly as the "Export web service" feature in the web service change screen. For more information refer to that section.

If changes to the current web service configuration does not work as expected and it is not easy to revert the changes manually, you can click on the "Revert web service configuration" button.

This will open a dialog to ask you if you are sure to revert the web service configuration. Click "Revert web service configuration" in this dialog to replace the current configuration with the selected version, or click "Cancel" to close the dialog.

## Warning

Remember that any passwords stored in the web service configuration will be exported as plain text.

Please be careful when you restore a configuration because this can't be undone.

The screenshot shows the 'GenericInterface Configuration History for Web Service Test' page. At the top, there's a navigation bar with links for DASHBOARD, TICKETS (which is highlighted), STATISTICS, CUSTOMERS, ADMIN, and a search icon. A user is logged in as 'Miguel Hidalgo y Costilla'. Below the navigation, the main content area has a title 'GenericInterface Configuration History for Web Service Test' and a breadcrumb trail '» Web Services » Test » History'. On the left, there's a sidebar with 'Actions' containing a 'Go back to Web Service' button, and a 'Hint' section explaining the purpose of the history list. The main right-hand panel is titled 'Configuration History List' and contains a table with five rows, each representing a configuration version with its creation time. Version 3 is selected, and its details are shown below the table. The 'History Details' section for Version 3 (2011-07-21 13:48:04) includes fields for Debugger, TestMode, Description, Provider, Operation, Transport, Config, RemoteSystem, Requester, and Transport. At the bottom of the page, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

VERSION	CREATE TIME
5	2011-07-21 15:23:02
4	2011-07-21 13:57:38
3	2011-07-21 13:48:04
2	2011-07-21 13:36:14
1	2011-07-21 13:33:11

**History Details: Version 3, 2011-07-21 13:48:04**

Export web service configuration | Restore web service configuration

```

Debugger:
  DebugThreshold: debug
  TestMode: 0
Description: A test web service config
Provider:
  Operation:
    Operation one:
      Description: Operation one description.
      MappingInbound:
        Type: Simple
      MappingOutbound:
        Type: Simple
      Type: Test::Test
Transport:
  Config:
    Authentication: {}
    Type: HTTP::SOAP
RemoteSystem: remote
Requester:
  Transport:
    Config:
      Authentication: {}
    Type: HTTP::SOAP
  
```

*Figure: Web service history.*

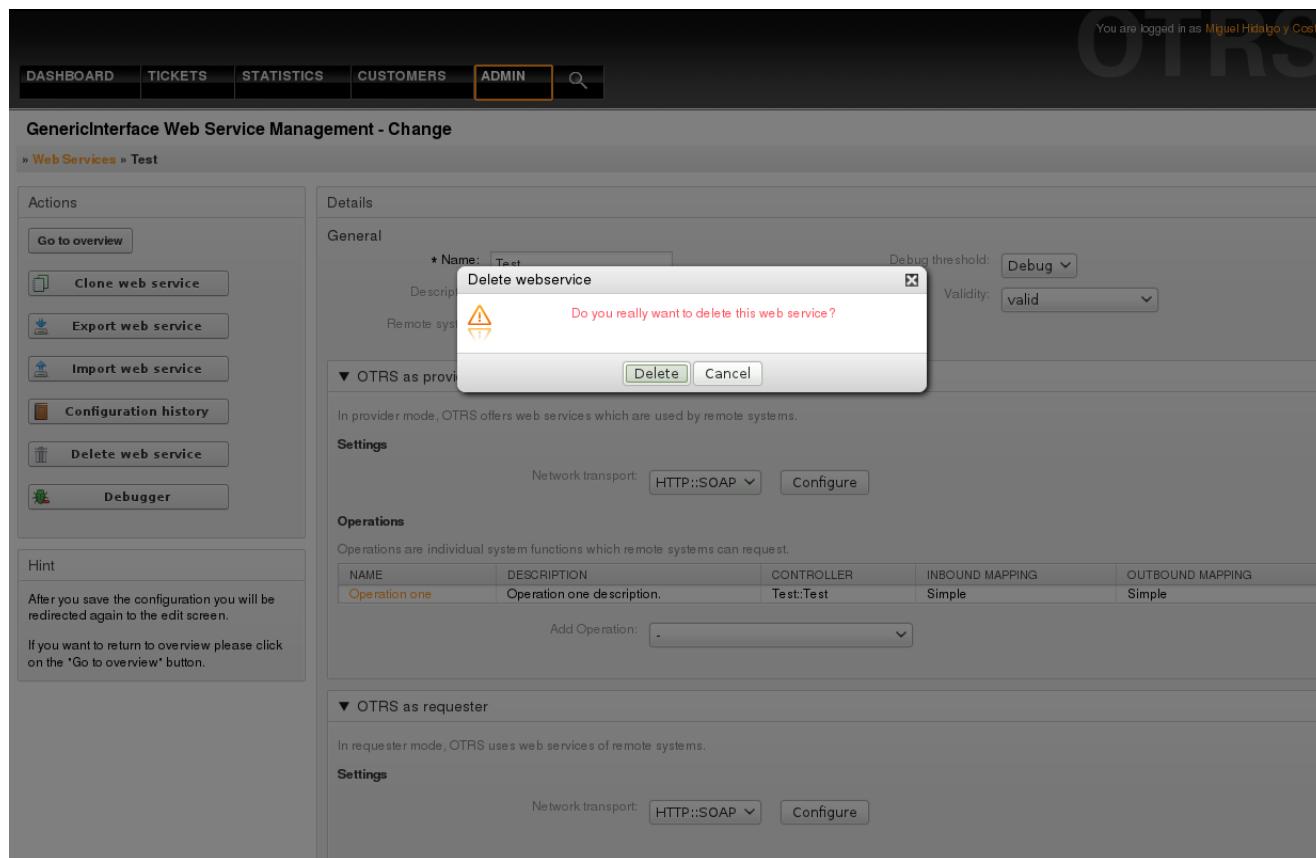
## Web Service Delete

Sometimes it is necessary to delete a web service completely. To do this you can press on the "Delete web service" button and a new dialog will appear asking for confirmation.

Click on "Delete" to confirm the removal of the web service or on "Cancel" to close the dialog.

## Warning

Delete a web service can't be undone, please be careful when deleting a web service.



*Figure: Web service delete.*

## Web Service Debugger

The Debugger stores the log of a web service. In the debugger screen you can track all the web service communications for either provider or requester types.

When this screen is shown the request list starts to load. After the list is fully filled you can choose one of the rows (that means a communication sequence) to check its details. This details will appear in a box below.

You can narrow the communication list using the filter on the right part of the screen. You can filter by:

- Communication type (provider or requester)
- Date: before and / or after a particular date
- The remote IP Address
- A combination of all.

After filter settings are set, push the "Refresh" button and a new list will be displayed meeting your search criteria.

### Note

Depending on the search criteria for the filters the new list could return no results.

On the left part of the screen under the action column you can select "Go back to the web service" or clear the debugger log by pushing the "Clear" button. This will open a dialog that ask you to confirm erasing of the log. Click "Clear" in the dialog button to perform the action or click on "Cancel" to close this dialog.

In the "Request details" section you can see all the details for the selected communication. Here you can track the complete flow and check for possible errors or confirm success responses.

TYPE	TIME	REMOTE IP
Provider	2011-07-21 15:43:45	:1
Provider	2011-07-21 16:46:53	:1

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*Figure: Web service debugger.*

## Web Service Configuration Change

Returning to the web service change screen, now we are going to review the right side of it. Here we have the possibility to modify all the general data for a web service such as name, description, debug threshold, etc. Also there are two more sections below that allows us to modify specific parameters for communication types "OTRS as Provider" and "OTRS as Requester".

The web service configuration needs to be saved on each level. This means that if a setting is changed, links to other, deeper parts of the configuration will be disabled forcing to save the current configuration level. After saving the disabled links will be re-enabled again allowing you to continue with the configuration.

On the "OTRS as provider" section it is possible to set or configure the network transport protocol. Only network transport backends that are registered are shown on the list. To configure the network transport click on the "Configure" button. It is also possible to add new operations in this box. To do this select one of the available operations from the "Add Operation" list. This will

lead you to the operation configuration screen. After saving the new operation it will be listed in the table above.

"OTRS as requester" is very similar to the previous one, but instead of "operations" you can add invokers here.

Click the "Save" button to save and continue configuring the web service, "Save and finish" to save and return to the web service overview screen, or "Cancel" to discard current configuration level changes and return to web service overview screen.

The screenshot shows the 'GenericInterface Web Service Management - Change' screen for a 'Test' web service. The interface is divided into several sections:

- Actions:** Includes buttons for Go to overview, Clone web service, Export web service, Import web service, Configuration history, Delete web service, and Debugger.
- Details:** General settings for the web service, including:
  - Name:** Test
  - Description:** A test web service config
  - Remote system:** remote
  - Debug threshold:** Debug
  - Validity:** valid
- OTRS as provider:** Settings for network transport (HTTP::SOAP) and operations. The operations table has one entry:
 

NAME	DESCRIPTION	CONTROLLER	INBOUND MAPPING	OUTBOUND MAPPING
Operation one	Operation one description.	Test:Test	Simple	Simple
- OTRS as requester:** Settings for network transport (HTTP::SOAP) and invokers. The invokers table has one entry:
 

NAME	DESCRIPTION	CONTROLLER	INBOUND MAPPING	OUTBOUND MAPPING
Invoker one	Invoker one description	Test:Test	Simple	Simple
- Buttons:** Save, Save and finish, or Cancel.

Figure: Web services change.

### Note

Like the other Generic Interface configuration screens such as Network Transport, operation, Invoker and Mapping, the initial configuration (add) screen will only present two options: "Save" and "Cancel", when the configuration is re-visited then a new option "Save and Finish" will appear. The behavior of this feature is defined below.

"Save" will store the current configuration level in the database and it will return to the same screen to review your changes or to configure deeper settings.

"Save and Finish" will store the current configuration level in the database and it will return to the previous screen in the configuration hierarchy (to the immediate upper configuration level).

"Cancel" will discard any configuration change to the current configuration level and will return to the previous screen in the configuration hierarchy.

## Web Service Provider Network Transport

In future the list of available network transports will be increased. Currently only the "HTTP::SOAP" transport is available. Each transport has different configuration options to setup and they might use different frontend modules to configure it, but mostly they should look similar to the "HTTP::SOAP" transport configuration module.

For "HTTP::SOAP" protocol as provider the configuration is quite simple. There are only two settings: "Namespace" and "Maximum message length". These fields are required. The first one is a URI to give SOAP methods a context, reducing ambiguities, and the second one it's a field where you can specify the maximum size (in bytes) for SOAP messages that OTRS will process.

GenericInterface Transport HTTP::SOAP for Web Service Test

You are logged in as **Miguel Hidalgo y Costilla**

DASHBOARD TICKETS STATISTICS CUSTOMERS ADMIN

[Go back to web service](#)

Actions

Network transport

Properties

Type: HTTP::SOAP

\*Namespace: TransportOne

URI to give SOAP methods a context, reducing ambiguities.  
e.g. urn:otrs-com:soap:functions or http://www.otrs.com/GenericInterface/actions

\*Maximum message length: 100000000

Here you can specify the maximum size (in bytes) of SOAP messages that OTRS will process.

**Save** **Save and finish** or **Cancel**

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*Figure: Web service provider network transport.*

## Web Service Operation

The actions that can be performed when you are using OTRS as a provider are called "Operations". Each operation belongs to a controller. Controllers are collections of operations or invokers, normally operations from the same controller need similar settings and shares the same configuration dialog. But each operation can have independent configuration dialogs if needed.

Name, Description, Backend, and Mappings are fields that normally appear on every operation, other special fields can appear in non default configuration dialogs to fulfill specific needs of the operation.

Normally there are two mapping configuration sections on each operation, one for the incoming data and another one for the outgoing data. You can choose different mapping types (backends) for each mapping direction, since their configuration is independent from each other and also independent from the operation backend. The normal and most common practice is that the operation uses same mapping type in both cases (with inverted configuration). The complete mapping configuration is done in a separate screen which depends on the mapping type.

The operation backend is pre-filled and is not editable. You will see this parameter when you choose the operation on the web service edit screen. The field is only informative.

In the left part of the screen on the action column you have the options: "Go back to web service" (discarding all changes since the last save) and "Delete". If you click on the last one, a dialog will open and ask you if you like to remove the operation. Click on "Delete" button to confirm the removal of the operation and "Cancel" to close the delete dialog.

You are logged in as **Miguel Hidalgo y Costilla**

**OTRS**

**Change Operation Operation one of Web Service Test**

» Web Services » Test » Change operation Operation one

<b>Actions</b> <input type="button" value="Go back to web service"/> <input type="button" value="Delete"/>	<b>Operation Details</b> * Name: <input type="text" value="Operation one"/> <p>The name is typically used to call up this web service operation from a remote system.</p> Description: <input type="text" value="Operation one description."/> Mapping for incoming request data: <input type="button" value="Test"/> <p>The request data will be processed by this mapping, to transform it to the kind of data OTRS expects.</p> Operation backend: <input type="text" value="Test::Test"/> <p>This OTRS operation backend module will be called internally to process the request, generating data for the response.</p> Mapping for outgoing response data: <input type="button" value="Test"/> <p>The response data will be processed by this mapping, to transform it to the kind of data the remote system expects.</p> <input type="button" value="Save"/> <input type="button" value="Save and finish"/> or <input type="button" value="Cancel"/>
--	--

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*Figure: Web service operation.*

## Web Service Provider Transport

The network transport configuration for the requester is similar to the configuration for the provider. For the Requester "HTTP::SOAP" network transport there are more fields to be set.

Apart from the "Endpoint" (URI of the Remote System web service interface to accept requests) and "Namespace" which are required fields, you can also specify:

- Encoding (such as utf-8, latin1, iso-8859-1, cp1250, etc) for the SOAP message.
- SOAPAction Header: you can use this to send an empty or filled SOAPAction header. Set to "No" and the SOAPAction header on the SOAP message will be an empty string, or set to "Yes" to send the soap action in Namespace#Action format and define the separator (typically "/" for .Net web services and "#" for the rest).
- Authentication: to set the authentication mechanism, set to "-" to not use any authentication or select one from the list and the detail fields will appear.

## Note

Currently only the "BasicAuth" (HTTP) authentication mechanism is implemented. You can decide whether or not to use it depending on the Remote System configuration. If used, you must provide the User Name and the Password to access the remote system.

## Warning

If you supply a password for authentication and after you export the web service to a YAML file this password will be revealed and will be written into a plain text string inside the YAML file. Be aware of it and take precautions if needed.

The screenshot shows the OTRS web interface for configuring a web service requester. The top navigation bar includes links for DASHBOARD, TICKETS (highlighted in orange), STATISTICS, CUSTOMERS, ADMIN, and a search icon. The main title is "GenericInterface Transport HTTP::SOAP for Web Service Test". Below the title, the breadcrumb navigation shows "» Web Services » Test » Requester Transport HTTP::SOAP".

The configuration form is titled "Network transport" and contains the following fields:

- Properties** section:
  - Type: HTTP::SOAP
  - \* Endpoint: EndpointOne (with a note: "URI to indicate a specific location for accessing a service. e.g. http://local.ots.com:8000/WebService/Example")
  - \* Namespace: NameSpace (with a note: "URI to give SOAP methods a context, reducing ambiguities. e.g. urn:ots.com:soap:functions or http://www.ots.com/GenericInterface/actions")
  - Encoding: (empty input field)
  - The character encoding for the SOAP message contents. e.g. utf-8, latin1, iso-8859-1, cp1250, Etc.
- SOAPAction**: Yes (selected radio button)
  - Set to "Yes" to send a filled SOAPAction header.
  - Set to "No" to send an empty SOAPAction header.
- SOAPAction separator**: #
  - Character to use as separator between name space and SOAP method.
  - Usually .Net web services uses a "/" as separator.
- Authentication**: BasicAuth (selected dropdown option)
  - The authentication mechanism to access the remote system.
  - A "-" value means no authentication.
- User**: root@localhost
  - The user name to be used to access the remote system.
- Password**: (redacted input field)
  - The password for the privileged user.

At the bottom right of the form are three buttons: Save, Save and finish, and Cancel.

Figure: Web service requester network transport.

## Web Service Invoker

The actions that can be performed when you are using OTRS as a requester are called "Invokers". Each invoker belongs to a controller (controllers are collections of operations or

invokers), normally invokers from the same controller need similar settings and share the same configuration dialogs. Each invoker can have independent configuration dialogs if needed.

Name, Description, Backend, and Mappings are fields that normally appear on every invoker, as well as the list of event triggers other special fields can appear on non default configuration dialogs to fulfill special needs of the invoker.

Normally there are two mapping configuration sections for each invoker, one for the incoming data and another one for the outgoing data. You can choose different mapping types (backends) for each mapping direction, since their configuration is independent from each other and also independent from the invoker backend. The normal and most common practice is that the invoker uses the same mapping type in both cases, with inverted configuration. The complete mapping configuration is done in a separate screen, which depends on the mapping type.

The invoker backend is pre-filled and is not editable. You will see this parameter when you choose the invoker on the web service edit screen. The field is only informative.

Event triggers are events within OTRS such as "TicketCreate", "ArticleSend", etc. These can act as triggers to execute the invoker. Each invoker needs to have at least one event trigger registered, or the invoker will be useless, because it will never be called. The asynchronous property of the event triggers define if the OTRS process will handle the invoker or if it will be delegated to the Scheduler.

## Note

The OTRS Scheduler is a separated process that executes tasks in the background. Using this the OTRS process itself will not be affected if the Remote System takes a long time to respond, if it is not available or if there are network problems. If you don't use the scheduler using web services can make OTRS slow or non-responsive. Therefore it is highly recommend to use asynchronous event triggers as often as possible.

To add an Event trigger first select the event family from the first list, then the event name from the second list, then set the asynchronous property (if unchecked means that the event trigger will not be asynchronous) and then click on the plus button. A new event trigger will be created and it will be listed on the invoker "Event Triggers" list.

To delete an Event trigger, simply locate the event trigger to be deleted in the "Event Triggers" list and click on the trash icon at the end of the row. This will open a dialog that ask you if you are sure to delete the event trigger. Click "Delete" to remove the event trigger from the list, or "Cancel" to close the dialog.

In the left part of the screen on the action column you have the options: "Go back to web service" (discarding all changes since the last save) and "Delete". If you click on the last one, a dialog will emerge and ask you if you like to remove the invoker. Click on the "Delete" button to confirm the removal of the invoker and its configuration or "Cancel" to close the delete dialog.

The screenshot shows the 'Invoker Details' configuration page for a web service invoker named 'Invoker one'. The 'Actions' sidebar on the left has 'Delete' selected. The main form contains fields for 'Name' (Invoker one), 'Description' (Invoker one description), and 'Invoker backend' (Test::Test). It also includes sections for 'Mapping for outgoing request data' and 'Mapping for incoming response data', both set to 'Simple'. Under 'Event Triggers', there is a table with a single row for 'HistoryAdd' with 'ASYNCHRONOUS' checked. A note states: 'This invoker will be triggered by the configured events.' Below the table is an 'Add Event Trigger' section with dropdowns for 'EVENT' (Ticket) and 'HistoryDelete', and a checkbox for 'Asynchronous'. A note says: 'To add a new event select the event object and event name and click on the '+' button. Asynchronous event triggers are handled by the OTRS Scheduler in background (recommended). Synchronous event triggers would be processed directly during the web request.' At the bottom are 'Save', 'Save and finish', and 'Cancel' buttons.

*Figure: Web service invoker.*

## Web Service Mapping

There are cases where you need to transform the data from one format to another (map or change data structure), because normally a web service is used to interact with a Remote System, that is highly probable that is not another OTRS system and / or could not understand the OTRS data structures and values. In these cases some or all values has to be changed, and sometimes even the names of the values (keys) or sometimes the complete structure, in order to match with the expected data on the other end. To accomplish this task the the Generic Interface Mapping Layer exists.

Each Remote System has it own data structures and it is possible to create new mapping modules for each case (e.g. there is a customized mapping module for SAP Solution Manager shipped with OTRS), but it is not always necessary. The module Mapping::Simple should cover most of the mapping needs.

### Note

When Mapping::Simple does not cover all mapping needs for a web service a new mapping module should be created. To learn more about how to create new mapping modules please consult the OTRS Development Manual.

This module gives you the opportunity to set default values to map for each key or value for the whole communication data.

At the beginning of the screen you will see a general section where you can set the default rules that will apply for all the unmapped keys and values. There are three options available, these options are listed below:

- Keep (leave unchanged): doesn't touch the keys or values in any way.
- Ignore (drop key/value pair): when this is applied to the key it deletes the key and value, because when a key is deleted then in consequence its associated value is deleted too. When this is applied to the value, only the value is deleted, keeping the key, that now will be associated to an empty value.
- MapTo (use provided key or value as default): all keys and / or values without a defined map rule, will use this as default, when you select this option a new text field will appear to set this default.

Clicking on the "+" button for new key map, will display a new box for a single mapping configuration. You can add as many key mappings as needed. Just click on the "+" button again and a new mapping box will appear below the existing one. From this mapping boxes you can define a map for a single key, with the next options:

- Exact value(s): the old key string will be changed to a new one if the old key matches exactly.
- Regular expression: The key string will be replaced following a regular expression rule.

Pressing the new value map "+" button will display a new row for a value map. Here also is possible to define rules for each value to be mapped with the same options as for the key map (Exact value and Regular expression). You can add as many values to map as needed, and if you want to delete one of them, just click on the "-" button for each mapping value row.

Deleting the complete key mapping section (box) is possible, just push on the "-" button located on the up right corner of each box that you want to delete.

If you need to delete a complete mapping configuration: go back to the corresponding operation or invoker screen, look for the mapping direction that you select before and set its value to "-", and save the configuration to apply changes.

You are logged in as Miguel Hidalgo y Costilla

GenericInterface Mapping Simple for Web Service Test

» Web Services » Test » Operation Operation one » Simple Mapping for Icomming Data

Actions

Go back to operation

Mapping Simple

Default rule for unmapped keys: MapTo (use provided value as default) default\_value

This rule will apply for all keys with no mapping rule.

Default rule for unmapped values: Keep (leave unchanged)

This rule will apply for all values with no mapping rule.

New key map: +

▼ Mapping for Key KeyNew

Key mapping:

- \*Map key: KeyOne matching the: Exact value(s) \*to new key: KeyNew

Value mapping:

- \*Map value: MapOne matching the: Exact value(s) \*to new value: MapNewOne
- \*Map value: MapTwo matching the: Regular expression \*to new value:

New value map: +

Save Save and finish or Cancel

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*Figure: Web service mapping.*

## Web Service Command Line Interface

The Command Line Interface (CLI) is fast way to work with the web services. It consists of a set of tools can be used to perform basic operations like:

- Create, Update, Read, List and Delete web services based on YAML files.
- Read the Debugger log, with filter options.

### Note

You don't need to use the CLI to work with web services. Integrated into the Admin interface there is a complete set of screens to interact with every part of the web services. Please read the web service GUI section included in this manual.

## Web Service Configuration

The "WebserviceConfig.pl" was developed in order to create basic, but fast and powerful tool to work with web service configurations. It gives you the ability to perform the following actions:

- Add: to create web services using a YAML file as the configuration source.
- Update: to change an existing web service, the configuration can be changed using a different or modified YAML file.

- Read: to get the current web service configuration displayed on the screen.
- List: to get a complete list of all the web services registered in system.
- Delete: to delete a web service from the system. Be careful when you use it, because this action can't be undone.

## Warning

A web service READ operation will display all the configuration as plain text on the screen, including any stored passwords. Please be aware of this and take the needed precautions!

Example: Creating a new web service configuration:

```
shell> OTRS_HOME/bin/otrs.WebServiceConfig.pl -a write  
-n <webservice_name> -f /path/to/yaml/file
```

Also you can use 'otrs.WebServiceConfig.pl' with following options:

- **-a read -i <webservice\_id>** - To read a stored configuration.
- **-a write -n <webservice\_name> -f /path/to/yaml/file** - To create a new web service.
- **-a write -i <webservice\_id> -f /path/to/yaml/file** - To update a web service.
- **-a list** - To list available web services.
- **-a delete -i <webservice\_id>** - To delete a web service.

## Web Service Debugger

Another available tool on the command line is the "otrs.GenericInterfaceDebugRead.pl" script, which is an interface to search for web service debugger log entries.

Example: Searching for debugger log entries:

```
shell> bin/otrs.GenericInterfaceDebugRead.pl
```

Optional parameters can be used for the "otrs.GenericInterfaceDebugRead.pl" script:

- **-c** - to filter by Communication ID (md5sum format).
- **-t** - to filter by CommunicationType ('Provider' or 'Requester').
- **-a** - to filter by date (At or After a date).
- **-b** - to filter by date (At or Before a date).
- **-i** - to filter by IP Address (must be valid IPv4 or IPv6 address).

- **-w** - to filter by Web Service ID.
- **-d** - to include detailed communication data.

Example: Searching for debugger log entries with all parameters:

```
shell> ./otrs.GenericInterfaceDebugRead.pl -c  
a7cc4d9f5c70387a9bfbe1351bc88966 -t Provider -a '2011-07-22 00:00:00'  
-b '2011-07-26 00:00:00' -i 127.0.0.1 -w 123 -d 1
```

## Note

It is highly recommended to include at least one of the filter options listed above, and even more if the "-d" option is selected, because *a lot of* information can be retrieved from the data base and displayed on the screen, this could result in slow response times and much more information than what you really needed.

# Web Service Configuration

From its design the web services were conceived to be portable from one OTRS system to another, e.g. from a test or development environment to a production system. Therefore it was needed to have an easy way to extract the web service configuration from the database, and import it to another. To accomplish this task Generic Interface uses YAML files as the web services configuration basis.

Why YAML? YAML is a markup language designed to be human friendly to read and write (it is easier to understand than JSON), it does not have some of the limitations of XML like numeric tags, it is open, standardized, and is complete enough to store the whole web service configuration.

## Note

To learn more about YAML please visit <http://www.yaml.org/>.

The following is a web service configuration file example in YAML format:

```
---  
Debugger:  
  DebugThreshold: debug  
  Description: This an example of a web service configuration  
Provider:  
  Operation:  
    CloseIncident:  
      Description: This is a test operation  
      MappingInbound: {}  
      MappingOutbound: {}  
      RemoteSystemGuid: ''  
      Type: Test::Test  
Test:  
  Description: This is a test operation
```

```
MappingInbound:  
    Config:  
        KeyMapDefault:  
            MapTo: ''  
            MapType: Keep  
        KeyMapExact:  
            Prio: Priority  
        ValueMap:  
            Priority:  
                ValueMapExact:  
                    Critical: 5 Very High  
                    Information: 1 Very Low  
                    Warning: 3 Normal  
            ValueMapDefault:  
                MapTo: 3 Normal  
                MapType: MapTo  
            Type: Simple  
    MappingOutbound:  
        Config:  
            KeyMapDefault:  
                MapTo: ''  
                MapType: Ignore  
            KeyMapExact:  
                Priority: Prio  
            ValueMap:  
                Prio:  
                    ValueMapExact:  
                        1 Very Low: Information  
                        3 Normal: Warning  
                        5 Very High: Critical  
            ValueMapDefault:  
                MapTo: ''  
                MapType: Ignore  
            Type: Simple  
        Type: Test::Test  
    Transport:  
        Config:  
            MaxLength: 10000000  
            NameSpace: http://www.example.com/actions  
        Type: HTTP::SOAP  
    RemoteSystem: remote.system.description.example.com  
    Requester:  
        Invoker:  
            Test:  
                Description: This is a test invoker  
                Events:  
                    - Asynchronous: 1  
                        Event: TicketCreate  
                    - Asynchronous: 0  
                        Event: ArticleUpdate  
    MappingInbound:  
        Type: Simple  
    MappingOutbound:  
        Type: Simple
```

```
Type: Test::Test
Transport:
Config:
    Authentication:
        Password: '*****'
        Type: BasicAuth
        User: otrs
    Encoding: utf-8
    Endpoint: http://www.example.com:8080/endpoint
    NameSpace: http://www.example.com/actions
    SOAPAction: Yes
    SOAPActionSeparator: '#'
Type: HTTP::SOAP
```

## Configuration Details

### General

- Description: a short text that describes the web service.
- RemoteSystem: a short description of the Remote System.
- Debugger: a container for the debugger settings.
- Provider: a container for the provider settings.
- Requester: a container for the requester settings.

### Debugger

- DebugThreshold: the debugger level

#### Possible Values

- debug: all logs are stored in the database.
- info: info, notice and error level logs are stored in the database.
- notice: notice and error level logs are stored in the database.
- error: only error level logs are stored in the database.

### Provider

- Operation: a container for each operation settings.
- Transport: a container for provider network transport settings.

### Operation

- <OperationName>: Unique name for the operation, container for its own operation settings (cardinality 0..n, but not duplicate).

**<OperationName>**

This section is based on operations from type "Test::Test" other operations might contain more or different settings.

- Description: a short text that describes the operation.
- MappingInbound: a container for the mapping settings for the incoming request data.
- MappingOutbound: a container for the mapping settings for the outgoing response data.
- Type: the operation backend, in Controller::Operation format.

**MappingInbound**

This section is based on mappings from type "Simple". Other mappings might contain more or different settings.

- Config: a container for this mapping settings.
- Type: the mapping backend.

**Config**

- KeyMapDefault: a container for all non mapped keys settings.
- ValueMapDefault: a container for all non mapped values settings.
- KeyMapExact: a container for all exact key mappings (cardinality 0 .. 1).
- KeyMapRegEx: a container for all regular expression key mappings (cardinality 0 .. 1).
- ValueMap: a container for all value mappings (cardinality 0 .. 1).

**KeyMapDefault**

- MapTo: the new value to be used (only applicable if MapType is set to MapTo).
- MapType: the rule for the mapping.

**Possible Values**

- Keep: leave unchanged.
- Ignore: drop.
- MapTo: change to the MapTo value.

**ValueMapDefault**

Similar to KeyMapDefault.

**KeyMapExact**

- <oldkey>: <newkey> (cardinality 0 .. n but not duplicate).

**KeyMapRegEx**

- <oldkey(RegEx)>: <newkey> ( cardinality 0 .. n but no duplicates).

## **ValueMap**

- <newkey>: a container for value mappings for this new key (cardinality depends on the new keys from KeyMapExact and KeyMapRegEx).

### **<newkey>**

- ValueMapExact: a container for all exact value mappings (cardinality 0 .. 1).
- ValueMapRegEx: a container for all regular expression value mappings (cardinality 0 .. 1).

## **valueMapExact**

- <oldvalue>: <newvalue> ( cardinality 0 .. n but not duplicate).

## **ValueMapRegEx**

- <oldvalue(RegEx)>: <newvalue> ( cardinality 0 .. n but not duplicate).

## **MappingOutbound**

Same as MappingInbound.

## **Transport**

This section is based on the provider network transport HTTP::SOAP, other transports might contain more or different settings.

- Config: a container for the specific network transport configuration settings.
- Type: the provider network transport backend.

## **Config**

- MaxLength: the maximum length in bytes to be read in a SOAP message by OTRS.
- NameSpace: an URI that gives a context to all operations that belongs to this web service.

## **Requester**

- Invoker: a container for each invokers' settings.
- Transport: a container for requester network transport settings.

## **Invoker**

- <InvokerName>: Unique name for the invoker, container for its own invoker settings (cardinality 0..n, but not duplicate).

### **<InvokerName>**

This section is based on invokers from type "Test::Test" other invokers might contain more or different settings.

- Description: a short text that describes the invoker

- Events: a container for a unnamed list of event trigger settings.
- MappingInbound: a container for the mapping settings for the incoming response data.
- MappingOutbound: a container for the mapping settings for the outgoing request data.
- Type: the invoker backend, in Controller::Invoker format.

## Events

- *List Element*: (cardinality 0 .. n)
  - Asynchronous: to set if the invoker execution will be delegated to the Scheduler

## Possible Values

- 0: not handled by the Scheduler.
- 1: handled by the Scheduler.
- Event: the name of the event trigger.

## Possible Values (for ticket events)

- TicketCreate
- TicketDelete
- TicketTitleUpdate
- TicketUnlockTimeoutUpdate
- TicketQueueUpdate
- TicketTypeUpdate
- TicketServiceUpdate
- TicketSLAUpdate
- TicketCustomerUpdate
- TicketFreeTextUpdate
- TicketFreeTimeUpdate
- TicketPendingTimeUpdate
- TicketLockUpdate
- TicketArchiveFlagUpdate
- TicketStateUpdate
- TicketOwnerUpdate
- TicketResponsibleUpdate

- TicketPriorityUpdate
- HistoryAdd
- HistoryDelete
- TicketAccountTime
- TicketMerge
- TicketSubscribe
- TicketUnsubscribe
- TicketFlagSet
- TicketFlagDelete
- TicketSlaveLinkAdd
- TicketSlaveLinkDelete
- TicketMasterLinkDelete

### **Possible Values (for article events)**

- Article Events
- ArticleCreate
- ArticleFreeTextUpdate
- ArticleUpdate
- ArticleSend
- ArticleBounce
- ArticleAgentNotification
- ArticleCustomerNotification
- ArticleAutoResponse
- ArticleFlagSet
- ArticleFlagDelete
- ArticleAgentNotification
- ArticleCustomerNotification

### **MappingInbound**

Same as Operation MappingInbound

## MappingOutbound

Same as Operation MappingInbound.

## Transport

This section is based on the requester network transport HTTP::SOAP, other transports might contain more or different settings.

- Config: a container for the specific network transport configuration settings.
- Type: the requester network transport backend.

## Config

- Authentication: a container for authentication settings.
- Encoding: the SOAP Message request encoding
- Endpoint: the URI of the Remote Server web service to accept OTRS requests
- NameSpace: an URI that gives a context to all invokers that belongs to this web service.
- SOAPAction: to send an empty or filled SOAPAction header in the SOAP Message (in "<NameSpace> <Separator> <Actions>" format).

## Possible Values

- YES: to send a filled SOAPAction header.
- No: to send an empty SOAPAction header.
- SOAPActionSeparator: to set the <Separator> of a filled SOAPAction header.

## Possible Values

- '/': used for .net web services.
- '#': used for all the rest web services.

## Authentication

- User: the privileged user name that has access to the remote web service.
- Password: the password for privileged user in plain text.
- Type: the type of authentication.

# Connectors

A Connector is in essence set of actions called Operations if OTRS acts as a web service provider or Invokers if OTRS acts as a web service requester. But it can also include special Mappings or Transports

One Connector can have only Operations, Only Invokers or both. A connector can even use parts of other connectors like the Mappings or Transports if they are not so specific for the Connector that implements them.

In another words a Connector is not limited to just the Controller layer but it can be extended to Data Mapping or Network Transport layers if needed.

Due to the modular design of the Generic Interface a Connector can be seen as a plug-in; this means that by adding Connectors the capabilities of the generic interface can be extended using: OTRS Feature add ons, OTRS Custom modules, 3rd Party modules, and so on.

## Bundled Connectors

Included with this version of OTRS the following connectors are ready to be used.

- Session
- Ticket

### Session Connector

This connector is capable to create a valid SessionID that can be used in any other operation.

Provides:

- Operations:
  - SessionCreate

### Operations

#### SessionCreate

Creates a new new valid SessionID to be used in other operations from other connectors like TicketCreate.

#### Note

To use the SessionID in other operations from other connectors is necessary that the operation implements authentication by SessionID. all the rest of the bundled operations are capable to accept a valid SessionID as an authentication method.

Possible Attributes:

```
<SessionCreate>
    <!--You have a MANDATORY CHOICE of the next 2 items at this
level-->
    <!--Optional:-->
    <UserLogin>?</UserLogin>
    <!--Optional:-->
    <CustomerUserLogin>?</CustomerUserLogin>
    <!--Optional:-->
    <Password>?</Password>
</SessionCreate>
```

## Ticket Connector

This connector supplies the basic functionality to interact with tickets

Provides:

- Operations:
  - TicketCreate
  - TicketUpdate
  - TicketGet
  - TicketSearch

## Operations

### TicketCreate

Provides an interface to create ticket in OTRS, a ticket must contain an Article and can contain several attachments, all defined Dynamic Fields can be also set on TicketCreate operation.

Possible Attributes:

```
<TicketCreate>
    <!--You have a MANDATORY CHOICE of the next 3 items at this
level-->
    <!--Optional:-->
    <UserLogin>?</UserLogin>
    <!--Optional:-->
    <CustomerUserLogin>?</CustomerUserLogin>
    <!--Optional:-->
    <SessionID>?</SessionID>
    <!--Optional:-->
    <Password>?</Password>
    <Ticket>
        <Title>?</Title>
        <!--You have a MANDATORY CHOICE of the next 2 items at
this level-->
        <!--Optional:-->
        <QueueID>?</QueueID>
        <!--Optional:-->
        <Queue>?</Queue>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <TypeID>?</TypeID>
        <!--Optional:-->
        <Type>?</Type>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
```

```
<ServiceID>?</ServiceID>
<!--Optional:-->
<Service>?</Service>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<SLAID>?</SLAID>
<!--Optional:-->
<SLA>?</SLA>
<!--You have a MANDATORY CHOICE of the next 2 items at
this level-->
<!--Optional:-->
<StateID>?</StateID>
<!--Optional:-->
<State>?</State>
<!--You have a MANDATORY CHOICE of the next 2 items at
this level-->
<!--Optional:-->
<PriorityID>?</PriorityID>
<!--Optional:-->
<Priority>?</Priority>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<OwnerID>?</OwnerID>
<!--Optional:-->
<Owner>?</Owner>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ResponsibleID>?</ResponsibleID>
<!--Optional:-->
<Responsible>?</Responsible>
<CustomerUser>?</CustomerUser>
<!--Optional:-->
<PendingTime>
    <Year>?</Year>
    <Month>?</Month>
    <Day>?</Day>
    <Hour>?</Hour>
    <Minute>?</Minute>
</PendingTime>
</Ticket>
<Article>
    <!--You have a CHOICE of the next 2 items at this level-->
    <!--Optional:-->
    <ArticleTypeID>?</ArticleTypeID>
    <!--Optional:-->
    <ArticleType>?</ArticleType>
    <!--You have a CHOICE of the next 2 items at this level-->
    <!--Optional:-->
    <SenderTypeID>?</SenderTypeID>
    <!--Optional:-->
    <SenderType>?</SenderType>
    <!--Optional:-->
    <From>?</From>
    <Subject>?</Subject>
```

```
<Body>?</Body>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ContentType>?</ContentType>
<Charset>?</Charset>
<MimeType>?</MimeType>
<!--Optional:-->
<HistoryType>?</HistoryType>
<!--Optional:-->
<HistoryComment>?</HistoryComment>
<!--Optional:-->
<AutoResponseType>?</AutoResponseType>
<!--Optional:-->
<TimeUnit>?</TimeUnit>
<!--Optional:-->
<NoAgentNotify>?</NoAgentNotify>
<!--Zero or more repetitions:-->
<ForceNotificationToUserID>?</ForceNotificationToUserID>
<!--Zero or more repetitions:-->
<ExcludeNotificationToUserID>?</
ExcludeNotificationToUserID>
<!--Zero or more repetitions:-->
<ExcludeMuteNotificationToUserID>?</
ExcludeMuteNotificationToUserID>
</Article>
<!--Zero or more repetitions:-->
<DynamicField>
<Name>?</Name>
<!--1 or more repetitions:-->
<Value>?</Value>
</DynamicField>
<!--Zero or more repetitions:-->
<Attachment>
<Content>cid:61886944659</Content>
<ContentType>?</ContentType>
<Filename>?</Filename>
</Attachment>
</TicketCreate>
```

## TicketUpdate

TicketUpdate operation add the capability to modify attributes from a ticket or add a new article, including attachments and all defined dynamic fields for the ticket and the new article.

### Note

It is not necessary to create a new article to modify a ticket attribute.

Possible Attributes:

```
<TicketUpdate>
    <!--You have a MANDATORY CHOICE of the next 3 items at this
level-->
    <!--Optional:-->
    <UserLogin>?</UserLogin>
    <!--Optional:-->
    <CustomerUserLogin>?</CustomerUserLogin>
    <!--Optional:-->
    <SessionID>?</SessionID>
    <!--Optional:-->
    <Password>?</Password>
    <!--You have a CHOICE of the next 2 items at this level-->
    <TicketID>?</TicketID>
    <TicketNumber>?</TicketNumber>
    <!--Optional:-->
    <Ticket>
        <!--Optional:-->
        <Title>?</Title>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <QueueID>?</QueueID>
        <!--Optional:-->
        <Queue>?</Queue>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <TypeID>?</TypeID>
        <!--Optional:-->
        <Type>?</Type>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <ServiceID>?</ServiceID>
        <!--Optional:-->
        <Service>?</Service>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <SLAID>?</SLAID>
        <!--Optional:-->
        <SLA>?</SLA>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <StateID>?</StateID>
        <!--Optional:-->
        <State>?</State>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <PriorityID>?</PriorityID>
        <!--Optional:-->
        <Priority>?</Priority>
        <!--You have a CHOICE of the next 2 items at this level-->
        <!--Optional:-->
        <OwnerID>?</OwnerID>
        <!--Optional:-->
        <Owner>?</Owner>
        <!--You have a CHOICE of the next 2 items at this level-->
```

```
<!--Optional:-->
<ResponsibleID>?</ResponsibleID>
<!--Optional:-->
<Responsible>?</Responsible>
<!--Optional:-->
<CustomerUser>?</CustomerUser>
<!--Optional:-->
<PendingTime>
    <Year>?</Year>
    <Month>?</Month>
    <Day>?</Day>
    <Hour>?</Hour>
    <Minute>?</Minute>
</PendingTime>
</Ticket>
<!--Optional:-->
<Article>
    <!--You have a CHOICE of the next 2 items at this level-->
    <!--Optional:-->
    <ArticleTypeID>?</ArticleTypeID>
    <!--Optional:-->
    <ArticleType>?</ArticleType>
    <!--You have a CHOICE of the next 2 items at this level-->
    <!--Optional:-->
    <SenderTypeID>?</SenderTypeID>
    <!--Optional:-->
    <SenderType>?</SenderType>
    <!--Optional:-->
    <From>?</From>
    <Subject>?</Subject>
    <Body>?</Body>
    <!--You have a CHOICE of the next 2 items at this level-->
    <!--Optional:-->
    <ContentType>?</ContentType>
    <Charset>?</Charset>
    <MimeType>?</MimeType>
    <!--Optional:-->
    <HistoryType>?</HistoryType>
    <!--Optional:-->
    <HistoryComment>?</HistoryComment>
    <!--Optional:-->
    <AutoResponseType>?</AutoResponseType>
    <!--Optional:-->
    <TimeUnit>?</TimeUnit>
    <!--Optional:-->
    <NoAgentNotify>?</NoAgentNotify>
    <!--Zero or more repetitions:-->
    <ForceNotificationToUserID>?</ForceNotificationToUserID>
    <!--Zero or more repetitions:-->
    <ExcludeNotificationToUserID>?</
ExcludeNotificationToUserID>
    <!--Zero or more repetitions:-->
    <ExcludeMuteNotificationToUserID>?</
ExcludeMuteNotificationToUserID>
```

```
</Article>
<!--Zero or more repetitions:-->
<DynamicField>
    <Name>?</Name>
    <!--1 or more repetitions:-->
    <Value>?</Value>
</DynamicField>
<!--Zero or more repetitions:-->
<Attachment>
    <Content>cid:166861569966</Content>
    <ContentType>?</ContentType>
    <Filename>?</Filename>
</Attachment>
</TicketUpdate>
```

## TicketGet

This operation is used to get all the attributes of a ticket including the dynamic fields, all the articles and all the attachments that belongs to the ticket.

Possible Attributes:

```
<TicketGet>
    <!--You have a MANDATORY CHOICE of the next 3 items at this
level-->
    <!--Optional:-->
    <UserLogin>?</UserLogin>
    <!--Optional:-->
    <CustomerUserLogin>?</CustomerUserLogin>
    <!--Optional:-->
    <SessionID>?</SessionID>
    <!--Optional:-->
    <Password>?</Password>
    <!--Optional:-->
    <TicketID>?</TicketID>
    <!--Optional:-->
    <DynamicFields>?</DynamicFields>
    <!--Optional:-->
    <Extended>?</Extended>
    <!--Optional:-->
    <AllArticles>?</AllArticles>
    <!--Optional:-->
    <ArticleSenderType>?</ArticleSenderType>
    <!--Optional:-->
    <ArticleOrder>?</ArticleOrder>
    <!--Optional:-->
    <ArticleLimit>?</ArticleLimit>
    <!--Optional:-->
    <Attachments>?</Attachments>
</TicketGet>
```

**TicketSearch**

TicketSearch operation returns a list of Ticket IDs that matches a predefined criteria.

Possible Attributes:

```
<TicketSearch>
    <!--You have a MANDATORY CHOICE of the next 3 items at this
level-->
    <!--Optional:-->
    <UserLogin>?</UserLogin>
    <!--Optional:-->
    <CustomerUserLogin>?</CustomerUserLogin>
    <!--Optional:-->
    <SessionID>?</SessionID>
    <!--Optional:-->
    <Password>?</Password>
    <!--Optional:-->
    <Limit>?</Limit>
    <!--Zero or more repetitions:-->
    <TicketNumber>?</TicketNumber>
    <!--Zero or more repetitions:-->
    <Title>?</Title>
    <!--Zero or more repetitions:-->
    <Queues>?</Queues>
    <!--Zero or more repetitions:-->
    <QueueIDs>?</QueueIDs>
    <!--Optional:-->
    <UseSubQueues>?</UseSubQueues>
    <!--Zero or more repetitions:-->
    <Types>?</Types>
    <!--Zero or more repetitions:-->
    <TypeID>?</TypeID>
    <!--Zero or more repetitions:-->
    <States>?</States>
    <!--Zero or more repetitions:-->
    <StateIDs>?</StateIDs>
    <!--Zero or more repetitions:-->
    <StateType>?</StateType>
    <!--Zero or more repetitions:-->
    <StateTypeIDs>?</StateTypeIDs>
    <!--Zero or more repetitions:-->
    <Priorities>?</Priorities>
    <!--Zero or more repetitions:-->
    <PriorityIDs>?</PriorityIDs>
    <!--Zero or more repetitions:-->
    <Services>?</Services>
    <!--Zero or more repetitions:-->
    <ServiceIDs>?</ServiceIDs>
    <!--Zero or more repetitions:-->
    <SLAs>?</SLAs>
```

```
<!--Zero or more repetitions:-->
<SLAIDs>?</SLAIDs>
<!--Zero or more repetitions:-->
<Locks>?</Locks>
<!--Zero or more repetitions:-->
<LockIDs>?</LockIDs>
<!--Zero or more repetitions:-->
<OwnerIDs>?</OwnerIDs>
<!--Zero or more repetitions:-->
<ResponsibleIDs>?</ResponsibleIDs>
<!--Zero or more repetitions:-->
<WatchUserIDs>?</WatchUserIDs>
<!--Zero or more repetitions:-->
<CustomerID>?</CustomerID>
<!--Zero or more repetitions:-->
<CustomerUserLogin>?</CustomerUserLogin>
<!--Zero or more repetitions:-->
<CreatedUserIDs>?</CreatedUserIDs>
<!--Zero or more repetitions:-->
<CreatedTypes>?</CreatedTypes>
<!--Zero or more repetitions:-->
<CreatedTypeIDs>?</CreatedTypeIDs>
<!--Zero or more repetitions:-->
<CreatedPriorities>?</CreatedPriorities>
<!--Zero or more repetitions:-->
<CreatedPriorityIDs>?</CreatedPriorityIDs>
<!--Zero or more repetitions:-->
<CreatedStates>?</CreatedStates>
<!--Zero or more repetitions:-->
<CreatedStateIDs>?</CreatedStateIDs>
<!--Zero or more repetitions:-->
<CreatedQueues>?</CreatedQueues>
<!--Zero or more repetitions:-->
<CreatedQueueIDs>?</CreatedQueueIDs>
<!--Zero or more repetitions:-->
<DynamicFields>
    <!--You have a MANDATORY CHOICE of the next 6 items at
this level-->
        <!--Optional:-->
        <Equals>?</Equals>
        <!--Optional:-->
        <Like>?</Like>
        <!--Optional:-->
        <GreaterThan>?</GreaterThan>
        <!--Optional:-->
        <GreaterEquals>?</GreaterEquals>
        <!--Optional:-->
        <LowerThan>?</LowerThan>
        <!--Optional:-->
        <LowerEqual>?</LowerEqual>
    </DynamicFields>
    <!--Optional:-->
    <Ticketflag>
        <!--Optional:-->
```

```
<Seen>?</Seen>
</Ticketflag>
<!--Optional:-->
<From>?</From>
<!--Optional:-->
<To>?</To>
<!--Optional:-->
<Cc>?</Cc>
<!--Optional:-->
<Subject>?</Subject>
<!--Optional:-->
<Body>?</Body>
<!--Optional:-->
<FullTextIndex>?</FullTextIndex>
<!--Optional:-->
<ContentSearch>?</ContentSearch>
<!--Optional:-->
<ConditionInline>?</ConditionInline>
<!--Optional:-->
<ArticleCreateTimeOlderMinutes>?</
ArticleCreateTimeOlderMinutes>
<!--Optional:-->
<ArticleCreateTimeNewerMinutes>?</
ArticleCreateTimeNewerMinutes>
<!--Optional:-->
<ArticleCreateTimeNewerDate>?</ArticleCreateTimeNewerDate>
<!--Optional:-->
<ArticleCreateTimeOlderDate>?</ArticleCreateTimeOlderDate>
<!--Optional:-->
<TicketCreateTimeOlderMinutes>?</
TicketCreateTimeOlderMinutes>
<!--Optional:-->
<ATicketCreateTimeNewerMinutes>?</
ATicketCreateTimeNewerMinutes>
<!--Optional:-->
<TicketCreateTimeNewerDate>?</TicketCreateTimeNewerDate>
<!--Optional:-->
<TicketCreateTimeOlderDate>?</TicketCreateTimeOlderDate>
<!--Optional:-->
<TicketChangeTimeOlderMinutes>?</
TicketChangeTimeOlderMinutes>
<!--Optional:-->
<TicketChangeTimeNewerMinutes>?</
TicketChangeTimeNewerMinutes>
<!--Optional:-->
<TicketChangeTimeNewerDate>?</TicketChangeTimeNewerDate>
<!--Optional:-->
<TicketChangeTimeOlderDate>?</TicketChangeTimeOlderDate>
<!--Optional:-->
<TicketCloseTimeOlderMinutes>?</TicketCloseTimeOlderMinutes>
<!--Optional:-->
<TicketCloseTimeNewerMinutes>?</TicketCloseTimeNewerMinutes>
<!--Optional:-->
<TicketCloseTimeNewerDate>?</TicketCloseTimeNewerDate>
```

```
<!--Optional:-->
<TicketCloseTimeOlderDate>?</TicketCloseTimeOlderDate>
<!--Optional:-->
<TicketPendingTimeOlderMinutes>?</
TicketPendingTimeOlderMinutes>
<!--Optional:-->
<TicketPendingTimeNewerMinutes>?</
TicketPendingTimeNewerMinutes>
<!--Optional:-->
<TicketPendingTimeNewerDate>?</TicketPendingTimeNewerDate>
<!--Optional:-->
<TicketPendingTimeOlderDate>?</TicketPendingTimeOlderDate>
<!--Optional:-->
<TicketEscalationTimeOlderMinutes>?</
TicketEscalationTimeOlderMinutes>
<!--Optional:-->
<TTicketEscalationTimeNewerMinutes>?</
TTicketEscalationTimeNewerMinutes>
<!--Optional:-->
<TicketEscalationTimeNewerDate>?</
TicketEscalationTimeNewerDate>
<!--Optional:-->
<TicketEscalationTimeOlderDate>?</
TicketEscalationTimeOlderDate>
<!--Optional:-->
<ArchiveFlags>?</ArchiveFlags>
<!--Zero or more repetitions:-->
<OrderBy>?</OrderBy>
<!--Zero or more repetitions:-->
<SortBy>?</SortBy>
<!--Zero or more repetitions:-->
<CustomerUserID>?</CustomerUserID>
</TicketSearch>
```

## Examples:

### Web Service Configuration

The following is a basic but complete web service configuration file in YAML format to use all the Ticket Connector operations, in order to use it in OTRS you need to copy the content, save it into a file called GenericTicketConnector.yml, and import it into OTRS in the Web Services screen in the Admin panel by clicking in the "Add web service" action from the overview screen and then clicking in the "Import web service" action in the add screen.

```
---
Debugger:
  DebugThreshold: debug
  TestMode: 0
Description: Ticket Connector Sample
FrameworkVersion: 3.1.x CVS
```

```
Provider:
Operation:
SessionCreate:
    Description: Creates a Session
    MappingInbound: {}
    MappingOutbound: {}
    Type: Session::SessionCreate
TicketCreate:
    Description: Creates a Ticket
    MappingInbound: {}
    MappingOutbound: {}
    Type: Ticket::TicketCreate
TicketUpdate:
    Description: Updates a Ticket
    MappingInbound: {}
    MappingOutbound: {}
    Type: Ticket::TicketUpdate
TicketGet:
    Description: Retrieve Ticket data
    MappingInbound: {}
    MappingOutbound: {}
    Type: Ticket::TicketGet
TicketSearch:
    Description: Search for Tickets
    MappingInbound: {}
    MappingOutbound: {}
    Type: Ticket::TicketSearch
Transport:
Config:
    MaxLength: 100000000
    NameSpace: http://www.otrs.org/TicketConnector/
    Type: HTTP::SOAP
RemoteSystem: ''
Requester:
Transport:
Type: ''
```

## Perl SOAP Requester

The following code is a Perl script that can connect to OTRS via the generic interface, to perform the operations provided by the Ticket Connector, it uses two Perl CPAN modules SOAP::Lite and Data::Dumper, be sure that your environment is capable to use that modules before you try to run the script.

```
#!/usr/bin/perl -w
# --
# otrs.SOAPRequest.pl - sample to send a SOAP request to OTRS Generic
# Interface Ticket Connector
# Copyright (C) 2001-2012 OTRS AG, http://otrs.org/
# --
```

```
# $Id: genericinterface-connectors.xml,v 1.8 2012/06/12 20:34:19 cr
Exp $
#
# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU AFFERO General Public License as
# published by
# the Free Software Foundation; either version 3 of the License, or
# any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU Affero General Public
# License
# along with this program; if not, write to the Free Software
# Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307
# USA
# or see http://www.gnu.org/licenses/agpl.txt.
# --

use strict;
use warnings;

# use ../ as lib location
use File::Basename;
use FindBin qw($RealBin);
use lib dirname($RealBin);

use SOAP::Lite;
use Data::Dumper;

#
# Variables to be defined.

# this is the URL for the web service
# the format is
# <HTTP_TYPE>://<OTRS_FQDN>/nph-genericinterface.pl/Webservice/
<WEB_SERVICE_NAME>
# or
# <HTTP_TYPE>://<OTRS_FQDN>/nph-genericinterface.pl/WebserviceID/
<WEB_SERVICE_ID>
my $URL = 'http://localhost/otrs/nph-genericinterface.pl/Webservice/
GenericTicketConnector';

# this name space should match the specified name space in the SOAP
# transport for the web service.
my $NameSpace = 'http://www.otrs.org/TicketConnector/';

# this is operation to execute, it could be TicketCreate,
# TicketUpdate, TicketGet, TicketSearch
# or SessionCreate. and they must to be defined in the web service.
my $Operation = 'TicketCreate';
```

```
# this variable is used to store all the parameters to be included on
# a request in XML format, each
# operation has a determined set of mandatory and non mandatory
# parameters to work correctly, please
# check OTRS Admin Manual in order to get the complete list.
my $XMLData = '
<UserLogin>some user login</UserLogin>
<Password>some password</Password>
<Ticket>
    <Title>some title</Title>
    <CustomerUser>some customer user login</CustomerUser>
    <Queue>some queue</Queue>
    <State>some state</State>
    <Priority>some priority</Priority>
</Ticket>
<Article>
    <Subject>some subject</Subject>
    <Body>some body</Body>
    <ContentType>text/plain; charset=utf8</ContentType>
</Article>
';

# ---

# create a SOAP::Lite data structure from the provided XML data
# structure.
my $SOAPData = SOAP::Data
    ->type( 'xml' => $XMLData );

my $SOAPObject = SOAP::Lite
    ->uri($NameSpace)
    ->proxy($URL)
    ->$Operation($SOAPData);

# check for a fault in the soap code.
if ( $SOAPObject->fault ) {
    print $SOAPObject->faultcode, " ", $SOAPObject->faultstring, "\n";
}

# otherwise print the results.
else {

    # get the XML response part from the SOAP message.
    my $XMLResponse = $SOAPObject->context()->transport()->proxy()-
>http_response()->content();

    # deserialize response (convert it into a perl structure).
    my $Deserialized = eval {
        SOAP::Deserializer->deserialize($XMLResponse);
    };

    # remove all the headers and other not needed parts of the SOAP
    # message.
```

```
my $Body = $Deserialized->body();

# just output relevant data and no the operation name key (like
TicketCreateResponse).
for my $ResponseKey ( keys %{$Body} ) {
    print Dumper( $Body->{$ResponseKey} );
}
}
```

# Chapter 21. OTRS Scheduler

The OTRS Scheduler is an independent system process that executes tasks in background. These kind of processes are known as *daemons* in Unix / Linux systems or as *services* on Windows environments. It is independent but that doesn't mean that the Scheduler does everything alone, it is fully integrated into OTRS and can use any OTRS module as needed to complete each task.

Currently the OTRS Scheduler is only able to handle Generic Interface tasks. These kind of tasks executes invokers that send requests to remote systems. Other handlers for different tasks will be added in future OTRS versions.

For sanity reasons the Scheduler process needs to be restarted from time to time. This is done automatically by the scheduler process itself once a day, but it can be adjusted as needed using the SysConfig by editing the "Scheduler::RestartAfterSeconds" setting.

The OTRS Scheduler is a set it and forget it process, the only needed human interaction is to check its status periodically and start or stop it as needed.

## Note

If the Scheduler is stopped for any reason all pending tasks and new tasks registered when the Scheduler is stopped will be executed as soon as the Scheduler starts again (unless the tasks are set to be executed in the future).

## Scheduler Graphical Interface

The Scheduler is not visible in the OTRS Graphical User Interface unless it stops running.

## Scheduler Not Running Notification

There are two different types of notifications if the system detects that scheduler is not running. This detection is based on the Scheduler process update frequency, if the difference between current time and the last process update time is 2 times the process update frequency a warning message will be displayed in the OTRS notification area. If it is over 4 times the process frequency then an alert will be displayed instead.

The Scheduler process update time can be configured via the SysConfig in the "Scheduler::PIDUpdateTime" setting.

If you would see a warning message it is not always necessary to take an action, but is highly recommended to check if the scheduler process is running. If you see an alert, then it is highly probable that the scheduler is in fact not running and should be started.

By default the Scheduler not running notification is enabled, if there is a valid web service registered in the database, and is only displayed to the users in the "admin" group.

To disable the notification (not recommended) or to change or add the notification groups, please edit the "Frontend::NotifyModule###800-Scheduler-Check" setting in the SysConfig.



*Figure: Scheduler notification.*

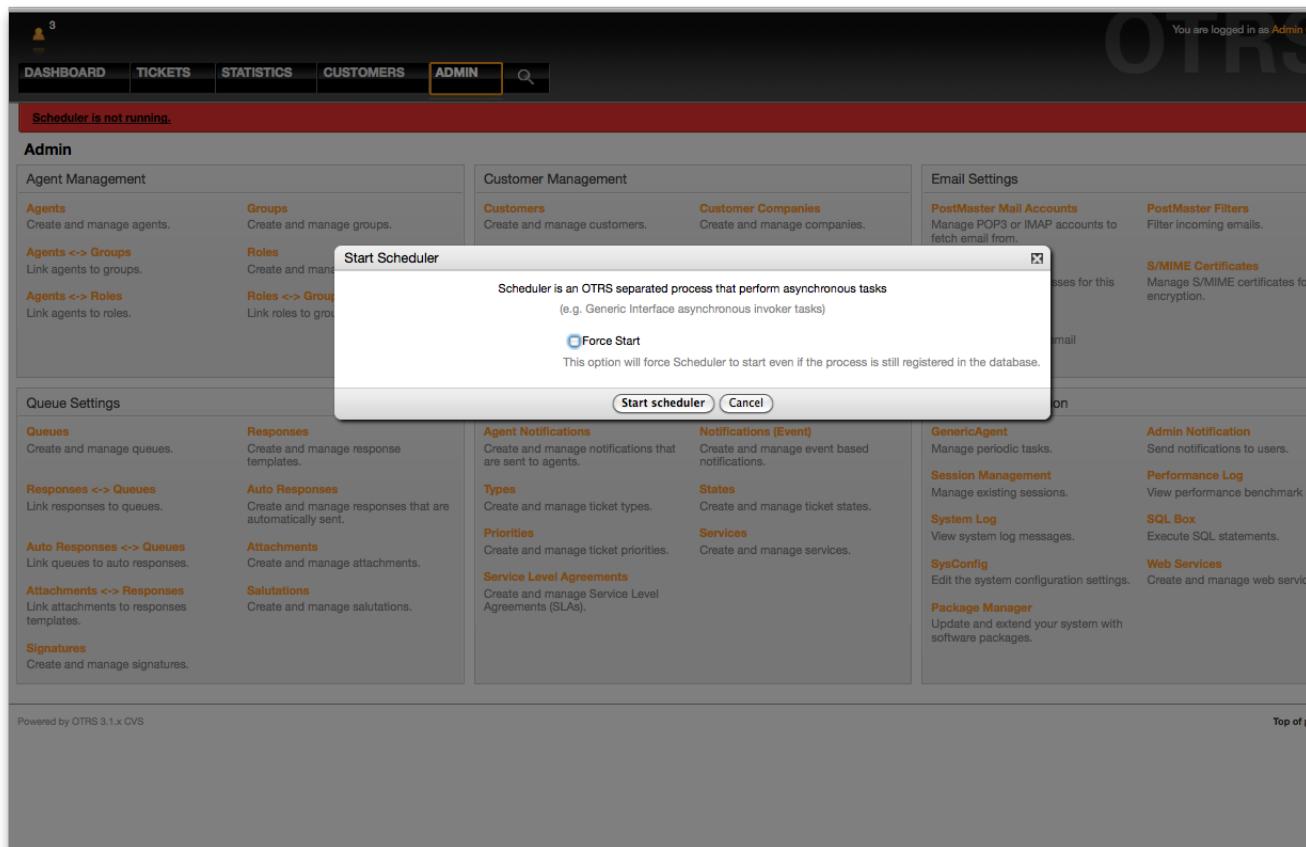
## Start Scheduler

By clicking on the Scheduler not running notification link (either warning or alert) a dialog box will open to let you start the Scheduler process again. The Scheduler can be started normally or forced to start, by clicking on the appropriate check box in the dialog.

### Note

A forced Scheduler start is only necessary if previous Scheduler process was terminated abnormally and the Process ID is still registered in the database.

To have full control of the Scheduler process and to check its real status please use the command line tools described below.

*Figure: Start Scheduler.*

## Scheduler Command Line Interface

The Scheduler command line tools let you control the Scheduler process (Start / Stop) or query its status. There are also tools to register the process to be controlled by the operating system.

Included with OTRS there are two sets of CLI tools, one for Unix / Linux OS and another for MS Windows OS.

# Unix / Linux

## Scheduler Init.d Files

Init.d files are special scripts that are called by the operating system at startup and shutdown (or restart) times.

OTRS provide init.d scripts to start / stop the OTRS Scheduler process automatically by the operating system, this scripts are located under OTRS\_HOME/scripts.

Init.d scripts needs to be copied to the correct location for your operating system, they need to have the proper permissions and some internal variables needs to be set to work properly.

### Init.d Script Internal Variables

- **OTRS\_HOME** - the path of your OTRS installation.
- **User** - the apache process user name.
- **Group** - the apache process user's group name.

### Note

Currently there are only init.d scripts for Linux platforms.

**Table 21.1. List of Init Scripts And Supported Operating Systems**

Init Script	Supported OS
otrs-scheduler-linux	Red Hat, Fedora, CentOS, SUSE, openSUSE, Debian, Ubuntu
otrs-scheduler-gentoo-init.d, otrs-scheduler-gentoo-conf.d	Gentoo

### Example 21.1. Example To Start The OTRS Scheduler Form An Init.d Script

```
shell> /etc/init.d/otrs-scheduler-linux
start
```

### Available Actions

- **start** to start the OTRS Scheduler process.
- **stop** to stop the OTRS Scheduler process.
- **restart** to restart the OTRS Scheduler process.
- **status** to query the OTRS Scheduler process status.

The Scheduler needs the database to be available to register its Process ID, for this reason is necessary to:

- Execute the Scheduler init.d script to *start* the Scheduler process after the database process is up and running.
- Execute the Scheduler init.d script to *stop* the Scheduler before the database process shuts down.

## Note

If you want the Scheduler to run at system startup, please read the documentation of the operating system for the right location to place the init.d scripts, how to configure them to run automatically and how to set the run order.

## Scheduler Daemon File

This is the part of the Scheduler that stays running in the background checking for tasks to execute. It also provides the main functions to control the process.

All Unix / Linux uses the file **OTRS\_HOME/bin/otrs.Scheduler.pl**.

### Example 21.2. Example To Start The OTRS Scheduler

```
shell> OTRS_HOME/bin/otrs.Scheduler.pl -a  
start
```

## Available Options

- **-a** action.

## Possible Values

- **start**- to start the Scheduler process.
- **stop**- to stop the Scheduler process.
- **status**- to query Scheduler process status.
- **-f** to force the start or stop of the Scheduler process.

### Example 21.3. Example To Force Stop The OTRS Scheduler

```
shell> OTRS_HOME/bin/otrs.Scheduler.pl -a  
stop -f 1
```

## Note

Force stop the Scheduler is used remove the process ID from the database when scheduler is not running and the process is still registered.

Force start the Scheduler is used to start the Scheduler process if the scheduler is not running and the process is registered.

Force start or stop are only necessary if the start of the process is needed to be done before the process update time expires. Otherwise an expired entry in the database is discarded by normal start.

## Windows

### Scheduler Service Installer

The integration of the services into the MS Windows Operating System is done via the Windows Service Control Manager (SCM). In order to make the OTRS Scheduler process to be controlled by the SCM is necessary to register this service

OTRS provides the script **OTRS\_HOME/bin/otrs.Scheduler4WinInstaller.pl** to register or unregister the OTRS Scheduler into the SCM.

#### **Example 21.4. Example To Register The OTRS Scheduler Into the Widows SCM**

```
shell> OTRS_HOME/bin/  
otrs.Scheduler4WinInstaller.pl -a install
```

#### **Available Options**

- **-a** action.

#### **Possible Values**

- **install**- to install the Scheduler process into the Windows SCM.
- **remove**- to remove the Scheduler process from the Windows SCM.

After installing into the Widows SCM the OTRS Scheduler process can be used as any other service in Windows. It can be started, stopped and restarted and can be configured to be started manually or automatic.

#### **Note**

To learn more about Windows Services and the Windows SCM please read the Windows documentation, and Microsoft online help.

### Scheduler Service File

This is the part of the Scheduler that stays running in the background checking for tasks to execute. It also provides the main functions to control the process.

Windows Operating System uses the file **OTRS\_HOME/bin/otrs.Scheduler4Win.pl**.

#### **Example 21.5. Example To Start The OTRS Scheduler**

```
shell> OTRS_HOME/bin/otrs.Scheduler4Win.pl  
-a start
```

## Available Options

- **-a** action.

## Possible Values

- **start**- to start the Scheduler process.
- **stop**- to stop the Scheduler process.
- **status**- to query Scheduler process status.
- **-f** to force the start or stop of the Scheduler process.

## Example 21.6. Example To Force Stop The OTRS Scheduler

```
shell> OTRS_HOME/bin/otrs.Scheduler4Win.pl  
-a stop -f 1
```

## Note

Force stopping the Scheduler is used to remove the process ID from the database when scheduler is not running and the process is still registered.

Force starting the Scheduler is used to start the Scheduler process if the scheduler is not running and the process is still registered.

Force start or stop are only necessary if starting the process is needed to be done before the process update time expires. Otherwise an expired entry in the database would be discarded by a normal start.

---

# Chapter 22. Dynamic Fields

## Introduction

A dynamic field is a special kind of field in OTRS, created to extend the information stored on a ticket or article. These fields are not fixed in the system and they can appear only in specific screens, they can be mandatory or not, and their representation in the screens depends on the field type defined at their creation time according to the data to be held by the field. For example, there are fields to hold a text, a date, a selection of items, etc.

Dynamic fields are the evolution of TicketFreeText, TicketFreeKey, TicketFreeTime, ArticleFreeText and ArticleFreeKey fields that were commonly used in OTRS 3.0 and before. The limitation of these "Free Fields" was that they can be defined up to 16 (text or dropdown) fields and 6 time fields for a ticket and 3 (text or dropdown) fields for each article only, not more.

Now with dynamic fields the limitation in the number of fields per ticket or article is removed, you can create as many dynamic fields you like either for ticket or articles. And beyond that, the framework behind the dynamic fields is prepared to handle custom fields for other objects rather than just ticket and articles.

This new framework that handles the dynamic fields is built using a modular approach, where each kind of dynamic field can be seen as a plug-in module for the framework. This means that the variety of dynamic fields can be easily extended by public OTRS modules, OTRS Feature Add-ons, OTRS custom developments, and other custom developments.

The following dynamic field types are included with this release:

- Text (one line of text)
- Textarea (multiple lines of text)
- Checkbox
- Dropdown (single choice, multiple values)
- Multiselect (multiple choice, multiple values)
- Date
- Date / Time

## Configuration

By default, a clean installation of OTRS 3.1.x does not include any dynamic fields. If you plan to use such fields in tickets or articles you need to create dynamic fields.

An updated installation from OTRS 3.0.x will have all the old "free fields" created as dynamic fields for compatibility and data preservation. The following is the list of dynamic fields that are created during the migration from OTRS 3.0.x to 3.1.x.

- TicketFreeKey[1-16] (TicketFreeKey1, TicketFreeKey2 ... TicketFreeKey16)

- TicketFreeText[1-16]
- TicketFreeTime[1-6]
- ArticleFreeKey[1-16]
- ArticleFreeText[1-16]

### Note

During the migration procedure from OTRS 3.0.x to OTRS 3.1.x all the old "free fields" data and configuration are migrated to the new dynamic fields architecture. Any custom development around the old "free fields" has to be updated to use the new dynamic field framework.

The migration of the configuration include the field itself and the screen configurations to hide, show or show field as mandatory for each screen.

The configuration of a dynamic field is split in two parts, to add a new dynamic field or manage an existing one you need to navigate into the "Admin" panel in the "Dynamic Fields" link. To show, show as mandatory or hide a dynamic field in one screen you need to change the OTRS settings in the "SysConfig" screen.

## Adding a Dynamic Field

Click in the "Admin" button located in the navigation bar, then click on the "Dynamic Field" link inside "Ticket Settings" box located in the lower center of the screen. The dynamic fields overview will display as follows:

**Dynamic Fields Management - Overview**

**Actions**

Article	Add new field for object: Article
Ticket	Add new field for object: Ticket

**Hint**

To add a new field, select the field type form one of the object's list, the object defines the boundary of the field and it can't be changed after the field creation.

**Dynamic Fields List**

NAME	LABEL	ORDER	TYPE	OBJECT	VALID
No data found.					

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*Figure: Dynamic fields overview screen, empty.*

Notice that this screen will change as you add more dynamic fields to list all created dynamic fields. This screen might already have some fields if the installation was updated from an older version of OTRS.

The Actions in the side bar at the left of the screen describes two possibilities: Article and Ticket, each one has its own dropdown selection of dynamic fields.

## Note

The installation of an OTRS package could add more objects to the Action side bar.

The general procedure to create a dynamic field is:

- Click on the desired dynamic field object dropdown in the Action side bar.
- Click on the dynamic field type that you want to add from the list.
- Fill the configuration.
- Save.

The configuration dialogs for the dynamic fields are split in two parts, the upper section is common among all the fields and the lower part might be different from one type of dynamic field to another.

General dynamic field settings:

- Name: Mandatory, unique, only letters and numbers are allowed.

This is the internal name of the field, used for example to show or hide a field in one screen. Any modification on field name (not recommended) will need manual a update on the "SysConfig" settings where the field is referenciated.

- Label: Mandatory.

This is field name to be displayed in the screens, it supports translations.

## Note

Label translations have to be added manually to language translations files.

- Field order: Mandatory.

Defines the relative order in which the field will be displayed in the screen, by default each new field has the last position, a change in this setting will affect the other of the other created dynamic fields.

- Validity: Mandatory.

An invalid dynamic field will not be displayed in any screen, no matter if is configured to displayed.

- Field type: Mandatory, Read only.

Shows the current selected field type.

- Object type: Mandatory, Read only.

Shows the scope of field.

## Note

To illustrate each specific field type settings a few fields will be added in our example. These new fields will be referenced in later sections.

For the following examples all the dynamic fields will be created for the Ticket object if you need to create a dynamic field for Article object, just chose the field from the Article dropdown list.

**Table 22.1. The following fields will be added into the system:**

Name	Label	Type
Field1	My Field 1	Text
Field2	My Field 2	Textarea
Field3	My Field 3	Checkbox
Field4	My Field 4	Dropdown
Field5	My Field 5	Multiselect
Field6	My Field 5	Date
Field7	My Field 6	Date / Time

## Text Dynamic Field Configuration

Text dynamic field is used to store a single line string.

Text dynamic field settings:

- Default value: Optional.

This is the value to be shown by default in the edit screens (like New Phone Ticket or Ticket Compose).

- Show link: Optional.

If set, the field value will be converted into a clickable link for display screens (like ticket zoom or overviews).

For example, if "Show link" is set to "<http://www.otrs.com>", clicking on the filled value will make your browser to open the OTRS web page.

## Note

The use of `$LQData{"NameX"}` in the Set link value, where NameX is the name of the field will add the field value as part of the link reference.

The screenshot shows the 'Dynamic Fields - Ticket: Add Text Field' configuration dialog. At the top, there is a navigation bar with tabs: DASHBOARD, TICKETS (which is selected), STATISTICS, CUSTOMERS, ADMIN, and a search icon. Below the navigation bar, the main title is 'Dynamic Fields - Ticket: Add Text Field'. On the left, there is a sidebar with 'Actions' and a 'Go back to overview' button. The main content area is divided into two sections: 'General' and 'Text Field Settings'. In the 'General' section, there are fields for 'Name' (Field1), 'Label' (My Field 1), 'Validity' (valid), 'Field type' (Text), and 'Object type' (Ticket). There are also notes explaining what each field does. In the 'Text Field Settings' section, there is a 'Default value' field containing 'My Text' with a note explaining it is the default value for this field. There is also a 'Show link' field containing 'http://www.otrs.com' with a note explaining it is an optional HTTP link for the field value in Overviews and Zoom screens. At the bottom right, there are 'Save' and 'Cancel' buttons.

*Figure: Dynamic field Text configuration dialog.*

## Textarea Dynamic Field Configuration

Textarea dynamic field is used to store a multiple line string.

Textarea dynamic field settings:

- Number of rows: Optional, integer.

Used to define the height of the field in the edit screens (like New Phone Ticket or Ticket Compose).

- Number of cols: Optional, Integer.

This value is used to define the width of the field in the edit screens.

- Default value: Optional.

This is the value to be shown by default in the edit screens (it can be a multiple line text).

**Dynamic Fields - Ticket: Change Textarea Field**

**General**

- \* Name:  Validity:
- Must be unique and only accept alphabetic and numeric characters.
- \* Label:  Field type:
- This is the name to be shown on the screens where the field is active.
- \* Field order:  Object type:
- This is the order in which this field will be shown on the screens where it is active.

**Textarea Field Settings**

- Number of rows:  Specify the height (in lines) for this field in the edit mode.
- Number of cols:  Specify the width (in characters) for this field in the edit mode.
- Default value:  This is the default value for this field.

Figure: Dynamic field Textarea configuration dialog.

## Checkbox Dynamic Field Configuration

Checkbox dynamic field is used to store true or false value, represented by a checked or unchecked check box.

Checkbox dynamic field settings:

- Default value: Mandatory.

This is the value to be shown by default in the edit screens (like New Phone Ticket or Ticket Compose), the default value for this field is closed selection that can be Checked or Unchecked.

The screenshot shows the 'Dynamic Fields - Ticket: Add Checkbox Field' configuration dialog. At the top, there's a navigation bar with links for DASHBOARD, TICKETS (which is highlighted in orange), STATISTICS, CUSTOMERS, ADMIN, and a search icon. Below the navigation is a title 'Dynamic Fields - Ticket: Add Checkbox Field'. On the left, there's a sidebar with 'Actions' and a link to 'Go back to overview'. The main area is divided into sections: 'General' and 'Checkbox Field Settings'. In the 'General' section, there are fields for 'Name' (set to 'Field3'), 'Label' (set to 'My Field 3'), 'Field order' (set to '3'), 'Validity' (set to 'valid'), 'Field type' (set to 'Checkbox'), and 'Object type' (set to 'Ticket'). A note says 'Must be unique and only accept alphabetic and numeric characters.' Another note under 'Label' says 'This is the name to be shown on the screens where the field is active.' A note under 'Field order' says 'This is the order in which this field will be shown on the screens where it is active.' In the 'Checkbox Field Settings' section, there's a field for 'Default value' (set to 'Unchecked') with a note saying 'This is the default value for this field.' At the bottom right, there are 'Save' and 'Cancel' buttons.

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*Figure: Dynamic field Checkbox configuration dialog.*

## Dropdown Dynamic Field Configuration

Dropdown dynamic field is used to store a single value, from a closed list.

Dropdown dynamic field settings:

- Possible values: Mandatory.

List of values to choose. When add a new value is necessary to specify the Key (internal value) and the Value (display value).

- Default value: Optional.

This is the value to be show by default in the edit screens (like New Phone Ticket or Ticket Compose), the default value for this field is closed selection defined by the Possible values.

- Add empty value: Mandatory, (Yes / No).

If this option is activated an extra value is defined to show a "-" in the list of possible values, this special value is empty internally.

- Translatable values: Mandatory, (Yes / No).

This setting is used mark the possible values of this field to be translated. Only the display values are translated, internal values are not affected, the translation of the values needs to be manually added to the language files.

- Show link: Optional.

If set, the field value will be converted into a clickable HTP link for display screens (like Zoom or overviews).

For example, if Show link is set to "http://www.otsr.com", clicking on the filed value will make your browser to open the OTRS web page.

## Note

The use of \$LQData{"NameX"} in the Set link value, where NameX is the name of the field will add the field value as part of the link reference.

**General**

- \* Name: Field4
- \* Label: My Field 4
- \* Field order: 4
- Validity: valid
- Field type: Dropdown
- Object type: Ticket

**Dropdown Field Settings**

- Possible values:
  - \*Key: 1 \*Value: Option1
  - \*Key: 2 \*Value: Option2
  - \*Key: 3 \*Value: Option3
- Add value: +
- Default value: -
- Add empty value: No
- Translatable values: No
- Show link:

Figure: Dynamic field Dropdown configuration dialog.

## Multiselect Dynamic Field Configuration

Multiselect dynamic field is used to store a multiple values, from a closed list.

Multiselect dynamic field settings:

- Possible values: Mandatory.

List of values to choose. when add a new value is necessary to specify the Key (internal value) and the Value (display value).

- Default value: Optional.

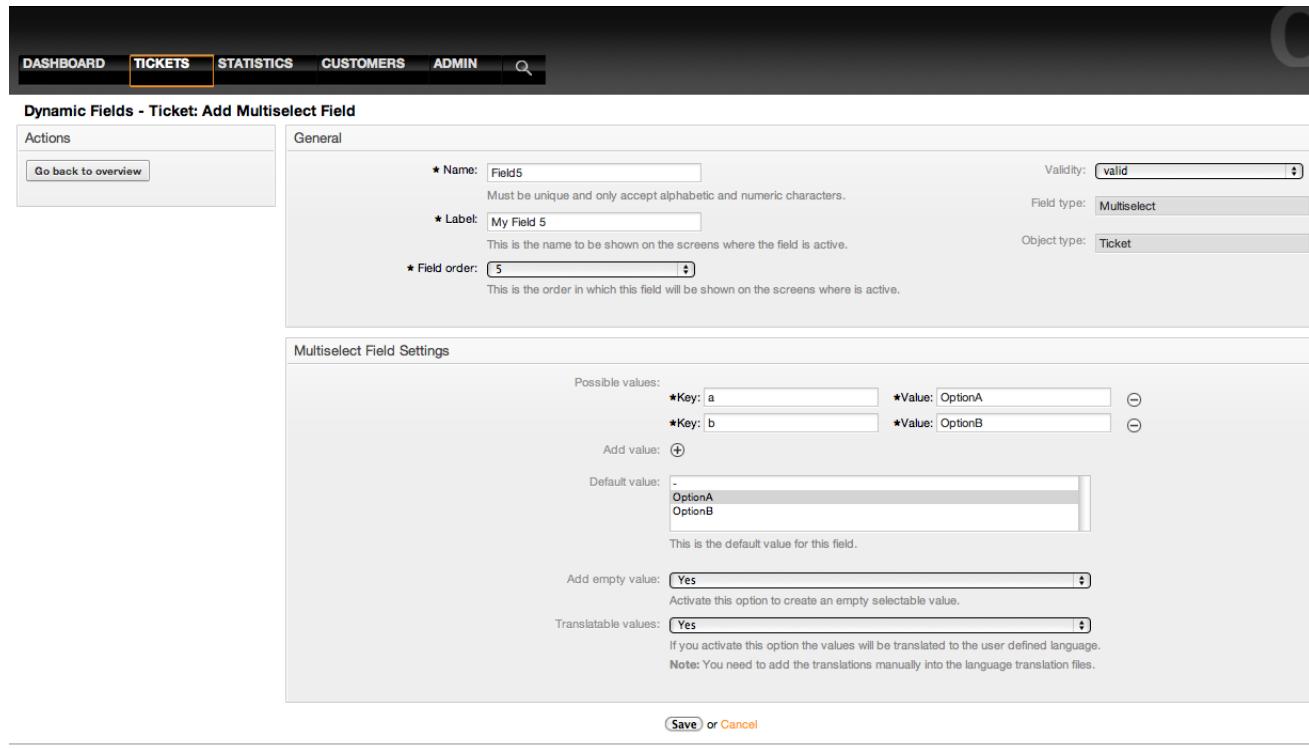
This is the value to be show by default in the edit screens (like New Phone Ticket or Ticket Compose), the default value for this field is closed selection defined by the Possible values.

- Add empty value: Mandatory, (Yes / No).

If this option is activated an extra value is defined to show a "-" in the list of possible values, this special value is empty internally.

- Translatable values: Mandatory, (Yes / No).

This setting is used mark the possible values of this field to be translated. Only the display values are translated, internal values are not affected, the translation of the values needs to be manually added to the language files.



The screenshot shows the 'Dynamic Fields - Ticket: Add Multiselect Field' configuration dialog. The top navigation bar includes links for DASHBOARD, TICKETS (which is selected), STATISTICS, CUSTOMERS, ADMIN, and a search icon. The main form has two tabs: 'General' and 'Multiselect Field Settings'. The 'General' tab contains fields for Name (Field5), Label (My Field 5), and Field order (5). Validation is set to 'valid', the field type is 'Multiselect', and the object type is 'Ticket'. The 'Multiselect Field Settings' tab shows possible values 'a' and 'b' with corresponding values 'OptionA' and 'OptionB'. It also includes sections for 'Add value', 'Default value' (with a dropdown containing 'OptionA' and 'OptionB'), 'Add empty value' (set to 'Yes'), and 'Translatable values' (set to 'Yes'). A note states: 'If you activate this option the values will be translated to the user defined language. Note: You need to add the translations manually into the language translation files.' At the bottom right are 'Save' and 'Cancel' buttons.

*Figure: Dynamic field Multiselect configuration dialog.*

## Date Dynamic Field Configuration

Date dynamic field is used to store a date value (Day, Month and Year).

Date dynamic field settings:

- Default date difference: Optional, Integer.

Number of seconds (positive or negative) between the current date and the selected date to be show by default in the edit screens (like New Phone Ticket or Ticket Compose).

- Define years period: Mandatory (Yes / No).

Used to set a defined number of years in past and future from current date in the year select of this field, If set to Yes the following options are available:

- Years in the past: Optional, Positive integer.

Define the number of years in past from current day to display in the year selection for this dined in edit screens.

- Years in the future: Optional, Positive integer.

Define the number of years in future from current day to display in the year selection for this dined in edit screens.

- Show link: Optional.

If set, the field value will be converted into a clickable HTP link for display screens (like Zoom or overviews).

For example, if Show link is set to "http://www.otsr.com", clicking on the filed value will make your browser to open the OTRS web page.

## Note

The use of \$LQData{"NameX"} in the Set link value, where NameX is the name of the field will add the field value as part of the link reference.

The screenshot shows the 'Dynamic Fields - Ticket: Add Date Field' configuration dialog in the OTRS interface. The 'TICKETS' tab is selected in the top navigation bar. The main form has two sections: 'General' and 'Date Field Settings'. In the 'General' section, the 'Name' field is set to 'Field6' and 'Label' to 'My Field 6'. The 'Field type' is 'Date' and 'Object type' is 'Ticket'. In the 'Date Field Settings' section, the 'Default date difference' is set to '3600'. Under 'Define years period', 'Yes' is selected. 'Years in the past' is set to '5' and 'Years in the future' is also set to '5'. There is a note about 'Show link' which says: 'Here you can specify an optional HTTP link for the field value in Overviews and Zoom screens. Example: http://some.example.com/handle?query=\$LQData["Field1"]'.

*Figure: Dynamic field Date configuration dialog.*

## Date / Time Dynamic Field Configuration

Date / Time dynamic field is used to store a date time value (Minute, Hour, Day, Month and Year).

Date / Time dynamic field settings:

- Default date difference: Optional, Integer.

Number of seconds (positive or negative) between the current date and the selected date to be show by default in the edit screens (like New Phone Ticket or Ticket Compose).

- Define years period: Mandatory (Yes / No).

Used to set a defined number of years in past and future from current date in the year select of this field, If set to Yes the following options are available:

- Years in the past: Optional, Positive integer.

Define the number of years in past from current day to display in the year selection for this dined in edit screens.

- Years in the future: Optional, Positive integer.

Define the number of years in future from current day to display in the year selection for this dined in edit screens.

- Show link: Optional.

If set, the field value will be converted into a clickable HTP link for display screens (like Zoom or overviews).

For example, if Show link is set to "http://www.otsr.com", clicking on the filed value will make your browser to open the OTRS web page.

## Note

The use of \$LQData{"NameX"} in the Set link value, where NameX is the name of the field will add the field value as part of the link reference.

## Dynamic Fields

The screenshot shows the 'Dynamic Fields - Ticket: Add Date / Time Field' configuration dialog. At the top, there is a navigation bar with tabs: DASHBOARD, TICKETS (which is selected), STATISTICS, CUSTOMERS, ADMIN, and a search icon. Below the navigation bar, the main title is 'Dynamic Fields - Ticket: Add Date / Time Field'. On the left, there is a sidebar titled 'Actions' with a 'Go back to overview' button. The main content area is divided into two sections: 'General' and 'Date / Time Field Settings'. In the 'General' section, there are fields for 'Name' (Field7), 'Label' (My Field 7), 'Validity' (valid), 'Field type' (Date / Time), and 'Object type' (Ticket). There are also notes explaining the requirements for the name and label. In the 'Date / Time Field Settings' section, there are fields for 'Default date difference' (0), 'Define years period' (No), and 'Show link' (an empty input field with a note about specifying an optional HTTP link). At the bottom right of the dialog are 'Save' and 'Cancel' buttons.

Figure: Dynamic field Date / Time configuration dialog.

## Editing a Dynamic Field

A filled dynamic field overview screen (with the previous examples) should look like:

NAME	LABEL	ORDER	TYPE	OBJECT
Field1	My Field 1	1	Text	Ticket
Field2	My Field 2	2	Textarea	Ticket
Field3	My Field 3	3	Checkbox	Ticket
Field4	My Field 4	4	Dropdown	Ticket
Field5	My Field 5	5	Multiselect	Ticket
Field6	My Field 6	6	Date	Ticket
Field7	My Field 7	7	Date / Time	Ticket

*Figure: Dynamic field overview screen filled with sample data.*

To change or edit a dynamic field you must have at least one field defined, select an already added field from the dynamic fields overview screen and update it's settings.

### Note

Not all the dynamic field settings can be changed, the Field type and Object type are fixed from the selection of the field and they can't be changed.

It is not recommended to change the field internal name, but the label can be changed at any time. If internal name is changed all "SysConfig" settings that has a reference to that particular field needs to be updated as well as user preferences (if defined).

## Showing a Dynamic Field on a Screen

To display a dynamic field on a particular screen there are two mandatory conditions:

1. The dynamic field must be valid.
2. The dynamic field must be set to 1 or 2 in the configuration of the screen.

Follow this steps to show a dynamic field in a screen

- Be sure that the dynamic field is set to valid, you can see the validity of the field from the dynamic field overview screen. Set to valid by editing the field if necessary.
- Open the "sysconfig" and select "Ticket" from the dropdown list in the Actions side bar located in the left part of the screen.

## Note

You can also search for "DynamicField" in the search box above or the "sysconfig" key directly if you already know it.

- Locate the setting sub-group for the screen that you are looking for and click on it. For example "Frontend::Agent::Ticket::ViewPhoneNew".
- Search for the setting that ends with "###DynamicField". For example "Ticket::Frontend::AgentTicketPhone###DynamicField".
- If the setting is empty or does not have the required dynamic field name, click on the "+" button to add a new entry. For example Key: Field1, Content: 1.  
If the setting already has the dynamic field name listed be sure that is set to "1" to display the field or to "2" to display it as mandatory.
- Save the configuration by clicking in the "Update" button and the bottom of the screen and navigate to the screen where you want the field to be displayed.

## Show Examples

The following are "sysconfig" configurations examples to show or hide dynamic fields on different screens.

### Example 22.1. Activate Field1 in New Phone Ticket Screen.

- *Group:* Ticket
- *Sub-group:* Frontend::Agent::Ticket::ViewPhoneNew
- *Setting:* Ticket::Frontend::AgentTicketPhone###DynamicField
- *Value:*

Key	Content
Field1	1

## Dynamic Fields

The screenshot shows a web-based ticket creation form. At the top, there are fields for 'Subject' (mandatory) and 'Text' (mandatory). Below these is a rich text editor toolbar. Further down are fields for 'Attachment' (with a 'Choose File' button), 'CustomerID', 'Next ticket state' (set to 'open'), 'Pending Date' (set to 02/16/2012 22:01), 'Priority' (set to '3 normal'), and a dynamic field 'My Field 1' containing the value 'My Text'. This 'My Field 1' input field is highlighted with a red rectangular border. At the bottom right is a 'Create' button.

Figure: Field1 in New Phone Ticket Screen.

### Example 22.2. Activate Field1 in New Phone Ticket Screen as mandatory.

- *Group:* Ticket
- *Sub-group:* Frontend::Agent::Ticket::ViewPhoneNew
- *Setting:* Ticket::Frontend::AgentTicketPhone###DynamicField
- *Value:*

Key	Content
Field1	2

The screenshot shows the 'New Phone Ticket' form in OTRS 3.1.x CVS. At the top, there are fields for 'Subject' (mandatory) and 'Text' (mandatory). Below these is a rich text editor toolbar. Further down are fields for 'Attachment', 'CustomerID', 'Next ticket state', 'Pending Date (for pending\* states)', 'Priority', and a custom field 'My Field 1'. The 'My Field 1' input field is highlighted with a red border, indicating it is a mandatory field. A 'Create' button is at the bottom right.

*Figure: Field1 in New Phone Ticket Screen as mandatory.*

### **Example 22.3. Activate several fields in New Phone Ticket Screen.**

- *Group:* Ticket
- *Sub-group:* Frontend::Agent::Ticket::ViewPhoneNew
- *Setting:* Ticket::Frontend::AgentTicketPhone###DynamicField
- *Value:*

Key	Content
Field1	1
Field2	1
Field3	1
Field4	1
Field5	1
Field6	1
Field7	1

The screenshot shows a web-based ticket creation form. At the top, there are fields for Attachment (with a 'Choose File' button and 'No file chosen' message), CustomerID (a text input field), Next ticket state (a dropdown menu set to 'open'), Pending Date (a date/time picker set to 02/16/2012 22:18), Priority (a dropdown menu set to '3 normal'), and a red box highlighting 'My Field 1' through 'My Field 7'. Below these are additional fields: My Field 3 (checkbox), My Field 4 (dropdown menu set to 'Option1'), My Field 5 (checkboxes for 'OptionA' and 'OptionB'), My Field 6 (date/time picker set to 02/15/2012 23:00), and My Field 7 (date/time picker set to 02/15/2012 22:18). A 'Create' button is at the bottom.

*Figure: Several fields in New Phone Ticket Screen as mandatory.*

#### **Example 22.4. Deactivate some fields in New Phone Ticket Screen.**

- *Group:* Ticket
- *Sub-group:* Frontend::Agent::Ticket::ViewPhoneNew
- *Setting:* Ticket::Frontend::AgentTicketPhone###DynamicField
- *Value:*

Key	Content
Field1	1
Field2	0
Field3	1
Field4	0
Field5	1
Field6	0
Field7	1

Attachment:  No file chosen

CustomerID:

Next ticket state:

Pending Date (for pending\* states):  /  /   -  :

Priority:

My Field 1:

My Field 3:

My Field 5:

My Field 7:   /  /   -  :

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Figure: Some deactivated fields in New Phone Ticket Screen as mandatory.

### Example 22.5. Activate Field1 in Ticket Zoom Screen.

- *Group:* Ticket
- *Sub-group:* Frontend::Agent::Ticket::ViewZoom
- *Setting:* Ticket::Frontend::AgentTicketZoom###DynamicField
- *Value:*

Key	Content
Field1	1

## Dynamic Fields

The screenshot shows the OTRS ticket zoom interface. At the top, there's a navigation bar with links for DASHBOARD, TICKETS (which is highlighted in orange), STATISTICS, CUSTOMERS, and ADMIN. A search bar is also present. Below the navigation, the ticket details are shown: Ticket#2012021510000016 – Testing Ticket. It indicates 1 Article(s) and provides links for Back, Lock, History, Print, Priority, Free Fields, Link, Owner, Responsible, Customer, Note, Merge, Pending, Watch, Close, and Change Queue. The ticket was created 4 minutes ago on 02/15/2012 at 22:30 by My User. The ticket table shows one row: NO. 1, TYPE customer - phone, FROM test@test.com, SUBJECT Testing Ticket, and CREATED 02/15/2012 22:30. Below the table, an email message is displayed with the subject #1 – Testing Ticket. The message content is: From: test@test.com, To: Junk, Subject: Testing Ticket. The body of the message contains the text "This is a test". On the right side of the screen, there's a sidebar with various links like Ticket Information, Log, Priorities, Queue, Customer Overview, Response, and more. At the bottom left, it says "Powered by OTRS 3.1.x CVS".

Figure: Field1 in Ticket Zoom Screen.

### Example 22.6. Activate Field1 in Ticket Overview Small Screens.

- *Group:* Ticket
- *Sub-group:* Frontend::Agent::TicketOverview
- *Setting:* Ticket::Frontend::OverviewSmall###DynamicField
- *Value:*

Key	Content
Field1	1

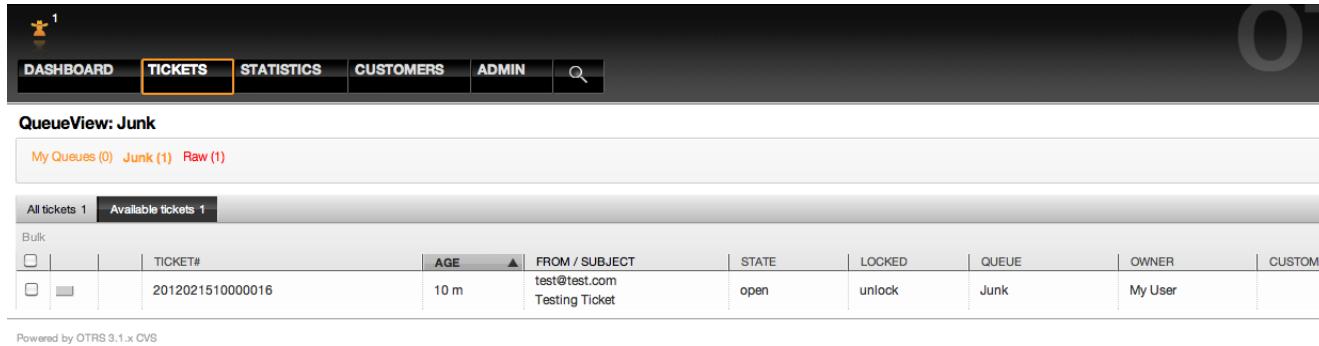


Figure: Field1 in Ticket Overview Small Screen.

This setting affects: Escalation View, Locked View, Queue View, Responsible View, Status View and Watch View screens.

## Setting a Default Value by a Ticket Event Module

A ticket event (e.g. TicketCreate) can trigger a value set for a certain field, if the field does not have a value yet.

### Note

By using this method this default value, is not seen in the edit screen (e.g. New Phone Ticket) since the value is set after the creation of the ticket.

To activate this feature is necessary to enable the following setting: "Ticket::EventModulePost###TicketDynamicFieldDefault".

### Example 22.7. Activate Field1 in TicketCreate event.

- *Group:* Ticket
- *Sub-group:* Core::TicketDynamicFieldDefault
- *Setting:* Ticket::TicketDynamicFieldDefault###Element1

### Note

This configuration can be set in any of the 16 Ticket::TicketDynamicFieldDefault###Element settings.

If more than 16 fields needs to be set up a custom XML file must be places in \$OTRS\_HOME/Kernel/Config/files directory to extend this feature.

- *Value:*

Key	Content
Event	TicketCreate
Name	Field1
Value	a new value

## Set a Default Value by User Preferences

The dynamic field default value can be overwritten with a user defined value stored in the user preferences.

Using this method, the default value of the field will be shown on any screen where the field is activated (if the field does not have already a different value).

The "sysconfig" setting "PreferencesGroups###DynamicField" located in the "Frontend::Agent::Preferences" Sub-group. This setting is an example of how to create an entry in the User Preferences screen to set an exclusive dynamic field default value for the selected user. The limitation of this setting is that it only admits one dynamic field. if two or more fields will use this feature is necessary to create a custom XML configuration file to add more settings similar to this one.

### Note

Remember, if more settings are added in a new XML each setting name needs to be unique in the system and different than "PreferencesGroups###DynamicField". for example: PreferencesGroups###101-DynamicField-Field1, PreferencesGroups###102-DynamicField-Field2, PreferencesGroups###My-Field1, PreferencesGroups###My-Field2, etc.

### Example 22.8. Activate Field1 in the User preferences.

- *Group:* Ticket
- *Sub-group:* Frontend::Agent::Preferences
- *Setting:* PreferencesGroups###101-DynamicField-Field1
- *Value:*

Key	Content
Event	TicketCreate
Active	1
Block	Input
Column	Other Settings
Data:	\$Env{"UserDynamicField_Field1"}

Key	Content
Key:	My Field 1
Label:	Default value for: My Field 1
Module:	Kernel::Output::HTML::PreferencesGeneric
PrefKey:	UserDynamicField_Field1
Prio:	7000

The screenshot shows the 'Edit your preferences' page in OTRS. The left sidebar includes links for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, ADMIN, and a search bar. The main content area is divided into several sections:

- User Profile**: Includes fields for Change password (Current password, New password, Verify password) and Language (Frontend language: English (United States)).
- Email Settings**: Contains sections for New ticket notification, Ticket follow up notification, Ticket lock timeout notification, Ticket move notification, and Ticket watch notification.
- Other Settings**: Includes a 'My Queues' section listing Junk, Misc, Postmaster, and Raw, and an 'Overview Refresh Time' section.
- Screen after new ticket**: Shows a configuration for 'Default value for: My Field 1'.

In the 'Email Settings' section, there is a red box highlighting the 'Default value for: My Field 1' field, which is set to 'My Field 1'. This corresponds to the data shown in the table above.

Figure: Field1 in User preferences screen.

## Updating from OTRS 3.0

During the update from OTRS 3.0 there is a special step that is very important and must not be skipped, there is a script file named "DBUpdate-to-3.1.pl" under the "\$OTRS\_HOME/scripts" that must be called at the precise time in the update procedure (please refer to UPGRADING file for more details).

The script mentioned above is in charge to get all the "Free fields" configurations and creates their dynamic field substitute, it also gathers each "Free field" data from every ticket and article and move it to the dynamic fields format. It also read the screen configuration for "Free fields" and port it to the dynamic fields format.

### Note

All the "Free fields" configurations are keep in the system but they are not used anymore, they are placed under the group "Z\_DDeprecated", and the might be removed in further versions of OTRS.

## Dynamic Fields

While the updating script tries to be very precise migrating the screen configurations it is always good to do a manual fine tuning. Please note that "Free fields" TicketFreeKey[1-16] and TicketFreeText[1-16] came always in pair in OTRS 3.0 systems (and before). This is not longer necessary it could be that the TicketFreeKey field is not necessary anymore for a particular TicketFreeText field.

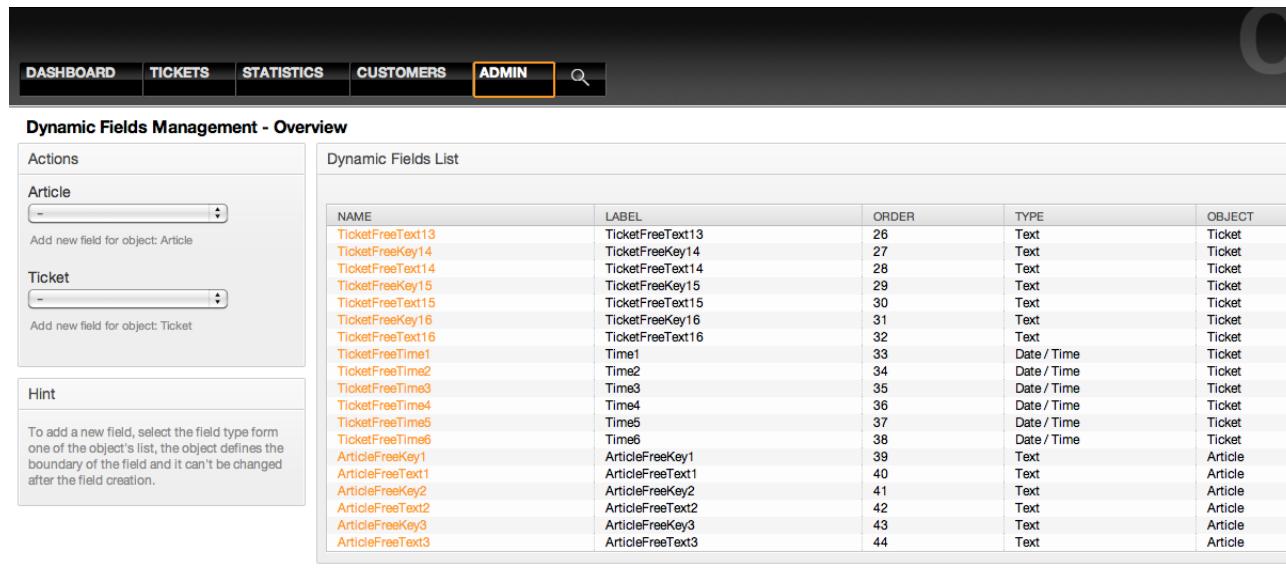
The dynamic fields overview screen from clean OTRS 3.0.x updated to 3.1.x should look like:

NAME	LABEL	ORDER	TYPE	OBJECT
TicketFreeKey1	TicketFreeKey1	1	Text	Ticket
TicketFreeText1	TicketFreeText1	2	Text	Ticket
TicketFreeKey2	TicketFreeKey2	3	Dropdown	Ticket
TicketFreeText2	Product	4	Dropdown	Ticket
TicketFreeKey3	TicketFreeKey3	5	Dropdown	Ticket
TicketFreeText3	TicketFreeText3	6	Text	Ticket
TicketFreeKey4	TicketFreeKey4	7	Text	Ticket
TicketFreeText4	TicketFreeText4	8	Dropdown	Ticket
TicketFreeKey5	TicketFreeKey5	9	Text	Ticket
TicketFreeText5	TicketFreeText5	10	Text	Ticket
TicketFreeKey6	TicketFreeKey6	11	Text	Ticket
TicketFreeText6	TicketFreeText6	12	Text	Ticket
TicketFreeKey7	TicketFreeKey7	13	Text	Ticket
TicketFreeText7	TicketFreeText7	14	Text	Ticket
TicketFreeKey8	TicketFreeKey8	15	Text	Ticket
TicketFreeText8	TicketFreeText8	16	Text	Ticket
TicketFreeKey9	TicketFreeKey9	17	Text	Ticket
TicketFreeText9	TicketFreeText9	18	Text	Ticket
TicketFreeKey10	TicketFreeKey10	19	Text	Ticket
TicketFreeText10	TicketFreeText10	20	Text	Ticket
TicketFreeKey11	TicketFreeKey11	21	Text	Ticket
TicketFreeText11	TicketFreeText11	22	Text	Ticket
TicketFreeKey12	TicketFreeKey12	23	Text	Ticket
TicketFreeText12	TicketFreeText12	24	Text	Ticket
TicketFreeKey13	TicketFreeKey13	25	Text	Ticket

Figure: Updated dynamic field overview screen page2.

## Dynamic Fields

---



**Dynamic Fields Management - Overview**

NAME	LABEL	ORDER	TYPE	OBJECT
TicketFreeText13	TicketFreeText13	26	Text	Ticket
TicketFreeKey14	TicketFreeKey14	27	Text	Ticket
TicketFreeText14	TicketFreeText14	28	Text	Ticket
TicketFreeKey15	TicketFreeKey15	29	Text	Ticket
TicketFreeText15	TicketFreeText15	30	Text	Ticket
TicketFreeKey16	TicketFreeKey16	31	Text	Ticket
TicketFreeText16	TicketFreeText16	32	Text	Ticket
TicketFreeTime1	Time1	33	Date / Time	Ticket
TicketFreeTime2	Time2	34	Date / Time	Ticket
TicketFreeTime3	Time3	35	Date / Time	Ticket
TicketFreeTime4	Time4	36	Date / Time	Ticket
TicketFreeTime5	Time5	37	Date / Time	Ticket
TicketFreeTime6	Time6	38	Date / Time	Ticket
ArticleFreeKey1	ArticleFreeKey1	39	Text	Article
ArticleFreeText1	ArticleFreeText1	40	Text	Article
ArticleFreeKey2	ArticleFreeKey2	41	Text	Article
ArticleFreeText2	ArticleFreeText2	42	Text	Article
ArticleFreeKey3	ArticleFreeKey3	43	Text	Article
ArticleFreeText3	ArticleFreeText3	44	Text	Article

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*Figure: Updated dynamic field overview screen page2.*

Please note that the new dynamic field named "TicketFreeText2" has the label "Product", this is because the default configuration from this "Free field" in OTRS 3.0.x specifies that "TicketFreeKey2" has a fixed value of "Product". in this case the dynamic field "TicketFreeKey2" is not needed anymore and it can be manually set to invalid.

It might me also a very good idea to set the label value of each valid migrated field to a text that describes better the use of the field in the system.

---

# **Chapter 23. Additional applications**

You can install additional application packages to extend the functionality of the OTRS framework. This can be done via the package manager from the Admin page, which downloads the applications from an online repository and manages package dependencies. It is also possible to install packages from local files.

## **FAQ**

The FAQ is the Knowledge Base component. It supports editing and viewing of FAQ articles. Articles can be viewed and restricted to agents, customer users or anonymous users. They can also be structured in groups, and be in different languages.

---

# Chapter 24. Performance Tuning

Presented below is a list of performance enhancing techniques for your OTRS installation, covering configuration, coding, memory use and more.

## OTRS

There are several options to improve OTRS performance.

### TicketIndexModule

There are two backend modules for the ticket index:

- Using Kernel::System::Ticket::IndexAccelerator::RuntimeDB (default), generate each queue view on the fly from the ticket table. You will not have performance trouble until you have about 60,000 open tickets in your system.
- Kernel::System::Ticket::IndexAccelerator::StaticDB, the most powerful module, should be used when you have above 80,000 open tickets. It uses an extra ticket\_index table, which works like a view. Use `bin/otrs.RebuildTicketIndex.pl` for generating an initial index build after switching backends.

You can change the IndexAccelerator via SysConfig.

### TicketStorageModule

There are two different backend modules for the ticket/article storage:

- Configure Kernel::System::Ticket::ArticleStorageDB (default) to store attachments, etc. in the database. Note: Don't use it with large set ups.

Pro: If your webserver user isn't the 'otrs' user, use this module to avoid file permission problems.

Con: It is not advisable to store attachments in your database. Take care that your database is able to store large objects. E.g. Configure MySQL with "set-variable = max\_allowed\_packet=8M" to store 8 MB objects (the default is 2M).

- Configure Kernel::System::Ticket::ArticleStorageFS to store attachments etc. on the local file system. Note: Recommended for large setups.

Pro: It is fast!

Con: Your web server user should be the 'otrs' user. Also, if you have multiple front-end servers, you should make sure the filesystem is shared between the servers. So place it on an NFS share or preferably a SAN or similar solution.

Note: you can switch from one back-end to the other on the fly. You can switch the backend in the SysConfig, and then run the command line utility `otrs.ArticleStorageSwitch.pl` to put the articles from the database onto the filesystem or the other way around. You can use the `-s` and `-d` options to specify the source and destination back-ends. Please note that the whole

process can take considerable time to run, depending on the number of articles you have and the available CPU power and/or network capacity.

```
shell> bin/otrs.ArticleStorageSwitch.pl -s ArticleStorageDB -d ArticleStorageFS
```

*Script: Switching storage back-ends from database to filesystem.*

## Archiving Tickets

As OTRS can be used as an audit-proof system, deleting closed tickets may not be a good idea. Therefore we implemented a feature that allows you to archive tickets.

Tickets that match certain criteria can be marked as "archived". These tickets are not accessed if you do a regular ticket search or run a Generic Agent job. The system itself does not have to deal with a huge amount of tickets any longer as only the "latest" tickets are taken into consideration when using OTRS. This can mean a huge performance gain on large systems.

To use the archive feature simply follow these steps:

1. Activate the archive system in SysConfig

In the Admin page, go to SysConfig and select the group `Ticket`. In `Core::Ticket` you find the option `Ticket::ArchiveSystem` which is set to "no" by default. Change this setting to "yes" and save this change.

2. Define a GenericAgent job

On the Admin page, select GenericAgent and add a new job there.

- a. Job Settings

Provide a name for the archiving job, and select proper options to schedule this job.

- b. Ticket Filter

The ticket filter is searches for tickets that match the selected criteria. It might be a good idea to only archive those tickets in a closed state that have been closed a few months before.

- c. Ticket Action

In this section, set the field labeled "Archive selected tickets" to "archive tickets".

- d. Save the job

At the end of the page you will find an option to save the job.

- e. Affected tickets

The system will display all tickets which will be archived when executing the Generic Agent job.

3. Ticket Search

When you search for tickets, the system default is to search tickets which are not archived. If you want to search through archived tickets also, simply add "archive search" while defining search criteria.

# Database

DB issues vary by the database being used. Study the documentation for your database or check with your database administrator.

## MySQL

If you use the MySQL table type MyISAM (which is the default), and have deleted a large part of a table or if you have made many changes to a table with variable-length rows (tables that have VARCHAR, BLOB or TEXT columns), you need to defragment the datafile (tables) with the "optimize" command.

You should try this if the mysqld daemon needs a lot of your CPU time. Optimize the tables - ticket, ticket\_history and article (see Script below).

```
shell$ mysql -u user -p database
mysql$ optimize table ticket;
mysql$ optimize table ticket_history;
mysql$ optimize table article;
```

*Script: Optimizing data base tables.*

## PostgreSQL

PostgreSQL is best tuned by modifying the postgresql.conf file in your PostgreSQL data directory. For advice on how to do this, see these articles:

- <http://www.revsy.com/writings/postgresql-performance.html> [http://www.revsy.com/writings/postgresql-performance.html]
- <http://varlena.com/GeneralBits/Tidbits/perf.html> [http://varlena.com/GeneralBits/Tidbits/perf.html]
- [http://varlena.com/GeneralBits/Tidbits/annotated\\_conf\\_e.html](http://varlena.com/GeneralBits/Tidbits/annotated_conf_e.html) [http://varlena.com/GeneralBits/Tidbits/annotated\_conf\_e.html]

If performance is still not satisfactory, we suggest that you join the PostgreSQL Performance mailing list ( <http://www.postgresql.org/community/lists/> ), and ask questions there. The folks on the PostgreSQL list are very friendly and can probably help.

## Webserver

Of course you should use mod\_perl 2.0 ( <http://perl.apache.org/> ). It's much faster (~ \* 100) than pure cgi. But it needs more RAM.

## Pre-established database connections

You can have the database connections pre-established on startup of the web server. This saves time (see README.webserver).

## Preloaded modules - startup.pl

Use the startup script `scripts/apache2-perl-startup.pl` for preloaded/precompiled Perl modules on your mod\_perl webserver to be faster, with a smaller memory footprint (see `README.webserver`).

## Reload Perl modules when updated on disk

By default Apache::Reload is used in `scripts/apache2-httpd.include.conf`. Disable it and you will get 8% more speed. But remember to restart the web server if you install any modules via the OTRS Package Manager, or any values in your SysConfig or in Kernel/Config.pm. Important: this would also mean you can't use the OTRS Package Manager via the web interface, you need to use the command line variant `-bin/otrs.PackageManager.pl`.

## Choosing the Right Strategy

If you have a larger installation, say over 1,000 new tickets per day and over 40 agents, it is a good idea to read the chapters on Performance of the mod\_perl User's Guide (<http://perl.apache.org/docs/2.0/user/index.html>).

## mod\_gzip/mod\_deflate

If your bandwidth is small, use mod\_deflate for Apache2. If you have an html page with 45k, mod\_gzip/mod\_deflate compresses it to about 7k. The drawback is that this increases the load on the server side.

---

# Chapter 25. Backing up the system

This chapter describes the backup and restore of the OTRS data.

## Backup

There are two types of data to backup: application files (e.g. the files in `/opt/otrs`), and the data stored in the database.

To simplify backups, the script `scripts/backup.pl` is included with every OTRS installation. It can be run to backup all important data (see Script below).

```
linux:/opt/otrs# cd scripts/
linux:/opt/otrs/scripts# ./backup.pl --help
backup.pl <Revision 1.1> - backup script
Copyright (c) 2001-2005 Martin Edenhofer <martin@otrs.org>
usage: backup.pl -d /data_backup/ [-c bzip2|gzip] [-r 30] [-t
nofullbackup]
linux:/opt/otrs/scripts#
```

*Script: Getting help about the OTRS backup mechanism.*

Execute the command specified in the script below to create a backup:

```
linux:/opt/otrs/scripts# ./backup.pl -d /backup/
Backup /backup//2010-09-07_14-28/Config.tar.gz ... done
Backup /backup//2010-09-07_14-28/Application.tar.gz ... done
Dump MySQL rdbms ... done
Compress SQL-file... done
linux:/opt/otrs/scripts#
```

*Script: Creating a backup.*

All data was stored in the directory `/backup/2010-09-07_14-28/` (see Script below). Additionally, the data was saved into a `.tar.gz` file.

```
linux:/opt/otrs/scripts# ls /backup/2010-09-07_14-28/
Application.tar.gz Config.tar.gz DatabaseBackup.sql.gz
linux:/opt/otrs/scripts#
```

*Script: Checking the backup files.*

## Restore

To restore a backup, the saved application data has to be written back into the installation directory, e.g. `/opt/otrs`. Also the database has to be restored.

A script `scripts/restore.pl` (see Script below), which simplifies the restore process, is shipped with every OTRS installation. It supports MySQL and PostgreSQL.

```
linux:/opt/otrs/scripts# ./restore.pl --help
restore.pl <Revision 1.1> - restore script
Copyright (c) 2001-2005 Martin Edenhofer <martin@otrs.org>
usage: restore.pl -b /data_backup/<TIME>/ -d /opt/otrs/
linux:/opt/otrs/scripts#
```

*Script: Getting help about the restore mechanism.*

Data that is stored, for example, in the directory `/backup/2010-09-07_14-28/`, can be restored with the command specified in the script below, assuming the OTRS installation is at `/opt/otrs`.

```
linux:/opt/otrs/scripts# ./restore.pl -b /backup/2010-09-07_14-28 -d /
opt/otrs/
Restore /backup/2010-09-07_14-28//Config.tar.gz ...
Restore /backup/2010-09-07_14-28//Application.tar.gz ...
create MySQL
decompresses SQL-file ...
cat SQL-file into MySQL database
compress SQL-file...
linux:/opt/otrs/scripts#
```

*Script: Restoring OTRS data.*

---

# Appendix A. Additional Resources

We try to support you with the very latest information about OTRS. We also give you a good way to provide us with your feedback.

## Homepage OTRS.org

You can find our project homepage at <http://www.otrs.org/> (see Figure A-1 below).

*Figure: OTRS Homepage.*

## Mailing lists

The Table A-1 shows you our different community mailing lists.

**Table A.1. Mailinglists**

Name	Description	Homepage
announce@otrs.org	Low traffic list, in English, for announcements of new OTRS releases and security issues.	<a href="http://lists.otrs.org/cgi-bin/listinfo/announce">http://lists.otrs.org/cgi-bin/listinfo/announce</a> [ <a href="http://lists.otrs.org/cgi-bin/listinfo/announce">http://lists.otrs.org/cgi-bin/listinfo/announce</a> ]
otrs@otrs.org	Medium to high traffic list, in English, where you can find all sorts of questions on, and support for the product.	<a href="http://lists.otrs.org/cgi-bin/listinfo/otrs">http://lists.otrs.org/cgi-bin/listinfo/otrs</a> [ <a href="http://lists.otrs.org/cgi-bin/listinfo/otrs">http://lists.otrs.org/cgi-bin/listinfo/otrs</a> ]
otrs-de@otrs.org	Medium to high traffic list, in German, where you can find all sorts of questions on, and support for, the product.	<a href="http://lists.otrs.org/cgi-bin/listinfo/otrs-de">http://lists.otrs.org/cgi-bin/listinfo/otrs-de</a> [ <a href="http://lists.otrs.org/cgi-bin/listinfo/otrs-de">http://lists.otrs.org/cgi-bin/listinfo/otrs-de</a> ]
dev@otrs.org	Medium traffic list, in English, where the OTRS developers discuss various design and implementation issues.	<a href="http://lists.otrs.org/cgi-bin/listinfo/dev">http://lists.otrs.org/cgi-bin/listinfo/dev</a> [ <a href="http://lists.otrs.org/cgi-bin/listinfo/dev">http://lists.otrs.org/cgi-bin/listinfo/dev</a> ]
doc-de@otrs.org	Low traffic list, in German, with all sorts of questions on the documentation of the product.	<a href="http://lists.otrs.org/cgi-bin/listinfo/doc-de">http://lists.otrs.org/cgi-bin/listinfo/doc-de</a> [ <a href="http://lists.otrs.org/cgi-bin/listinfo/doc-de">http://lists.otrs.org/cgi-bin/listinfo/doc-de</a> ]
i18n@otrs.org	Low traffic list, in English, for internationalization and localization questions. If you are or want to become a translator of the OTRS project or have any problems with one of our applications in an international environment, this is where you should connect.	<a href="http://lists.otrs.org/cgi-bin/listinfo/i18n">http://lists.otrs.org/cgi-bin/listinfo/i18n</a> [ <a href="http://lists.otrs.org/cgi-bin/listinfo/i18n">http://lists.otrs.org/cgi-bin/listinfo/i18n</a> ]

Name	Description	Homepage
cvs-log@otrs.org	Very high traffic list of CVS commit notifications.	<a href="http://lists.otrs.org/cgi-bin/listinfo/cvs-log">http://lists.otrs.org/cgi-bin/listinfo/cvs-log</a> [http://lists.otrs.org/cgi-bin/listinfo/cvs-log]

To subscribe to any of this lists, visit the following link: <http://lists.otrs.org/>.

## Bug tracking

To submit bugs visit <http://bugs.otrs.org/> (see Figure below). Please take note of the difference between a bug and a configuration issue. Configuration issues are problems that you encounter when setting a system, or general questions on the use of OTRS. Bug reports should only be used for issues with the source code of OTRS itself, or to file enhancements for OTRS. All your bug reports and enhancement requests are very welcome in the bug tracker.

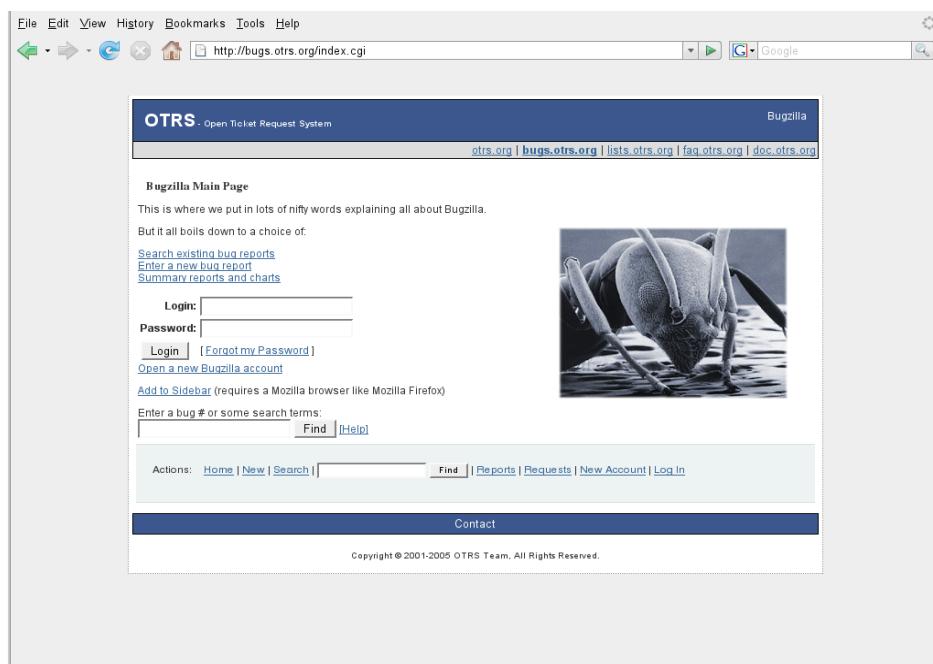


Figure: Bug tracker.

For configuration issues, you should either use the *commercial support, available from OTRS.com* [<http://www.otrs.com/en/support/>], or the public mailing lists.

You help us improve the product by reporting bugs. We appreciate your input!

## Commercial Support

For services (support, consulting, development, and training) you can contact the company behind OTRS, OTRS AG. They have offices in Germany, USA, Mexico, the Netherlands and other countries. Look at their website for contact information: <http://www.otrs.com/en/corporate-navigation/contact/>

---

# Appendix B. Configuration Options Reference

## Framework

### Core

#### SecureMode

Description	Value
Description:	Disables the web installer ( <a href="http://yourhost.example.com/otrs/installer.pl">http://yourhost.example.com/otrs/installer.pl</a> ), to prevent the system from being hijacked. If set to "No", the system can be reinstalled and the current basic configuration will be used to pre-populate the questions within the installer script. If not active, it also disables the GenericAgent, PackageManager and SQL Box (to avoid the use of destructive queries, such as DROP DATABASE, and also to steal user passwords).
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SecureMode' } = '0';</code>

#### Frontend::DebugMode

Description	Value
Description:	Enables or disable the debug mode over frontend interface.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'Frontend::DebugMode' } = '0';</code>

#### ConfigLevel

Description	Value
Description:	Sets the configuration level of the administrator. Depending on the config level, some sysconfig options will be not shown. The config levels are in ascending order: Expert, Advanced, Beginner. The higher the config level is (e.g. Beginner is the highest), the less likely is it that the user can accidentally configure the system in a way that it is not usable any more.

Description	Value
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'ConfigLevel' } = '100';</code>

## ProductName

Description	Value
Description:	Defines the name of the application, shown in the web interface, tabs and title bar of the web browser.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'ProductName' } = 'OTRS';</code>

## SystemID

Description	Value
Description:	Defines the system identifier. Every ticket number and http session string contain this ID. This ensures that only tickets which belong to your system will be processed as follow-ups (useful when communicating between two instances of OTRS).
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SystemID' } = '10';</code>

## FQDN

Description	Value
Description:	Defines the fully qualified domain name of the system. This setting is used as a variable, OTRS_CONFIG_FQDN which is found in all forms of messaging used by the application, to build links to the tickets within your system.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1

Description	Value
Config-Setting:	<code>\$Self-&gt;{ 'FQDN' } = 'yourhost.example.com';</code>

## HttpType

Description	Value
Description:	Defines the type of protocol, used by the web server, to serve the application. If https protocol will be used instead of plain http, it must be specified here. Since this has no affect on the web server's settings or behavior, it will not change the method of access to the application and, if it is wrong, it will not prevent you from logging into the application. This setting is used as a variable, OTRS_CONFIG_HttpType which is found in all forms of messaging used by the application, to build links to the tickets within your system.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'HttpType' } = 'http';</code>

## ScriptAlias

Description	Value
Description:	Sets the prefix to the scripts folder on the server, as configured on the web server. This setting is used as a variable, OTRS_CONFIG_ScriptAlias which is found in all forms of messaging used by the application, to build links to the tickets within the system.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'ScriptAlias' } = 'otrs/';</code>

## AdminEmail

Description	Value
Description:	Defines the system administrator's email address. It will be displayed in the error screens of the application.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{ 'AdminEmail' } = 'admin@example.com';</code>

## Organization

Description	Value
Description:	Company name for the customer web interface. Will also be included in emails as an X-Header.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Organization' } = 'Example Company';</code>

## DefaultLanguage

Description	Value
Description:	Defines the default front-end language. All the possible values are determined by the available language files on the system (see the next setting).
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'DefaultLanguage' } = 'en';</code>

## DefaultUsedLanguages

Description	Value
Description:	Defines all the languages that are available to the application. The Key/Content pair links the front-end display name to the appropriate language PM file. The "Key" value should be the base-name of the PM file (i.e. de.pm is the file, then de is the "Key" value). The "Content" value should be the display name for the front-end. Specify any own-defined language here (see the developer documentation <a href="http://doc.otsr.org/">http://doc.otsr.org/</a> for more information). Please remember to use the HTML equivalents for non-ASCII characters (i.e. for the German oe = o umlaut, it is necessary to use the &ouml; symbol).
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'DefaultUsedLanguages' } = {     'ar_SA' =&gt; 'Arabic (Saudi Arabia)',</code>

Description	Value
	<pre>'bg' =&gt; 'Bulgarian (&amp;#x0411;&amp;#x044a;&amp;#x043b;&amp;#x0433;&amp;#x0430;&amp;#x0440;&amp;#x0441;&amp;#x043 'ca' =&gt; 'Catal&amp;agrave;', 'cs' =&gt; 'Czech (&amp;#x010c;esky)', 'da' =&gt; 'Dansk', 'de' =&gt; 'Deutsch', 'el' =&gt; 'Greek (&amp;#x0395;&amp;#x03bb;&amp;#x03bb;&amp;#x03b7;&amp;#x03bd;&amp;#x03b9;&amp;#x03ba;&amp;#x03a 'en' =&gt; 'English (United States)', 'en_CA' =&gt; 'English (Canada)', 'en_GB' =&gt; 'English (United Kingdom)', 'es' =&gt; 'Espa&amp;ntilde;ol', 'es_MX' =&gt; 'Espa&amp;ntilde;ol (M&amp;eacute;xico)', 'et' =&gt; 'Eesti', 'fa' =&gt; 'Persian (&amp;#x0641;&amp;#x0627;&amp;#x0631;&amp;#x0633;&amp;#x0649;) ', 'fi' =&gt; 'Suomi', 'fr' =&gt; 'Fran&amp;ccedil;ais', 'hi' =&gt; 'Hindi', 'hr' =&gt; 'Hrvatski', 'hu' =&gt; 'Magyar', 'it' =&gt; 'Italiano', 'ja' =&gt; 'Japanese (&amp;#x65e5;&amp;#x672c;&amp;#x8a9e)', 'lt' =&gt; "Lietuvi\x{173} kalba", 'lv' =&gt; 'Latvijas', 'nb_NO' =&gt; 'Norsk bokm&amp;aring;l', 'nl' =&gt; 'Nederlands', 'pl' =&gt; 'Polski', 'pt' =&gt; 'Portugu&amp;ecirc;s', 'pt_BR' =&gt; 'Portugu&amp;ecirc;s Brasileiro', 'ru' =&gt; 'Russian (&amp;#x0420;&amp;#x0443;&amp;#x0441;&amp;#x0441;&amp;#x043a;&amp;#x0438;&amp;#x0439;) ', 'sk_SK' =&gt; 'Slovak (Sloven&amp;#x010d;ina)', 'sl' =&gt; "Slovenian (Sloven\x{161}\x{10d}ina)", 'sr_Cyrl' =&gt; "Serbian Cyrillic (\x{441}\x{440}\x{43f}\x{441}\x{43a}\x{438})", 'sr_Latn' =&gt; 'Serbian Latin (Srpski)', 'sv' =&gt; 'Svenska', 'tr' =&gt; 'T&amp;uuml;rk&amp;ccedil;e', 'uk' =&gt; 'Ukrainian (&amp;#x0423;&amp;#x043a;&amp;#x0440;&amp;#x0430;&amp;#x0457;&amp;#x043d;&amp;#x0441;&amp;#x044 'vi_VN' =&gt; 'Vietnam (Vi&amp;#x0246;t Nam)', 'zh_CN' =&gt; 'Chinese (Sim.) (&amp;#x7b80;&amp;#x4f53;&amp;#x4e2d;&amp;#x6587;) ', 'zh_TW' =&gt; 'Chinese (Tradi.) (&amp;#x6b63;&amp;#x9ad4;&amp;#x4e2d;&amp;#x6587;) ' };</pre>

## DefaultTheme

Description	Value
Description:	Defines the default front-end (HTML) theme to be used by the agents and customers. The default themes are Standard and Lite. If you like, you can add your own theme. Please refer the administrator manual located at <a href="http://doc.otsr.org/">http://doc.otsr.org/</a> .
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'DefaultTheme' } = 'Standard';</pre>

## DefaultTheme::HostBased

Description	Value
Description:	It is possible to configure different themes, for example to distinguish between agents and customers, to be used on a per-domain basis within the application. Using a regular expression (regex), you can configure a Key/Content pair to match a domain. The value in "Key" should match the domain, and the value in "Content" should be a valid theme on your system. Please see the example entries for the proper form of the regex.
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DefaultTheme::HostBased' } = {     'host1\\\\.example\\\\.com' =&gt; 'SomeTheme1',     'host2\\\\.example\\\\.com' =&gt; 'SomeTheme2' };</pre>

## CheckMXRecord

Description	Value
Description:	Makes the application check the MX record of email addresses before sending an email or submitting a telephone or email ticket.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CheckMXRecord' } = '1';</pre>

## CheckMXRecord::Nameserver

Description	Value
Description:	Defines the address of a dedicated DNS server, if necessary, for the "CheckMXRecord" look-ups.
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CheckMXRecord::Nameserver' } = 'ns.example.com';</pre>

## CheckEmailAddresses

Description	Value
Description:	Makes the application check the syntax of email addresses.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CheckEmailAddresses' } = '1';</pre>

## CheckEmailValidAddress

Description	Value
Description:	Defines a regular expression that excludes some addresses from the syntax check (if "CheckEmailAddresses" is set to "Yes"). Please enter a regex in this field for email addresses, that aren't syntactically valid, but are necessary for the system (i.e. "root@localhost").
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CheckEmailValidAddress' } = '^ (root@localhost   admin@localhost) \$';</pre>

## CheckEmailInvalidAddress

Description	Value
Description:	Defines a regular expression that filters all email addresses that should not be used in the application.
Group:	Framework

Description	Value
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CheckEmailInvalidAddress' } = '@(example)\\.(.. ...)\$';</pre>

## CGILogPrefix

Description	Value
Description:	Specifies the text that should appear in the log file to denote a CGI script entry.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CGILogPrefix' } = 'OTRS-CGI';</pre>

## DemoSystem

Description	Value
Description:	Runs the system in "Demo" mode. If set to "Yes", agents can change preferences, such as selection of language and theme via the agent web interface. These changes are only valid for the current session. It will not be possible for agents to change their passwords.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'DemoSystem' } = '0';</pre>

## SwitchToUser

Description	Value
Description:	Allows the administrators to login as other users, via the users administration panel.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{'SwitchToUser'} = '0';</code>

## NotificationSenderName

Description	Value
Description:	Specifies the name that should be used by the application when sending notifications. The sender name is used to build the complete display name for the notification master (i.e. "OTRS Notification Master" otrs@your.example.com). Notifications are messages such as en::Customer::QueueUpdate or en::Agent::Move.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'NotificationSenderId' } = 'OTRS Notification Master';</code>

## NotificationSenderId

Description	Value
Description:	Specifies the email address that should be used by the application when sending notifications. The email address is used to build the complete display name for the notification master (i.e. "OTRS Notification Master" otrs@your.example.com). You can use the OTRS_CONFIG_FQDN variable as set in your configuration, or choose another email address. Notifications are messages such as en::Customer::QueueUpdate or en::Agent::Move.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'NotificationSenderId' } = 'otrs@&lt;OTRS_CONFIG_FQDN&gt;';</code>

## System::Customer::Permission

Description	Value
Description:	Defines the standard permissions available for customers within the application. If more permissions are needed, you can enter them here. Permissions must be hard coded to be effective. Please ensure, when adding any of the afore mentioned permissions, that the "rw" permission remains the last entry.
Group:	Framework
SubGroup:	Core

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'System::Customer::Permission' } = [     'ro',     'rw' ];</pre>

## LanguageDebug

Description	Value
Description:	Debugs the translation set. If this is set to "Yes" all strings (text) without translations are written to STDERR. This can be helpful when you are creating a new translation file. Otherwise, this option should remain set to "No".
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'LanguageDebug' } = '0';</pre>

## Secure::DisableBanner

Description	Value
Description:	If enabled, the OTRS version tag will be removed from the HTTP headers.
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Secure::DisableBanner' } = '0';</pre>

## StandardResponse2QueueByCreating

Description	Value
Description:	List of default StandardResponses which are assigned automatically to new Queues upon creation.
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'StandardResponse2QueueByCreating' } = [     '' ];</pre>

## Core::LinkObject

### LinkObject::ViewMode

Description	Value
Description:	Determines the way the linked objects are displayed in each zoom mask.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'LinkObject::ViewMode' } = 'Simple';</pre>

### LinkObject::Type###Normal

Description	Value
Description:	Defines the link type 'Normal'. If the source name and the target name contain the same value, the resulting link is a non-directional one; otherwise, the result is a directional link.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'LinkObject::Type' }-&gt;{ 'Normal' } = {     'SourceName' =&gt; 'Normal',     'TargetName' =&gt; 'Normal' };</pre>

### LinkObject::Type###ParentChild

Description	Value
Description:	Defines the link type 'ParentChild'. If the source name and the target name contain the same value, the resulting link is a non-directional one; otherwise, the result is a directional link.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'LinkObject::Type' }-&gt;{ 'ParentChild' } = {     'SourceName' =&gt; 'Parent',     'TargetName' =&gt; 'Child' };</pre>

## LinkObject::TypeGroup###0001

Description	Value
Description:	Defines the link type groups. The link types of the same group cancel one another. Example: If ticket A is linked per a 'Normal' link with ticket B, then these tickets could not be additionally linked with link of a 'ParentChild' relationship.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'LinkObject::TypeGroup' }-&gt;{ '0001' } = [     'Normal',     'ParentChild' ];</pre>

## Core::Log

### LogModule

Description	Value
Description:	Defines the log module for the system. "File" writes all messages in a given logfile, "SysLog" uses the syslog daemon of the system, e.g. syslogd.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'LogModule' } = 'Kernel::System::Log::SysLog';</pre>

### LogModule::SysLog::Facility

Description	Value
Description:	If "SysLog" was selected for LogModule, a special log facility can be specified.

Description	Value
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'LogModule::SysLog::Facility' } = 'user';</code>

## LogModule::SysLog::LogSock

Description	Value
Description:	If "SysLog" was selected for LogModule, a special log sock can be specified (on solaris you may need to use 'stream').
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'LogModule::SysLog::LogSock' } = 'unix';</code>

## LogModule::SysLog::Charset

Description	Value
Description:	If "SysLog" was selected for LogModule, the charset that should be used for logging can be specified.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'LogModule::SysLog::Charset' } = 'utf-8';</code>

## LogModule::LogFile

Description	Value
Description:	If "file" was selected for LogModule, a logfile must be specified. If the file doesn't exist, it will be created by the system.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'LogModule::LogFile' } = '/tmp/otrs.log';</code>

## **LogModule::LogFile::Date**

Description	Value
Description:	Adds a suffix with the actual year and month to the OTRS log file. A logfile for every month will be created.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'LogModule::LogFile::Date' } = '0';</code>

## **Core::MIME-Viewer**

### **MIME-Viewer###application/excel**

Description	Value
Description:	Specifies the path to the converter that allows the view of Microsoft Excel files, in the web interface.
Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'MIME-Viewer' }-&gt;{ 'application/excel' } = 'xlhtml';</code>

### **MIME-Viewer###application/msword**

Description	Value
Description:	Specifies the path to the converter that allows the view of Microsoft Word files, in the web interface.
Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'MIME-Viewer' }-&gt;{ 'application/msword' } = 'wvWare';</code>

### **MIME-Viewer###application/pdf**

Description	Value
Description:	Specifies the path to the converter that allows the view of PDF documents, in the web interface.

Description	Value
Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'MIME-Viewer' }-&gt;{ 'application/pdf' } = 'pdftohtml -stdout -i';</pre>

## MIME-Viewer###text/xml

Description	Value
Description:	Specifies the path to the converter that allows the view of XML files, in the web interface.
Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'MIME-Viewer' }-&gt;{ 'text/xml' } = '&lt;OTRS_CONFIG_Home&gt;/scripts/tools/xml2html.pl';</pre>

## Core::MirrorDB

### Core::MirrorDB::DSN

Description	Value
Description:	If you want to use a mirror database for agent ticket fulltext search or to generate stats, specify the DSN to this database.
Group:	Framework
SubGroup:	Core::MirrorDB
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Core::MirrorDB::DSN' } = 'DBI:mysql:database=mirrordb;host=mirrordbhost';</pre>

### Core::MirrorDB::User

Description	Value
Description:	If you want to use a mirror database for agent ticket fulltext search or to generate stats, the user to authenticate to this database can be specified.
Group:	Framework

Description	Value
SubGroup:	Core::MirrorDB
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'Core::MirrorDB::User' } = 'some_user';</code>

## Core::MirrorDB::Password

Description	Value
Description:	If you want to use a mirror database for agent ticket fulltext search or to generate stats, the password to authenticate to this database can be specified.
Group:	Framework
SubGroup:	Core::MirrorDB
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'Core::MirrorDB::Password' } = 'some_password';</code>

## Core::PDF

### PDF

Description	Value
Description:	Enables PDF output. The CPAN module PDF::API2 is required, if not installed, PDF output will be disabled.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PDF' } = '1';</code>

### PDF::LogoFile

Description	Value
Description:	Specifies the path of the file for the logo in the page header (gif jpg png, 700 x 100 pixel).
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::LogoFile' } = '&lt;OTRS_CONFIG_Home&gt;/var/logo-otrs.png';</pre>

## PDF::PageSize

Description	Value
Description:	Defines the standard size of PDF pages.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::PageSize' } = 'a4';</pre>

## PDF::MaxPages

Description	Value
Description:	Defines the maximum number of pages per PDF file.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::MaxPages' } = '100';</pre>

## PDF::TTFontFile###Proportional

Description	Value
Description:	Defines the path and TTF-File to handle proportional font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'Proportional' } = 'DejaVuSans.ttf';</pre>

## PDF::TTFontFile###ProportionalBold

Description	Value
Description:	Defines the path and TTF-File to handle bold proportional font in PDF documents.

Description	Value
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'ProportionalBold' } = 'DejaVuSans-Bold.ttf';</pre>

## PDF::TTFontFile###ProportionallItalic

Description	Value
Description:	Defines the path and TTF-File to handle italic proportional font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'ProportionalItalic' } = 'DejaVuSans-Oblique.ttf';</pre>

## PDF::TTFontFile###ProportionalBoldItalic

Description	Value
Description:	Defines the path and TTF-File to handle bold italic proportional font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'ProportionalBoldItalic' } = 'DejaVuSans-BoldOblique.ttf';</pre>

## PDF::TTFontFile###Monospaced

Description	Value
Description:	Defines the path and TTF-File to handle monospaced font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'Monospaced' } = 'DejaVuSansMono.ttf';</pre>

## PDF::TTFontFile###MonospacedBold

Description	Value
Description:	Defines the path and TTF-File to handle bold monospaced font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'MonospacedBold' } = 'DejaVuSansMono-Bold.ttf';</pre>

## PDF::TTFontFile###MonospacedItalic

Description	Value
Description:	Defines the path and TTF-File to handle italic monospaced font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'MonospacedItalic' } = 'DejaVuSansMono-Oblique.ttf';</pre>

## PDF::TTFontFile###MonospacedBoldItalic

Description	Value
Description:	Defines the path and TTF-File to handle bold italic monospaced font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PDF::TTFontFile' }-&gt;{ 'MonospacedBoldItalic' } = 'DejaVuSansMono-BoldOblique.ttf';</pre>

## Core::Package

### Package::FileUpload

Description	Value
Description:	Enables file upload in the package manager frontend.
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Package::FileUpload' } = '1';</pre>

### Package::RepositoryRoot

Description	Value
Description:	Defines the location to get online repository list for additional packages. The first available result will be used.
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Package::RepositoryRoot' } = [     'http://ftp.otrs.org/pub/otrs/misc/packages/ repository.xml',     'http://otrs.org/repository.xml' ];</pre>

### Package::RepositoryList

Description	Value
Description:	Defines the list of online repositories. Another installations can be used as repository, for example: Key="http://example.com/otrs/public.pl?Action=PublicRepository;File=" and Content="Some Name".
Group:	Framework
SubGroup:	Core::Package
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Package::RepositoryList' } = {     'ftp://ftp.example.com/pub/otrs/misc/packages/' =&gt; '[Example] ftp://ftp.example.com/' };</pre>

## Package::RepositoryAccessRegExp

Description	Value
Description:	Defines the IP regular expression for accessing the local repository. You need to enable this to have access to your local repository and the package::RepositoryList is required on the remote host.
Group:	Framework
SubGroup:	Core::Package
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Package::RepositoryAccessRegExp' } = '127\\.0\\.0\\.1';</pre>

## Package::Timeout

Description	Value
Description:	Sets the timeout (in seconds) for package downloads. Overwrites "WebUserAgent::Timeout".
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Package::Timeout' } = '15';</pre>

## Package::Proxy

Description	Value
Description:	Fetches packages via proxy. Overwrites "WebUserAgent::Proxy".
Group:	Framework
SubGroup:	Core::Package
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Package::Proxy' } = 'http://proxy.sn.no:8001/';</pre>

## Package::ShowFeatureAddons

Description	Value
Description:	Toggles display of OTRS FeatureAddons list in PackageManager.
Group:	Framework

Description	Value
SubGroup:	Core::Package
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'Package::ShowFeatureAddons' } = '1';</code>

## Core::PerformanceLog

### PerformanceLog

Description	Value
Description:	Enables performance log (to log the page response time). It will affect the system performance. Frontend::Module###AdminPerformanceLog must be enabled.
Group:	Framework
SubGroup:	Core::PerformanceLog
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'PerformanceLog' } = '0';</code>

### PerformanceLog::File

Description	Value
Description:	Specifies the path of the file for the performance log.
Group:	Framework
SubGroup:	Core::PerformanceLog
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PerformanceLog::File' } = '&lt;OTRS_CONFIG_Home&gt;/var/log/Performance.log';</code>

### PerformanceLog::FileMax

Description	Value
Description:	Defines the maximum size (in MB) of the log file.
Group:	Framework
SubGroup:	Core::PerformanceLog
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'PerformanceLog::FileMax' } = '25';</pre>

## Core::ReferenceData

### ReferenceData::OwnCountryList

Description	Value
Description:	This setting allows you to override the built-in country list with your own list of countries. This is particularly handy if you just want to use a small select group of countries.
Group:	Framework
SubGroup:	Core::ReferenceData
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'ReferenceData::OwnCountryList' } = {     'AT' =&gt; 'Austria',     'CH' =&gt; 'Switzerland',     'DE' =&gt; 'Germany' };</pre>

## Core::SOAP

### SOAP::User

Description	Value
Description:	Defines the username to access the SOAP handle (bin/cgi-bin/rpc.pl).
Group:	Framework
SubGroup:	Core::SOAP
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'SOAP::User' } = 'some_user';</pre>

### SOAP::Password

Description	Value
Description:	Defines the password to access the SOAP handle (bin/cgi-bin/rpc.pl).
Group:	Framework
SubGroup:	Core::SOAP
Valid:	0
Required:	0

Description	Value
Config-Setting:	<code>\$Self-&gt;{ 'SOAP::Password' } = 'some_pass';</code>

## Core::Sendmail

### SendmailModule

Description	Value
Description:	Defines the module to send emails. "Sendmail" directly uses the sendmail binary of your operating system. Any of the "SMTP" mechanisms use a specified (external) mailserver. "DoNotSendEmail" doesn't send emails and it is useful for test systems.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SendmailModule' } = 'Kernel::System::Email::Sendmail';</code>

### SendmailModule::CMD

Description	Value
Description:	If "Sendmail" was selected as SendmailModule, the location of the sendmail binary and the needed options must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SendmailModule::CMD' } = '/usr/sbin/sendmail -i -f';</code>

### SendmailModule::Host

Description	Value
Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, the mailhost that sends out the mails must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'SendmailModule::Host'} = 'mail.example.com';</pre>

## SendmailModule::Port

Description	Value
Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, the port where your mailserver is listening for incoming connections must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'SendmailModule::Port'} = '25';</pre>

## SendmailModule::AuthUser

Description	Value
Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, and authentication to the mail server is needed, an username must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'SendmailModule::AuthUser'} = 'MailserverLogin';</pre>

## SendmailModule::AuthPassword

Description	Value
Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, and authentication to the mail server is needed, a password must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'SendmailModule::AuthPassword'} = 'MailserverPassword';</pre>

## SendmailBcc

Description	Value
Description:	Sends all outgoing email via bcc to the specified address. Please use this only for backup reasons.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'SendmailBcc' } = '';</code>

## SendmailNotificationEnvelopeFrom

Description	Value
Description:	If set, this address is used as envelope sender header in outgoing notifications. If no address is specified, the envelope sender header is empty.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'SendmailNotificationEnvelopeFrom' } = '';</code>

## SendmailEncodingForce

Description	Value
Description:	Forces encoding of outgoing emails (7bit 8bit quoted-printable base64).
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'SendmailEncodingForce' } = 'base64';</code>

## Core::Session

### SessionModule

Description	Value
Description:	Defines the module used to store the session data. With "DB" the frontend server can be splitted from the db server. "FS" is faster.

Description	Value
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'SessionModule' } = 'Kernel::System::AuthSession::DB';</pre>

## SessionName

Description	Value
Description:	Defines the name of the session key. E.g. Session, SessionID or OTRS.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'SessionName' } = 'Session';</pre>

## SessionCheckRemoteIP

Description	Value
Description:	Turns on the remote ip address check. It should be set to "No" if the application is used, for example, via a proxy farm or a dialup connection, because the remote ip address is mostly different for the requests.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'SessionCheckRemoteIP' } = '1';</pre>

## SessionDeleteIfNotRemoteID

Description	Value
Description:	Deletes a session if the session id is used with an invalid remote IP address.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{ 'SessionDeleteIfNotRemoteID' } = '1';</code>

## SessionMaxTime

Description	Value
Description:	Defines the maximal valid time (in seconds) for a session id.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SessionMaxTime' } = '57600';</code>

## SessionMaxIdleTime

Description	Value
Description:	Sets the inactivity time (in seconds) to pass before a session is killed and a user is loged out.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SessionMaxIdleTime' } = '21600';</code>

## SessionDeleteIfTimeToOld

Description	Value
Description:	Deletes requested sessions if they have timed out.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SessionDeleteIfTimeToOld' } = '1';</code>

## SessionUseCookie

Description	Value
Description:	Makes the session management use html cookies. If html cookies are disabled or if the client browser disabled html cookies, then the system will work as usual and append the session id to the links.

Description	Value
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SessionUseCookie' } = '1';</code>

## SessionUseCookieAfterBrowserClose

Description	Value
Description:	Stores cookies after the browser has been closed.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SessionUseCookieAfterBrowserClose' } = '0';</code>

## SessionCSRFProtection

Description	Value
Description:	Protection against CSRF (Cross Site Request Forgery) exploits (for more info see <a href="http://en.wikipedia.org/wiki/Cross-site_request_forgery">http://en.wikipedia.org/wiki/Cross-site_request_forgery</a> ).
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SessionCSRFProtection' } = '1';</code>

## SessionDir

Description	Value
Description:	If "FS" was selected for SessionModule, a directory where the session data will be stored must be specified.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{'SessionDir'} = '&lt;OTRS_CONFIG_Home&gt;/var/sessions';</code>

## SessionTable

Description	Value
Description:	If "DB" was selected for SessionModule, a table in database where session data will be stored must be specified.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionTable'} = 'sessions';</code>

## SessionTableID

Description	Value
Description:	If "DB" was selected for SessionModule, a column for the identifiers in session table must be specified.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionTableID'} = 'session_id';</code>

## SessionTableValue

Description	Value
Description:	If "DB" was selected for SessionModule, a column for the values in session table must be specified.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionTableValue'} = 'session_value';</code>

## SessionSaveLoginPasswd

Description	Value
Description:	Saves the login and password on the session table in the database, if "DB" was selected for SessionModule.

Description	Value
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SessionSaveLoginPasswd' } = '0';</code>

## CustomerPanelSessionName

Description	Value
Description:	Defines the name of the key for customer sessions.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'CustomerPanelSessionName' } = 'CSID';</code>

## Core::SpellChecker

### SpellChecker

Description	Value
Description:	Enables spell checker support.
Group:	Framework
SubGroup:	Core::SpellChecker
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SpellChecker' } = '0';</code>

### SpellCheckerBin

Description	Value
Description:	Install ispell or aspell on the system, if you want to use a spell checker. Please specify the path to the aspell or ispell binary on your operating system.
Group:	Framework
SubGroup:	Core::SpellChecker
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{ 'SpellCheckerBin' } = '/usr/bin/ispell';</code>

## SpellCheckerDictDefault

Description	Value
Description:	Defines the default spell checker dictionary.
Group:	Framework
SubGroup:	Core::SpellChecker
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SpellCheckerDictDefault' } = 'english';</code>

## SpellCheckerIgnore

Description	Value
Description:	Defines a default list of words, that are ignored by the spell checker.
Group:	Framework
SubGroup:	Core::SpellChecker
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'SpellCheckerIgnore' } = [     'www',     'webmail',     'https',     'http',     'html',     'rfc' ];</code>

## Core::Stats

### Stats::StatsHook

Description	Value
Description:	Sets the stats hook.
Group:	Framework
SubGroup:	Core::Stats
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Stats::StatsHook' } = 'Stat#';</code>

## Stats::StatsStartNumber

Description	Value
Description:	Start number for statistics counting. Every new stat increments this number.
Group:	Framework
SubGroup:	Core::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Stats::StatsStartNumber'} = '10000';</pre>

## Stats::MaxXaxisAttributes

Description	Value
Description:	Defines the default maximum number of X-axis attributes for the time scale.
Group:	Framework
SubGroup:	Core::Stats
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Stats::MaxXaxisAttributes'} = '1000';</pre>

## Core::Stats::Graph

### Stats::Graph::t\_margin

Description	Value
Description:	Specifies the top margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Stats::Graph::t_margin'} = '10';</pre>

### Stats::Graph::l\_margin

Description	Value
Description:	Specifies the left margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1

Description	Value
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Stats::Graph::l_margin' } = '10';</code>

## Stats::Graph::b\_margin

Description	Value
Description:	Specifies the bottom margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Stats::Graph::b_margin' } = '10';</code>

## Stats::Graph::r\_margin

Description	Value
Description:	Specifies the right margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Stats::Graph::r_margin' } = '20';</code>

## Stats::Graph::bgclr

Description	Value
Description:	Specifies the background color of the picture.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Stats::Graph::bgclr' } = 'white';</code>

## Stats::Graph::transparent

Description	Value
Description:	Makes the picture transparent.
Group:	Framework

Description	Value
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::transparent'} = '0';</code>

## Stats::Graph::fgclr

Description	Value
Description:	Specifies the border color of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::fgclr'} = 'black';</code>

## Stats::Graph::boxclr

Description	Value
Description:	Specifies the background color of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::boxclr'} = 'white';</code>

## Stats::Graph::accentclr

Description	Value
Description:	Specifies the border color of the legend.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::accentclr'} = 'black';</code>

## Stats::Graph::legendclr

Description	Value
Description:	Specifies the text color of the legend.

Description	Value
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::Graph::legendclr' } = 'black';</pre>

## Stats::Graph::textclr

Description	Value
Description:	Specifies the text color of the chart (e. g. caption).
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::Graph::textclr' } = 'black';</pre>

## Stats::Graph::dclrs

Description	Value
Description:	Defines the colors for the graphs.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::Graph::dclrs' } = [     'red',     'green',     'blue',     'yellow',     'black',     'purple',     'orange',     'pink',     'marine',     'cyan',     'lgray',     'lblue',     'lyellow',     'lgreen',     'lred',     'lpurple',     'lorange',</pre>

Description	Value
	'lbrown' ];

## Stats::Graph::line\_width

Description	Value
Description:	Defines the boldness of the line drawn by the graph.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::line_width'} = '1';</code>

## Stats::Graph::legend\_placement

Description	Value
Description:	Defines the placement of the legend. This should be a two letter key of the form: 'B[LCR] R[TCB]'. The first letter indicates the placement (Bottom or Right), and the second letter the alignment (Left, Right, Center, Top, or Bottom).
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::legend_placement'} = 'BC';</code>

## Stats::Graph::legend\_spacing

Description	Value
Description:	Defines the spacing of the legends.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::legend_spacing'} = '4';</code>

## Stats::Graph::legend\_marker\_width

Description	Value
Description:	Defines the width of the legend.
Group:	Framework

Description	Value
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::Graph::legend_marker_width' } = '12';</pre>

## **Stats::Graph::legend\_marker\_height**

Description	Value
Description:	Defines the height of the legend.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::Graph::legend_marker_height' } = '8';</pre>

## **Core::Time**

### **TimeInputFormat**

Description	Value
Description:	Defines the date input format used in forms (option or input fields).
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeInputFormat' } = 'Option';</pre>

### **TimeShowAlwaysLong**

Description	Value
Description:	Shows time in long format (days, hours, minutes), if set to "Yes"; or in short format (days, hours), if set to "No".
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeShowAlwaysLong' } = '0';</pre>

## TimeZone

Description	Value
Description:	Sets the system time zone (required a system with UTC as system time). Otherwise this is a diff time to the local time.
Group:	Framework
SubGroup:	Core::Time
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone' } = '+0';</pre>

## TimeZoneUser

Description	Value
Description:	Sets the user time zone per user (required a system with UTC as system time and UTC under TimeZone). Otherwise this is a diff time to the local time.
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZoneUser' } = '0';</pre>

## TimeZoneUserBrowserAutoOffset

Description	Value
Description:	Sets the user time zone per user based on java script / browser time zone offset feature at login time.
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZoneUserBrowserAutoOffset' } = '1';</pre>

## CalendarWeekDayStart

Description	Value
Description:	Define the start day of the week for the date picker.
Group:	Framework
SubGroup:	Core::Time
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CalendarWeekDayStart' } = '1';</pre>

## TimeVacationDays

Description	Value
Description:	Adds the permanent vacation days. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'International Workers\' Day'     } };</pre>

## TimeVacationDaysOneTime

Description	Value
Description:	Adds the one time vacation days. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDaysOneTime' } = {     '2004' =&gt; {         '1' =&gt; {             '1' =&gt; 'test'         }     } };</pre>

## TimeWorkingHours

Description	Value
Description:	Defines the hours and week days to count the working time.
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeWorkingHours' } = {     'Fri' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Mon' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Sat' =&gt; [],     'Sun' =&gt; [],     'Thu' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Tue' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Wed' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ] };</pre>

Description	Value
	<pre>         '16',         '17',         '18',         '19',         '20'     ],     'Tue' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Wed' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ] ]; </pre>

## TimeShowCompleteDescription

Description	Value
Description:	Shows time use complete description (days, hours, minutes), if set to "Yes"; or just first letter (d, h, m), if set to "No".
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'TimeShowCompleteDescription' } = '0';

## Core::Time::Calendar1

### TimeZone::Calendar1Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar1Name' } = 'Calendar Name 1';</pre>

### TimeZone::Calendar1

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar1' } = '0';</pre>

### TimeVacationDays::Calendar1

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays::Calendar1' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'Easter Sunday'     },     '7' =&gt; {         '1' =&gt; 'Whit Monday'     },     '10' =&gt; {         '1' =&gt; 'All Saints Day'     },     '11' =&gt; {         '1' =&gt; 'All Souls Day'     },     '12' =&gt; {         '25' =&gt; 'Christmas Day'     },     '1' =&gt; {         '1' =&gt; 'New Year Day'     }, };</pre>

Description	Value
	'1' => 'International Workers\' Day' } };

**TimeVacationDaysOneTime::Calendar1**

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'TimeVacationDaysOneTime::Calendar1' } = { '2004' => { '1' => { '1' => 'test' } } };

**TimeWorkingHours::Calendar1**

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'TimeWorkingHours::Calendar1' } = { 'Fri' => [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20' ],

Description	Value
	<pre>'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Sat' =&gt; [], 'Sun' =&gt; [], 'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Wed' =&gt; [     '8',     '9',     '10',     '11',</pre>

Description	Value
	<pre>'12', '13', '14', '15', '16', '17', '18', '19', '20' ]</pre> <p>};</p>

## Core::Time::Calendar2

### TimeZone::Calendar2Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar2Name' } = 'Calendar Name 2';</pre>

### TimeZone::Calendar2

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar2' } = '0';</pre>

### TimeVacationDays::Calendar2

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays::Calendar2' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'International Workers\' Day'     } };</pre>

## TimeVacationDaysOneTime::Calendar2

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDaysOneTime::Calendar2' } = {     '2004' =&gt; {         '1' =&gt; {             '1' =&gt; 'test'         }     } };</pre>

## TimeWorkingHours::Calendar2

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeWorkingHours::Calendar2' } = {     'Fri' =&gt; [</pre>

Description	Value
	<pre>'8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20'  ], 'Mon' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20'  ], 'Sat' =&gt; [], 'Sun' =&gt; [], 'Thu' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20'  ], 'Tue' =&gt; [   '8',   '9',   '10',   '11',   '12',</pre>

Description	Value
	<pre>'13', '14', '15', '16', '17', '18', '19', '20' ], 'Wed' =&gt; [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20' ] };</pre>

## Core::Time::Calendar3

### TimeZone::Calendar3Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar3Name' } = 'Calendar Name 3';</pre>

### TimeZone::Calendar3

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar3' } = '0';</pre>

## TimeVacationDays::Calendar3

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays::Calendar3' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'International Workers\' Day'     } };</pre>

## TimeVacationDaysOneTime::Calendar3

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDaysOneTime::Calendar3' } = {     '2004' =&gt; {         '1' =&gt; {             '1' =&gt; 'test'         }     } };</pre>

## TimeWorkingHours::Calendar3

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar3'} = {     'Fri' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Mon' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Sat' =&gt; [],     'Sun' =&gt; [],     'Thu' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Tue' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Wed' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ] }</pre>

Description	Value
	<pre>'15', '16', '17', '18', '19', '20' ], 'Tue' =&gt; [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20' ], 'Wed' =&gt; [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20' ] };</pre>

## Core::Time::Calendar4

### TimeZone::Calendar4Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{ 'TimeZone::Calendar4Name' } = 'Calendar Name 4';</code>

## TimeZone::Calendar4

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'TimeZone::Calendar4' } = '0';</code>

## TimeVacationDays::Calendar4

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'TimeVacationDays::Calendar4' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'International Workers\' Day'     } };</code>

## TimeVacationDaysOneTime::Calendar4

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar4

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDaysOneTime::Calendar4' } = {     '2004' =&gt; {         '1' =&gt; {             '1' =&gt; 'test'         }     } };</pre>

## TimeWorkingHours::Calendar4

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeWorkingHours::Calendar4' } = {     'Fri' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Mon' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ] };</pre>

Description	Value
	<pre>'19', '20' ], 'Sat' =&gt; [], 'Sun' =&gt; [], 'Thu' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20' ], 'Tue' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20' ], 'Wed' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20' ] };</pre>

## Core::Time::Calendar5

### TimeZone::Calendar5Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar5Name' } = 'Calendar Name 5';</pre>

### TimeZone::Calendar5

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar5' } = '0';</pre>

### TimeVacationDays::Calendar5

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays::Calendar5' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {</pre>

Description	Value
	'1' => 'International Workers\' Day' } };

## TimeVacationDaysOneTime::Calendar5

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'TimeVacationDaysOneTime::Calendar5' } = { '2004' => { '1' => { '1' => 'test' } } };

## TimeWorkingHours::Calendar5

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'TimeWorkingHours::Calendar5' } = { 'Fri' => [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20' ],

Description	Value
	<pre>'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Sat' =&gt; [], 'Sun' =&gt; [], 'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Wed' =&gt; [     '8',     '9',     '10',     '11',</pre>

Description	Value
	<pre>'12', '13', '14', '15', '16', '17', '18', '19', '20' ] };</pre>

## Core::Time::Calendar6

### TimeZone::Calendar6Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeZone::Calendar6Name'} = 'Calendar Name 6';</pre>

### TimeZone::Calendar6

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeZone::Calendar6'} = '0';</pre>

### TimeVacationDays::Calendar6

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays::Calendar6' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'International Workers\' Day'     } };</pre>

## TimeVacationDaysOneTime::Calendar6

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDaysOneTime::Calendar6' } = {     '2004' =&gt; {         '1' =&gt; {             '1' =&gt; 'test'         }     } };</pre>

## TimeWorkingHours::Calendar6

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeWorkingHours::Calendar6' } = {     'Fri' =&gt; [</pre>

Description	Value
	<pre>'8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20'  ], 'Mon' =&gt; [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20'  ], 'Sat' =&gt; [], 'Sun' =&gt; [], 'Thu' =&gt; [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20'  ], 'Tue' =&gt; [ '8', '9', '10', '11', '12',</pre>

Description	Value
	<pre>'13', '14', '15', '16', '17', '18', '19', '20' ], 'Wed' =&gt; [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20' ] };</pre>

## Core::Time::Calendar7

### TimeZone::Calendar7Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar7Name' } = 'Calendar Name 7';</pre>

### TimeZone::Calendar7

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar7' } = '0';</pre>

## TimeVacationDays::Calendar7

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays::Calendar7' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'International Workers\' Day'     } };</pre>

## TimeVacationDaysOneTime::Calendar7

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDaysOneTime::Calendar7' } = {     '2004' =&gt; {         '1' =&gt; {             '1' =&gt; 'test'         }     } };</pre>

## TimeWorkingHours::Calendar7

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar7'} = {     'Fri' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Mon' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Sat' =&gt; [],     'Sun' =&gt; [],     'Thu' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Tue' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Wed' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ] }</pre>

Description	Value
	<pre>         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Tue' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Wed' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ] ]; </pre>

## Core::Time::Calendar8

### TimeZone::Calendar8Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{ 'TimeZone::Calendar8Name' } = 'Calendar Name 8';</code>

## TimeZone::Calendar8

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'TimeZone::Calendar8' } = '0';</code>

## TimeVacationDays::Calendar8

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'TimeVacationDays::Calendar8' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {         '1' =&gt; 'International Workers\' Day'     } };</code>

## TimeVacationDaysOneTime::Calendar8

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar8

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDaysOneTime::Calendar8' } = {     '2004' =&gt; {         '1' =&gt; {             '1' =&gt; 'test'         }     } };</pre>

## TimeWorkingHours::Calendar8

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeWorkingHours::Calendar8' } = {     'Fri' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ],     'Mon' =&gt; [         '8',         '9',         '10',         '11',         '12',         '13',         '14',         '15',         '16',         '17',         '18',         '19',         '20'     ] };</pre>

Description	Value
	<pre>'19', '20' ], 'Sat' =&gt; [], 'Sun' =&gt; [], 'Thu' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20' ], 'Tue' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20' ], 'Wed' =&gt; [   '8',   '9',   '10',   '11',   '12',   '13',   '14',   '15',   '16',   '17',   '18',   '19',   '20' ] };</pre>

## Core::Time::Calendar9

### TimeZone::Calendar9Name

Description	Value
Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar9Name' } = 'Calendar Name 9';</pre>

### TimeZone::Calendar9

Description	Value
Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeZone::Calendar9' } = '0';</pre>

### TimeVacationDays::Calendar9

Description	Value
Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TimeVacationDays::Calendar9' } = {     '1' =&gt; {         '1' =&gt; 'New Year\'s Day'     },     '12' =&gt; {         '24' =&gt; 'Christmas Eve',         '25' =&gt; 'First Christmas Day',         '26' =&gt; 'Second Christmas Day',         '31' =&gt; 'New Year\'s Eve'     },     '5' =&gt; {</pre>

Description	Value
	'1' => 'International Workers\' Day' } };

**TimeVacationDaysOneTime::Calendar9**

Description	Value
Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'TimeVacationDaysOneTime::Calendar9' } = { '2004' => { '1' => { '1' => 'test' } } };

**TimeWorkingHours::Calendar9**

Description	Value
Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'TimeWorkingHours::Calendar9' } = { 'Fri' => [ '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20' ],

Description	Value
	<pre>'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Sat' =&gt; [], 'Sun' =&gt; [], 'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20 ], 'Wed' =&gt; [     '8',     '9',     '10',     '11',</pre>

Description	Value
	<pre>'12', '13', '14', '15', '16', '17', '18', '19', '20' ]; };</pre>

## Core::Web

### Frontend::WebPath

Description	Value
Description:	Defines the URL base path of icons, CSS and Java Script.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::WebPath' } = '/otrs-web/';</pre>

### Frontend::ImagePath

Description	Value
Description:	Defines the URL image path of icons for navigation.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ImagePath' } = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;skins/Agent/ default/img/';</pre>

### Frontend::CSSPath

Description	Value
Description:	Defines the URL CSS path.
Group:	Framework
SubGroup:	Core::Web

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CSSPath' } = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;css/';</pre>

## Frontend::JavaScriptPath

Description	Value
Description:	Defines the URL java script path.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::JavaScriptPath' } = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;js/';</pre>

## Frontend::RichText

Description	Value
Description:	Uses richtext for viewing and editing: articles, salutations, signatures, standard responses, auto responses and notifications.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::RichText' } = '1';</pre>

## Frontend::RichTextPath

Description	Value
Description:	Defines the URL rich text editor path.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::RichTextPath' } = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;js/thirdparty/ ckeditor-3.6.3/';</pre>

## Frontend::RichTextWidth

Description	Value
Description:	Defines the width for the rich text editor component. Enter number (pixels) or percent value (relative).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::RichTextWidth'} = '620';</pre>

## Frontend::RichTextHeight

Description	Value
Description:	Defines the height for the rich text editor component. Enter number (pixels) or percent value (relative).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::RichTextHeight'} = '320';</pre>

## Frontend::RichText::DefaultCSS

Description	Value
Description:	Defines the default CSS used in rich text editors.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::RichText::DefaultCSS'} = 'font-family:Geneva,Helvetica,Arial,sans-serif; font-size: 12px; ';</pre>

## DefaultViewNewLine

Description	Value
Description:	Automated line break in text messages after x number of chars.
Group:	Framework
SubGroup:	Core::Web
Valid:	1

Description	Value
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'DefaultViewNewLine' } = '90';</code>

## DefaultViewLines

Description	Value
Description:	Sets the number of lines that are displayed in text messages (e.g. ticket lines in the QueueZoom).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'DefaultViewLines' } = '6000';</code>

## Frontend::AnimationEnabled

Description	Value
Description:	Turns on the animations used in the GUI. If you have problems with these animations (e.g. performance issues), you can turn them off here.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Frontend::AnimationEnabled' } = '1';</code>

## AttachmentDownloadType

Description	Value
Description:	Allows choosing between showing the attachments of a ticket in the browser (inline) or just make them downloadable (attachment).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'AttachmentDownloadType' } = 'attachment';</code>

## WebMaxFileUpload

Description	Value
Description:	Defines the maximal size (in bytes) for file uploads via the browser.

Description	Value
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'WebMaxFileUpload' } = '16777216';</pre>

## WebUploadCacheModule

Description	Value
Description:	Selects the module to handle uploads via the web interface. "DB" stores all uploads in the database, "FS" uses the file system.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'WebUploadCacheModule' } = 'Kernel::System::Web::UploadCache::DB';</pre>

## Frontend::Output::FilterText###AAAURL

Description	Value
Description:	Defines the filter that processes the text in the articles, in order to highlight URLs.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Output::FilterText' }- &gt;{ 'AAAURL' } = {     'Module' =&gt;         'Kernel::Output::HTML::OutputFilterTextURL',     'Templates' =&gt; {         'AgentTicketZoom' =&gt; '1'     } };</pre>

## Frontend::Themes

Description	Value
Description:	Activates the available themes on the system. Value 1 means active, 0 means inactive.

Description	Value
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Themes' } = {     'Lite' =&gt; '0',     'Standard' =&gt; '1' };</pre>

## Frontend::Output::FilterText###OutputFilterTextAutoLink

Description	Value
Description:	Defines a filter to process the text in the articles, in order to highlight predefined keywords.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Output::FilterText' }- &gt;{ 'OutputFilterTextAutoLink' } = {     'Module' =&gt;         'Kernel::Output::HTML::OutputFilterTextAutoLink',     'Templates' =&gt; {         'AgentTicketZoom' =&gt; '1'     } };</pre>

## Frontend::Output::OutputFilterTextAutoLink###CVE

Description	Value
Description:	Defines a filter for html output to add links behind CVE numbers. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Frontend::Output::OutputFilterTextAutoLink' }- &gt;{ 'CVE' } = {     'RegExp' =&gt; [         '(CVE CAN) \\\\-(\\\\d{3,4}) \\\\-(\\\\d{2,6}) '</pre>

Description	Value
	<pre>], 'Templates' =&gt; {     'AgentTicketZoom' =&gt; '1' }, 'URL1' =&gt; {     'Description' =&gt; 'Mitre',     'Image' =&gt; 'http://cve.mitre.org/favicon.ico',     'Target' =&gt; '_blank',     'URL' =&gt; 'http://cve.mitre.org/cgi-bin/cvename.cgi?name=&lt;MATCH1&gt;-&lt;MATCH2&gt;-&lt;MATCH3&gt;' }, 'URL2' =&gt; {     'Description' =&gt; 'Google',     'Image' =&gt; 'http://www.google.de/favicon.ico',     'Target' =&gt; '_blank',     'URL' =&gt; 'http://google.com/search?q=&lt;MATCH1&gt;-&lt;MATCH2&gt;-&lt;MATCH3&gt;' }, 'URL3' =&gt; {     'Description' =&gt; 'US-CERT NVD',     'Image' =&gt; 'http://nvd.nist.gov/favicon.ico',     'Target' =&gt; '_blank',     'URL' =&gt; 'http://nvd.nist.gov/nvd.cfm?cvename=&lt;MATCH1&gt;-&lt;MATCH2&gt;-&lt;MATCH3&gt;' } };</pre>

## Frontend::Output::OutputFilterTextAutoLink###Bugtraq

Description	Value
Description:	Defines a filter for html output to add links behind bugtraq numbers. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Frontend::Output::OutputFilterTextAutoLink' }- &gt;{ 'Bugtraq' } =  {     'RegExp' =&gt; [         'Bugtraq[\s\w\t]*?ID[\s\w\t]*?:[\s\w\t]*?(\d{2,8})',         'Bugtraq[\s\w\t]*?ID[\s\w\t]*?(\d{2,8})',         'Bugtraq[\s\w\t]*?:[\s\w\t]*?(\d{2,8})',         'Bugtraq[\s\w\t]*?(\d{2,8})',         'Bugtraq[\s\w\t]*?:(\s\w\t)*?(\d{2,8})',         'Bugtraq[\s\w\t]*?(\d{2,8})',         'BID[\s\w\t]*?:[\s\w\t]*?(\d{2,8})',</pre>

Description	Value
	<pre>         'BID[\s\w\t]*?(\\d{2,8})'     ],     'Templates' =&gt; {         'AgentTicketZoom' =&gt; '1'     },     'URL1' =&gt; {         'Description' =&gt; 'Security Focus',         'Image' =&gt; 'http://www.securityfocus.com/ favicon.ico',         'Target' =&gt; '_blank',         'URL' =&gt; 'http://www.securityfocus.com/bid/ &lt;MATCH1&gt;/info'     },     'URL2' =&gt; {         'Description' =&gt; 'Google',         'Image' =&gt; 'http://www.google.de/favicon.ico',         'Target' =&gt; '_blank',         'URL' =&gt; 'http://google.com/search?q=&lt;MATCH&gt;'     } }; </pre>

## Frontend::Output::OutputFilterTextAutoLink###MSBulletins

Description	Value
Description:	Defines a filter for html output to add links behind MSBulletin numbers. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre> \$self- &gt;{'Frontend::Output::OutputFilterTextAutoLink'}- &gt;{'MSBulletins'} = {     'RegExp' =&gt; [         'MS[^A-Za-z]{0,5}(\d\d)\.(?(\d{2,4})'     ],     'Templates' =&gt; {         'AgentTicketZoom' =&gt; '1'     },     'URL1' =&gt; {         'Description' =&gt; 'Microsoft Technet',         'Image' =&gt; 'http://www.microsoft.com/ favicon.ico',         'Target' =&gt; '_blank',         'URL' =&gt; 'http://www.microsoft.com/technet/ security/bulletin/MS&lt;MATCH1&gt;-&lt;MATCH2&gt;.mspx'     }, </pre>

Description	Value
	<pre>'URL2' =&gt; {     'Description' =&gt; 'Google',     'Image' =&gt; 'http://www.google.de/favicon.ico',     'Target' =&gt; '_blank',     'URL' =&gt; 'http://google.com/search?q=MS&lt;MATCH1&gt;-&lt;MATCH2&gt;' } };</pre>

## Frontend::Output::OutputFilterTextAutoLink###Setting1

Description	Value
Description:	Define a filter for html output to add links behind a defined string. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Frontend::Output::OutputFilterTextAutoLink' }- &gt;{ 'Setting1' } =  {     'RegExp' =&gt; [         'RegExp'     ],     'Templates' =&gt; {         'AgentTicketZoom' =&gt; '1'     },     'URL1' =&gt; {         'Description' =&gt; 'Description',         'Image' =&gt; 'right-small.png',         'Target' =&gt; '_blank',         'URL' =&gt; 'URL'     },     'URL2' =&gt; {         'Description' =&gt; 'Description',         'Image' =&gt; 'Image',         'Target' =&gt; '_blank',         'URL' =&gt; 'URL'     } };</pre>

## Frontend::Output::OutputFilterTextAutoLink###Setting2

Description	Value
Description:	Defines a filter for html output to add links behind a defined string. The element Image allows two input kinds. At once the name of an image

Description	Value
	(e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Frontend::Output::OutputFilterTextAutoLink' }- &gt;{ 'Setting2' } =  {     'RegExp' =&gt; [         'RegExp'     ],     'Templates' =&gt; {         'AgentTicketZoom' =&gt; '1'     },     'URL1' =&gt; {         'Description' =&gt; 'Description',         'Image' =&gt; 'right-small.png',         'Target' =&gt; '_blank',         'URL' =&gt; 'URL'     },     'URL2' =&gt; {         'Description' =&gt; 'Description',         'Image' =&gt; 'Image',         'Target' =&gt; '_blank',         'URL' =&gt; 'URL'     },     'URL3' =&gt; {         'Description' =&gt; 'Description',         'Image' =&gt; 'Image',         'Target' =&gt; '_blank',         'URL' =&gt; 'URL'     } };</pre>

## Loader::Enabled::CSS

Description	Value
Description:	If enabled, OTRS will deliver all CSS files in minified form. <b>WARNING:</b> If you turn this off, there will likely be problems in IE 7, because it cannot load more than 32 CSS files.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Enabled::CSS' } = '1';</pre>

## Loader::Enabled::JS

Description	Value
Description:	If enabled, OTRS will deliver all JavaScript files in minified form.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Enabled::JS'} = '1';</pre>

## Loader::Agent::CommonCSS##000-Framework

Description	Value
Description:	List of CSS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::CommonCSS'}-&gt;{'000-Framework'} = [     'Core.Reset.css',     'Core.Default.css',     'Core.Header.css',     'Core.OverviewControl.css',     'Core.OverviewSmall.css',     'Core.OverviewMedium.css',     'Core.OverviewLarge.css',     'Core.Footer.css',     'Core.PageLayout.css',     'Core.Form.css',     'Core.Table.css',     'Core.Widget.css',     'Core.WidgetMenu.css',     'Core.TicketDetail.css',     'Core.Tooltip.css',     'Core.Dialog.css',     'Core.Print.css' ];</pre>

## Loader::Agent::CommonCSS::IE8##000-Framework

Description	Value
Description:	List of IE8-specific CSS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::CommonCSS::IE8'}-&gt;{'000-Framework'} = [     'Core.OverviewSmall.IE8.css' ];</pre>

## Loader::Agent::CommonJS###000-Framework

Description	Value
Description:	List of JS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::CommonJS'}-&gt;{'000-Framework'} = [     'thirdparty/json/json2.js',     'thirdparty/jquery-1.6.4/jquery.js',     'thirdparty/jquery-ui-1.8.16/jquery-ui.js',     'thirdparty/jquery-validate-1.9/ jquery.validate.js',     'thirdparty/stacktrace-0.3/stacktrace.js',     'Core.JavaScriptEnhancements.js',     'Core.Debug.js',     'Core.Data.js',     'Core.Config.js',     'Core.Exception.js',     'Core.JSON.js',     'Core.AJAX.js',     'Core.UI.js',     'Core.UI.IE7Fixes.js',     'Core.UI.Accordion.js',     'Core.UI.Datepicker.js',     'Core.UI.Resizable.js',     'Core.UI.Table.js',     'Core.UI.Accessibility.js',     'Core.UI.RichTextEditor.js',     'Core.UI.Dialog.js',     'Core.UI.ActionRow.js',     'Core.UI.Popup.js',     'Core.Form.js',     'Core.Form.ErrorTooltips.js',     'Core.Form.Validate.js',     'Core.App.js',     'Core.Agent.js',     'Core.Agent.Search.js'</pre>

Description	Value
	];

## Loader::Customer::CommonCSS##000-Framework

Description	Value
Description:	List of CSS files to always be loaded for the customer interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Customer::CommonCSS' }-&gt;{ '000-Framework' } = [     'Core.Reset.css',     'Core.Default.css',     'Core.Form.css',     'Core.Dialog.css',     'Core.Tooltip.css',     'Core.Login.css',     'Core.Control.css',     'Core.Table.css',     'Core.TicketZoom.css',     'Core.Print.css' ];</pre>

## Loader::Customer::CommonCSS::IE6##000-Framework

Description	Value
Description:	List of IE6-specific CSS files to always be loaded for the customer interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Customer::CommonCSS::IE6' }-&gt;{ '000-Framework' } = [     'Core.IE6.css',     'Core.Tooltip.IE6.css' ];</pre>

## Loader::Customer::CommonCSS::IE7##000-Framework

Description	Value
Description:	List of IE7-specific CSS files to always be loaded for the customer interface.

Description	Value
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Customer::CommonCSS::IE7' }-&gt;{ '000-Framework' } = [     'Core.IE7.css',     'Core.Tooltip.IE7.css',     'Core.Dialog.IE7.css' ];</pre>

## Loader::Customer::CommonCSS::IE8###000-Framework

Description	Value
Description:	List of IE8-specific CSS files to always be loaded for the customer interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Customer::CommonCSS::IE8' }-&gt;{ '000-Framework' } = [];</pre>

## Loader::Customer::CommonJS###000-Framework

Description	Value
Description:	List of JS files to always be loaded for the customer interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Customer::CommonJS' }-&gt;{ '000-Framework' } = [     'thirdparty/jquery-1.6.4/jquery.js',     'thirdparty/jquery-validate-1.9/jquery.validate.js',     'thirdparty/jquery-ui-1.8.16/jquery-ui.js',     'thirdparty/stacktrace-0.3/stacktrace.js',     'Core.Debug.js',     'Core.Data.js',     'Core.Exception.js',     'Core.JavaScriptEnhancements.js',</pre>

Description	Value
	<pre>'Core.Config.js', 'Core.App.js', 'Core.UI.js', 'Core.UI.IE7Fixes.js', 'Core.UI.Accessibility.js', 'Core.UI.Dialog.js', 'Core.UI.RichTextEditor.js', 'Core.UI.Datepicker.js', 'Core.UI.Popup.js', 'Core.Form.js', 'Core.Form.ErrorTooltips.js', 'Core.Form.Validate.js', 'Core.Customer.js' ];</pre>

## Loader::Agent::DefaultSelectedSkin

Description	Value
Description:	The agent skin's InternalName which should be used in the agent interface. Please check the available skins in Frontend::Agent::Skins.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::DefaultSelectedSkin'} = 'default';</pre>

## Loader::Customer::SelectedSkin::HostBased

Description	Value
Description:	It is possible to configure different skins, for example to distinguish between different customers, to be used on a per-domain basis within the application. Using a regular expression (regex), you can configure a Key/Content pair to match a domain. The value in "Key" should match the domain, and the value in "Content" should be a valid skin on your system. Please see the example entries for the proper form of the regex.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Loader::Customer::SelectedSkin::HostBased'} =  {   'host1\\\.example\\.com' =&gt; 'Someskin1',   'host2\\\.example\\.com' =&gt; 'Someskin2'</pre>

Description	Value
	<code>};</code>

## Core::WebUserAgent

### WebUserAgent::Timeout

Description	Value
Description:	Sets the timeout (in seconds) for http/ftp downloads.
Group:	Framework
SubGroup:	Core::WebUserAgent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'WebUserAgent::Timeout' } = '15';</code>

### WebUserAgent::Proxy

Description	Value
Description:	Defines the connections for http/ftp, via a proxy.
Group:	Framework
SubGroup:	Core::WebUserAgent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'WebUserAgent::Proxy' } = 'http://proxy.sn.no:8001/';</code>

## Crypt::PGP

### PGP

Description	Value
Description:	Enables PGP support. When PGP support is enabled for signing and securing mail, it is HIGHLY recommended that the web server be run as the OTRS user. Otherwise, there will be problems with the privileges when accessing .gnupg folder.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PGP' } = '0';</code>

## PGP::Bin

Description	Value
Description:	Defines the path to PGP binary.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PGP::Bin' } = '/usr/bin/gpg';</pre>

## PGP::Options

Description	Value
Description:	Sets the options for PGP binary.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PGP::Options' } = '--homedir /opt/otrs/.gnupg/ --batch --no-tty --yes';</pre>

## PGP::Key::Password

Description	Value
Description:	Sets the password for private PGP key.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PGP::Key::Password' } = {     '488A0B8F' =&gt; 'SomePassword',     'D2DF79FA' =&gt; 'SomePassword' };</pre>

## PGP::TrustedNetwork

Description	Value
Description:	Set this to yes if you trust in all your public and private pgp keys, even if they are not certified with a trusted signature.
Group:	Framework

Description	Value
SubGroup:	Crypt::PGP
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PGP::TrustedNetwork' } = '0';</pre>

## PGP::Log

Description	Value
Description:	Configure your own log text for PGP.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PGP::Log' } = {     'BADSIG' =&gt; 'The PGP signature with the keyid has     not been verified successfully.',     'ERRSIG' =&gt; 'It was not possible to check the PGP     signature, this may be caused by a missing public     key or an unsupported algorithm.',     'EXPKEYSIG' =&gt; 'The PGP signature was made by an     expired key.',     'GOODSIG' =&gt; 'Good PGP signature.',     'KEYREVOKED' =&gt; 'The PGP signature was made by a     revoked key, this could mean that the signature is     forged.',     'NODATA' =&gt; 'No valid OpenPGP data found.',     'NO_PUBKEY' =&gt; 'No public key found.',     'REVKEYSIG' =&gt; 'The PGP signature was made by a     revoked key, this could mean that the signature is     forged.',     'SIGEXPIRED' =&gt; 'The PGP signature is expired.',     'SIG_ID' =&gt; 'Signature data.',     'TRUST_UNDEFINED' =&gt; 'This key is not certified     with a trusted signature!.',     'VALIDSIG' =&gt; 'The PGP signature with the keyid     is good.' };</pre>

## Crypt::SMIME

### SMIME

Description	Value
Description:	Enables S/MIME support.

Description	Value
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME'} = '0';</code>

## SMIME::Bin

Description	Value
Description:	Defines the path to open ssl binary. It may need a HOME env (\$ENV{HOME} = '/var/lib/wwwrun').
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::Bin'} = '/usr/bin/openssl';</code>

## SMIME::CertPath

Description	Value
Description:	Specifies the directory where SSL certificates are stored.
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::CertPath'} = '/etc/ssl/certs';</code>

## SMIME::PrivatePath

Description	Value
Description:	Specifies the directory where private SSL certificates are stored.
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::PrivatePath'} = '/etc/ssl/private';</code>

## Frontend::Admin::AdminCustomerUser

### AdminCustomerUser::RunInitialWildcardSearch

Description	Value
Description:	Runs an initial wildcard search of the existing customer users when accessing the AdminCustomerUser module.
Group:	Framework
SubGroup:	Frontend::Admin::AdminCustomerUser
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'AdminCustomerUser::RunInitialWildcardSearch' } = '1';</pre>

## Frontend::Admin::ModuleRegistration

### Frontend::Module###Admin

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'Admin' } = {     'Description' =&gt; 'Admin-Area',     'Group' =&gt; [         'admin'     ],     'Loader' =&gt; {         'CSS' =&gt; [             'Core.Agent.Admin.css'         ],         'JavaScript' =&gt; [             'Core.Agent.Admin.SysConfig.js'         ]     },     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'a',             'Block' =&gt; 'ItemArea',             'Description' =&gt; '',             'Link' =&gt; 'Action=Admin',             'LinkOption' =&gt; '',             'Name' =&gt; 'Admin',         }     ] };</pre>

Description	Value
	<pre>'NavBar' =&gt; 'Admin', 'Prio' =&gt; '10000', 'Type' =&gt; 'Menu' } ], 'NavBarModule' =&gt; {     'Module' =&gt;     'Kernel::Output::HTML::NavBarModuleAdmin' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; '' };</pre>

## Frontend::Module###AdminInit

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminInit' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarName' =&gt; '',     'Title' =&gt; 'Init' };</pre>

## Frontend::Module###AdminUser

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminUser' } = {     'Description' =&gt; 'Create and manage agents.',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Agent',     } };</pre>

Description	Value
	<pre>'Description' =&gt; 'Create and manage agents.', 'Module' =&gt; Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'Agents', 'Prio' =&gt; '100' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Agents' };</pre>

## Frontend::Module###AdminGroup

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminGroup' } = { 'Description' =&gt; 'Admin', 'Group' =&gt; [ 'admin' ], 'NavBarModule' =&gt; { 'Block' =&gt; 'Agent', 'Description' =&gt; 'Create and manage groups.', 'Module' =&gt; Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'Groups', 'Prio' =&gt; '150' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Groups' };</pre>

## Frontend::Module###AdminUserGroup

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminUserGroup' } = {</pre>

Description	Value
	<pre>'Description' =&gt; 'Admin', 'Group' =&gt; [     'admin' ], 'NavBarModule' =&gt; {     'Block' =&gt; 'Agent',     'Description' =&gt; 'Link agents to groups.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Agents &lt;-&gt; Groups',     'Prio' =&gt; '200' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Agents &lt;-&gt; Groups' };</pre>

## Frontend::Module###AdminCustomerUser

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminCustomerUser' } = {     'Description' =&gt; 'Edit Customers',     'Group' =&gt; [         'admin',         'users'     ],     'GroupRo' =&gt; [         ''     ],     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'c',             'Block' =&gt; 'ItemArea',             'Description' =&gt; '',             'Link' =&gt; &gt;Action=AdminCustomerUser;Nav=Agent',             'LinkOption' =&gt; '',             'Name' =&gt; 'Customers',             'NavBar' =&gt; 'Customers',         }     ] };</pre>

Description	Value
	<pre>         'Prio' =&gt; '9000',         'Type' =&gt; 'Menu'     } ], 'NavBarModule' =&gt; {     'Block' =&gt; 'Customer',     'Description' =&gt; 'Create and manage customers.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Customers',     'Prio' =&gt; '300' }, 'NavBarName' =&gt; 'Customers', 'Title' =&gt; 'Customers' };</pre>

## Frontend::Module###AdminCustomerCompany

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminCustomerCompany' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin',         'users'     ],     'GroupRo' =&gt; [         ''     ],     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'c',             'Block' =&gt; 'ItemArea',             'Description' =&gt; '',             'Link' =&gt; &gt;Action=AdminCustomerCompany;Nav=Agent',             'LinkOption' =&gt; '',             'Name' =&gt; 'Companies',             'NavBar' =&gt; 'Companies',             'Prio' =&gt; '9100',             'Type' =&gt; 'Menu'         }     ], }</pre>

Description	Value
	<pre>'NavBarModule' =&gt; {     'Block' =&gt; 'Customer',     'Description' =&gt; 'Create and manage companies.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Customer Companies',     'Prio' =&gt; '310' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Customer Companies' };</pre>

## Frontend::Module###AdminCustomerUserGroup

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminCustomerUserGroup' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Customer',         'Description' =&gt; 'Link customers to groups.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Customers &lt;-&gt; Groups',         'Prio' =&gt; '400' },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Customers &lt;-&gt; Groups' };</pre>

## Frontend::Module###AdminCustomerUserService

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminCustomerUserService' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Customer',         'Description' =&gt; 'Link customers to services.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Customers &lt;-&gt; Services',         'Prio' =&gt; '500'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Customers &lt;-&gt; Services' };</pre>

## Frontend::Module###AdminRole

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminRole' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Agent',         'Description' =&gt; 'Create and manage roles.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Roles',         'Prio' =&gt; '600'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Roles' };</pre>

## Frontend::Module###AdminRoleUser

Description	Value
Description:	Frontend module registration for the agent interface.

Description	Value
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AdminRoleUser' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Agent',         'Description' =&gt; 'Link agents to roles.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Agents &lt;-&gt; Roles',         'Prio' =&gt; '700'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Agents &lt;-&gt; Roles' };</pre>

## Frontend::Module###AdminRoleGroup

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AdminRoleGroup' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Agent',         'Description' =&gt; 'Link roles to groups.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Roles &lt;-&gt; Groups',         'Prio' =&gt; '800'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Roles &lt;-&gt; Groups'</pre>

Description	Value
	};

## Frontend::Module###AdminSMIME

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'AdminSMIME' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Email',         'Description' =&gt; 'Manage S/MIME certificates for email encryption.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'S/MIME Certificates',             'Prio' =&gt; '1100'         },         'NavBarName' =&gt; 'Admin',         'Title' =&gt; 'S/MIME Management'     }; };</pre>

## Frontend::Module###AdminPGP

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'AdminPGP' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Email',         'Description' =&gt; 'Manage PGP keys for email encryption.',</pre>

Description	Value
	<pre>'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'PGP Keys', 'Prio' =&gt; '1200' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'PGP Key Management' };</pre>

## Frontend::Module###AdminMailAccount

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminMailAccount' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Email',         'Description' =&gt; 'Manage POP3 or IMAP accounts to fetch email from.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'PostMaster Mail Accounts',         'Prio' =&gt; '100'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Mail Accounts' };</pre>

## Frontend::Module###AdminPostMasterFilter

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminPostMasterFilter' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Email',         'Description' =&gt; 'Filter incoming emails.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'PostMaster Filters',         'Prio' =&gt; '200'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'PostMaster Filters' };</pre>

## Frontend::Module###AdminEmail

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminEmail' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'System',         'Description' =&gt; 'Send notifications to users.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Admin Notification',         'Prio' =&gt; '400'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Admin Notification' };</pre>

## Frontend::Module###AdminSession

Description	Value
Description:	Frontend module registration for the agent interface.

Description	Value
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AdminSession' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'System',         'Description' =&gt; 'Manage existing sessions.',         'Module' =&gt;             'Kernel' :&gt; { 'Output' :&gt; { 'HTML' :&gt; { 'NavBarModuleAdmin' },                 'Name' =&gt; 'Session Management',                 'Prio' =&gt; '500'             },             'NavBarName' =&gt; 'Admin',             'Title' =&gt; 'Session Management'         };     } };</pre>

## Frontend::Module###AdminPerformanceLog

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AdminPerformanceLog' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'Loader' =&gt; {         'CSS' =&gt; [             'Core.Agent.Admin.PerformanceLog.css'         ]     },     'NavBarModule' =&gt; {         'Block' =&gt; 'System',         'Description' =&gt; 'View performance benchmark results.',         'Module' =&gt;             'Kernel' :&gt; { 'Output' :&gt; { 'HTML' :&gt; { 'NavBarModuleAdmin' },</pre>

Description	Value
	<pre>'Name' =&gt; 'Performance Log', 'Prio' =&gt; '550' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Performance Log' };</pre>

## Frontend::Module###AdminLog

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminLog' } = { 'Description' =&gt; 'Admin', 'Group' =&gt; [ 'admin' ], 'NavBarModule' =&gt; { 'Block' =&gt; 'System', 'Description' =&gt; 'View system log messages.', 'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'System Log', 'Prio' =&gt; '600' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'System Log' };</pre>

## Frontend::Module###AdminSelectBox

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminSelectBox' } = { 'Description' =&gt; 'Admin', 'Group' =&gt; [ 'admin' ]</pre>

Description	Value
	<pre>], 'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Execute SQL statements.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'SQL Box',     'Prio' =&gt; '700' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'SQL Box' };</pre>

## Frontend::Module###AdminPackageManager

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminPackageManager' } = {     'Description' =&gt; 'Software Package Manager',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'System',         'Description' =&gt; 'Update and extend your system with software packages.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Package Manager',         'Prio' =&gt; '1000'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Package Manager' };</pre>

## Frontend::Module###AdminGenericInterfaceDebugger

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminGenericInterfaceDebugger' } =  {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'CSS_IE7' =&gt; [       'Core.Agent.Admin.GenericInterface.IE7.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceDebugger.js'     ]   },   'Title' =&gt; 'GenericInterface Debugger GUI' };</pre>

## Frontend::Module###AdminGenericInterfaceWebservice

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminGenericInterfaceWebservice' } =  {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceWebservice.js'     ]   },   'NavBarModule' =&gt; {</pre>

Description	Value
	<pre>'Block' =&gt; 'System', 'Description' =&gt; 'Create and manage web services.', 'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'Web Services', 'Prio' =&gt; '1000' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'GenericInterface Web Service GUI' };</pre>

## Frontend::Module###AdminGenericInterfaceTransportHTTPSOAP

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminGenericInterfaceTransportHTTPSOAP' } =  { 'Description' =&gt; 'Admin', 'Group' =&gt; [   'admin' ], 'Loader' =&gt; {   'CSS' =&gt; [     'Core.Agent.Admin.GenericInterface.css'   ] }, 'Title' =&gt; 'GenericInterface TransportHTTPSOAP GUI' };</pre>

## Frontend::Module###AdminGenericInterfaceWebserviceHistory

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminGenericInterfaceWebserviceHistory' } =  {</pre>

Description	Value
	<pre>'Description' =&gt; 'Admin', 'Group' =&gt; [   'admin' ], 'Loader' =&gt; {   'CSS' =&gt; [     'Core.Agent.Admin.GenericInterface.css'   ],   'JavaScript' =&gt; [     'Core.Agent.Admin.GenericInterfaceWebserviceHistory.js'   ] }, 'Title' =&gt; 'GenericInterface Webservice History GUI' };</pre>

## Frontend::Module###AdminGenericInterfaceOperationDefault

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AdminGenericInterfaceOperationDefault'} =  {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin' ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceOperation.js'     ] },   'Title' =&gt; 'GenericInterface Operation GUI' };</pre>

## Frontend::Module###AdminGenericInterfaceInvokerDefault

Description	Value
Description:	Frontend module registration for the agent interface.

Description	Value
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module' }- &gt;{ 'AdminGenericInterfaceInvokerDefault' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'Loader' =&gt; {         'CSS' =&gt; [             'Core.Agent.Admin.GenericInterface.css'         ],         'JavaScript' =&gt; [             'Core.Agent.Admin.GenericInterfaceInvoker.js'         ]     },     'Title' =&gt; 'GenericInterface Invoker GUI' };</pre>

## Frontend::Module###AdminGenericInterfaceMappingSimple

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module' }- &gt;{ 'AdminGenericInterfaceMappingSimple' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'Loader' =&gt; {         'CSS' =&gt; [             'Core.Agent.Admin.GenericInterface.css'         ],         'CSS_IE7' =&gt; [             'Core.Agent.Admin.GenericInterface.IE7.css'         ],         'JavaScript' =&gt; [             'Core.Agent.Admin.GenericInterfaceMappingSimple.js'         ]     } };</pre>

Description	Value
	<pre>}, &gt;Title' =&gt; 'GenericInterface Webservice Mapping GUI' };</pre>

## Frontend::Agent

### AgentLogo

Description	Value
Description:	The logo shown in the header of the agent interface. The URL to the image can be a relative URL to the skin image directory, or a full URL to a remote web server.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'AgentLogo' } = {     'StyleHeight' =&gt; '67px',     'StyleRight' =&gt; '38px',     'StyleTop' =&gt; '-4px',     'StyleWidth' =&gt; '244px',     'URL' =&gt; 'skins/Agent/default/img/logo_bg.png' };</pre>

### AgentLoginLogo

Description	Value
Description:	The logo shown on top of the login box of the agent interface. The URL to the image must be relative URL to the skin image directory.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'AgentLoginLogo' } = {     'StyleHeight' =&gt; '100px',     'URL' =&gt; 'skins/Agent/default/img/ loginlogo_default.png' };</pre>

### LoginURL

Description	Value
Description:	Defines an alternate URL, where the login link refers to.

Description	Value
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'LoginURL' } = 'http://host.example.com/ login.html';</pre>

## LogoutURL

Description	Value
Description:	Defines an alternate URL, where the logout link refers to.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'LogoutURL' } = 'http://host.example.com/ thanks-for-using-otrs.html';</pre>

## PreApplicationModule###AgentInfo

Description	Value
Description:	Defines a useful module to load specific user options or to display news.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreApplicationModule' }-&gt;{ 'AgentInfo' } = 'Kernel::Modules::AgentInfo';</pre>

## InfoKey

Description	Value
Description:	Defines the key to be checked with Kernel::Modules::AgentInfo module. If this user preferences key is true, the message is accepted by the system.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0

Description	Value
Config-Setting:	<code>\$Self-&gt;{ 'InfoKey' } = 'wpt22';</code>

## InfoFile

Description	Value
Description:	File that is displayed in the Kernel::Modules::AgentInfo module, if located under Kernel/Output/HTML/Standard/AgentInfo.dtl.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'InfoFile' } = 'AgentInfo';</code>

## LostPassword

Description	Value
Description:	Activates lost password feature for agents, in the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'LostPassword' } = '1';</code>

## ShowMotd

Description	Value
Description:	Shows the message of the day on login screen of the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'ShowMotd' } = '0';</code>

## NotificationSubjectLostPasswordToken

Description	Value
Description:	Defines the subject for notification mails sent to agents, with token about new requested password.

Description	Value
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'NotificationSubjectLostPasswordToken' } = 'New OTRS password request';</pre>

## NotificationBodyLostPasswordToken

Description	Value
Description:	Defines the body text for notification mails sent to agents, with token about new requested password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'NotificationBodyLostPasswordToken' } = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  You or someone impersonating you has requested to change your OTRS password.  If you want to do this, click on the link below. You will receive another email containing the password.  &lt;OTRS_CONFIG_HttpType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;index.pl? Action=LostPassword;Token=&lt;OTRS_TOKEN&gt;  If you did not request a new password, please ignore this email.  ';</pre>

## NotificationSubjectLostPassword

Description	Value
Description:	Defines the subject for notification mails sent to agents, about new password.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'NotificationSubjectLostPassword' } = 'New OTRS password';</pre>

## NotificationBodyLostPassword

Description	Value
Description:	Defines the body text for notification mails sent to agents, about new password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'NotificationBodyLostPassword' } = 'Hi &lt;OTRS_USERFIRSTNAME&gt;, Here\'s your new OTRS password. New password: &lt;OTRS_NEWPW&gt; You can log in via the following URL: &lt;OTRS_CONFIG_HttpType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/&lt;OTRS_CONFIG_ScriptAlias&gt;index.pl ';</pre>

## OpenMainMenuOnHover

Description	Value
Description:	If enabled, the first level of the main menu opens on mouse hover (instead of click only).
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'OpenMainMenuOnHover' } = '0';</pre>

## Loader::Agent::Skin##000-default

Description	Value
Description:	Default skin for interface.

Description	Value
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Agent::Skin' }-&gt;{ '000-default' } = {     'Description' =&gt; 'This is the default orange - black skin.',     'HomePage' =&gt; 'www.otrs.org',     'InternalName' =&gt; 'default',     'VisibleName' =&gt; 'Default' };</pre>

## Loader::Agent::Skin###001-ivory

Description	Value
Description:	Balanced white skin by Felix Niklas.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Agent::Skin' }-&gt;{ '001-ivory' } = {     'Description' =&gt; 'Balanced white skin by Felix Niklas',     'HomePage' =&gt; 'www.felixniklas.de',     'InternalName' =&gt; 'ivory',     'VisibleName' =&gt; 'Ivory' };</pre>

## Loader::Agent::Skin###001-slim

Description	Value
Description:	Experimental "Slim" skin which tries to save screen space for power users.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Agent::Skin' }-&gt;{ '001-slim' } = {     'Description' =&gt; 'Experimental "Slim" skin which tries to save screen space for power users.',     'HomePage' =&gt; 'www.otrs.org',</pre>

Description	Value
	'InternalName' => 'slim', 'VisibleName' => 'Slim' };

## Loader::Agent::DefaultSelectedSkin::HostBased

Description	Value
Description:	It is possible to configure different skins, for example to distinguish between different agents, to be used on a per-domain basis within the application. Using a regular expression (regex), you can configure a Key/Content pair to match a domain. The value in "Key" should match the domain, and the value in "Content" should be a valid skin on your system. Please see the example entries for the proper form of the regex.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	\$Self->{ 'Loader::Agent::DefaultSelectedSkin::HostBased' } = { 'host1\\\\.example\\\\.com' => 'SomeSkin1', 'host2\\\\.example\\\\.com' => 'SomeSkin2' };

## Frontend::Agent::Dashboard

### DashboardBackend###0000-ProductNotify

Description	Value
Description:	Defines the parameters for the dashboard backend. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" defines the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	\$Self->{ 'DashboardBackend' }->{ '0000-ProductNotify' } = { 'Block' => 'ContentLarge', 'CacheTTLLocal' => '1440', 'Default' => '1', 'Description' => 'News about OTRS releases!', 'Group' => 'admin',

Description	Value
	<pre>'Module' =&gt; 'Kernel::Output::HTML::DashboardProductNotify', 'Title' =&gt; 'Product News', 'URL' =&gt; 'http://otrs.org/product.xml' };</pre>

## DashboardBackend###0400-UserOnline

Description	Value
Description:	Defines the parameters for the dashboard backend. "Limit" defines the number of entries displayed by default. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" defines the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0400-UserOnline' } = {     'Block' =&gt; 'ContentSmall',     'CacheTTLLocal' =&gt; '5',     'Default' =&gt; '0',     'Description' =&gt; '',     'Filter' =&gt; 'Agent',     'Group' =&gt; '',     'IdleMinutes' =&gt; '60',     'Limit' =&gt; '10',     'Module' =&gt;         'Kernel::Output::HTML::DashboardUserOnline',     'ShowEmail' =&gt; '1',     'SortBy' =&gt; 'UserLastname',     'Title' =&gt; 'Online' };</pre>

## DashboardBackend###0410-RSS

Description	Value
Description:	Defines the parameters for the dashboard backend. "Limit" defines the number of entries displayed by default. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTL" indicates the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0410-RSS' } = {     'Block' =&gt; 'ContentSmall',     'CacheTTL' =&gt; '360',     'Default' =&gt; '1',     'Description' =&gt; '',     'Group' =&gt; '',     'Limit' =&gt; '6',     'Module' =&gt; 'Kernel::Output::HTML::DashboardRSS',     'Title' =&gt; 'OTRS News',     'URL' =&gt; 'http://www.otrs.com/en/rss.xml',     'URL_de' =&gt; 'http://www.otrs.com/de/rss.xml',     'URL_es' =&gt; 'http://www.otrs.com/es/rss.xml',     'URL_nl' =&gt; 'http://www.otrs.com/nl/rss.xml',     'URL_ru' =&gt; 'http://www.otrs.com/ru/rss.xml',     'URL_zh' =&gt; 'http://www.otrs.com/cn/rss.xml' };</pre>

## DashboardBackend###0200-Image

Description	Value
Description:	Defines the parameters for the dashboard backend. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTL" indicates the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0200-Image' } = {     'Block' =&gt; 'ContentLarge',     'Default' =&gt; '1',     'Description' =&gt; 'Some picture description!',     'Group' =&gt; '',     'Height' =&gt; '140',     'Link' =&gt; 'http://otrs.org/',     'LinkTitle' =&gt; 'http://otrs.org/',     'Module' =&gt;     'Kernel::Output::HTML::DashboardImage',     'Title' =&gt; 'A picture',     'URL' =&gt; 'http://www.otrs.com/uploads/pics/ jointhecommunity_02.jpg',     'Width' =&gt; '198' };</pre>

## DashboardBackend###0210-MOTD

Description	Value
Description:	Shows the message of the day (MOTD) in the agent dashboard. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0210-MOTD' } = {     'Block' =&gt; 'ContentLarge',     'Default' =&gt; '1',     'Group' =&gt; '',     'Module' =&gt;     'Kernel::Output::HTML::DashboardMOTD',     'Title' =&gt; 'Message of the Day' };</pre>

## DashboardBackend###0300-IFrame

Description	Value
Description:	Defines the parameters for the dashboard backend. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTL" indicates the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0300-IFrame' } = {     'Align' =&gt; 'left',     'Block' =&gt; 'ContentLarge',     'Default' =&gt; '1',     'Description' =&gt; 'Some description!',     'Frameborder' =&gt; '1',     'Group' =&gt; '',     'Height' =&gt; '800',     'Link' =&gt; 'http://otrs.org/',     'LinkTitle' =&gt; 'OTRS.org/',     'Marginheight' =&gt; '5',     'Marginwidth' =&gt; '5',     'Module' =&gt;     'Kernel::Output::HTML::DashboardIFrame',     'Scrolling' =&gt; 'auto',</pre>

Description	Value
	<pre>'Title' =&gt; 'A Website', 'URL' =&gt; 'http://www.otrs.org/', 'Width' =&gt; '1024' };</pre>

## Frontend::Agent::LinkObject

### Frontend::AgentLinkObject::WildcardSearch

Description	Value
Description:	Starts a wildcard search of the active object after the link object mask is started.
Group:	Framework
SubGroup:	Frontend::Agent::LinkObject
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Frontend::AgentLinkObject::WildcardSearch' } = '0';</pre>

## Frontend::Agent::ModuleMetaHead

### Frontend::HeaderMetaModule###100-Refresh

Description	Value
Description:	Defines the module to generate html refresh headers of html sites.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleMetaHead
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::HeaderMetaModule' }-&gt;{ '100- Refresh' } = {     'Module' =&gt;     'Kernel::Output::HTML::HeaderMetaRefresh' };</pre>

## Frontend::Agent::ModuleNotify

### Frontend::NotifyModule###200-UID-Check

Description	Value
Description:	Defines the module to display a notification in the agent interface, if the system is used by the admin user (normally you shouldn't work as admin).

Description	Value
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::NotifyModule' }-&gt;{ '200-UID- Check' } =  {     'Module' =&gt;     'Kernel::Output::HTML::NotificationUIDCheck' };</pre>

## Frontend::NotifyModule###300-ShowAgentOnline

Description	Value
Description:	Defines the module that shows all the currently logged in agents in the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::NotifyModule' }-&gt;{ '300- ShowAgentOnline' } =  {     'IdleMinutes' =&gt; '60',     'Module' =&gt;     'Kernel::Output::HTML::NotificationAgentOnline',     'ShowEmail' =&gt; '1' };</pre>

## Frontend::NotifyModule###400-ShowCustomerOnline

Description	Value
Description:	Defines the module that shows all the currently loged in customers in the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::NotifyModule' }-&gt;{ '400- ShowCustomerOnline' } =  {     'IdleMinutes' =&gt; '60',     'Module' =&gt;     'Kernel::Output::HTML::NotificationCustomerOnline',     'ShowEmail' =&gt; '1'</pre>

Description	Value
	};

## Frontend::NotifyModule###500-OutofOffice-Check

Description	Value
Description:	Defines the module to display a notification in the agent interface, if the agent is logged in while having out-of-office active.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::NotifyModule' }-&gt;{ '500-OutofOffice-Check' } = {     'Module' =&gt;     'Kernel::Output::HTML::NotificationOutOfOfficeCheck' };</pre>

## Frontend::NotifyModule###900-Generic

Description	Value
Description:	Defines the module that shows a generic notification in the agent interface. Either "Text" - if configured - or the contents of "File" will be displayed.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::NotifyModule' }-&gt;{ '900-Generic' } = = {     'File' =&gt; '&lt;OTRS_CONFIG_Home&gt;/var/notify.txt',     'Link' =&gt; 'http://www.otsrs.com',     'Module' =&gt;     'Kernel::Output::HTML::NotificationGeneric',     'Priority' =&gt; 'Warning',     'Text' =&gt; 'The OTRS Website' };</pre>

## Frontend::Agent::ModuleRegistration

### Frontend::Module###Logout

Description	Value
Description:	Frontend module registration for the agent interface.

Description	Value
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'Logout' } = {     'Description' =&gt; 'Logout',     'NavBarName' =&gt; '',     'Title' =&gt; '' };</pre>

## Frontend::Module###AgentDashboard

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentDashboard' } = {     'Description' =&gt; 'Agent Dashboard',     'Loader' =&gt; {         'JavaScript' =&gt; [             'thirdparty/flot-0.7/excanvas.js',             'thirdparty/flot-0.7/jquery.flot.js',             'Core.UI.Chart.js',             'Core.UI.DnD.js',             'Core.Agent.Dashboard.js'         ]     },     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'd',             'Block' =&gt; 'ItemArea',             'Description' =&gt; '',             'Link' =&gt; 'Action=AgentDashboard',             'LinkOption' =&gt; '',             'Name' =&gt; 'Dashboard',             'NavBar' =&gt; 'Dashboard',             'Prio' =&gt; '50',             'Type' =&gt; 'Menu'         }     ],     'NavBarName' =&gt; 'Dashboard',     'Title' =&gt; '' };</pre>

## Frontend::Module###AgentPreferences

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt;{ 'Module' :&gt;{ 'AgentPreferences' } } = {     'Description' =&gt; 'Agent Preferences',     'NavBarName' =&gt; 'Preferences',     'Title' =&gt; '' };</pre>

## Frontend::Module###PictureUpload

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt;{ 'Module' :&gt;{ 'PictureUpload' } } = {     'Description' =&gt; 'Picture upload module',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Picture-Upload' };</pre>

## Frontend::Module###AgentSpelling

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt;{ 'Module' :&gt;{ 'AgentSpelling' } } = {</pre>

Description	Value
	<pre>'Description' =&gt; 'Spell checker', 'Loader' =&gt; {     'JavaScript' =&gt; [         'Core.Agent.TicketAction.js'     ] }, 'NavBarName' =&gt; '', 'Title' =&gt; 'Spell Checker' };</pre>

## Frontend::Module###SpellingInline

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'SpellingInline' } = {     'Description' =&gt; 'Spell checker',     'NavBarName' =&gt; '',     'Title' =&gt; 'Spell Checker' };</pre>

## Frontend::Module###AgentBook

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentBook' } = {     'Description' =&gt; 'Address book of CustomerUser sources',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.CustomerSearch.js',             'Core.Agent.TicketAction.js'         ] },     'NavBarName' =&gt; '',     'Title' =&gt; 'Address Book'</pre>

Description	Value
	};

## Frontend::Module###AgentLinkObject

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AgentLinkObject' } =    {     'Description' =&gt; 'Link Object',     'NavBarName' =&gt; '',     'Title' =&gt; 'Link Object'   }; };</pre>

## Frontend::Module###AgentInfo

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AgentInfo' } =  {   'Description' =&gt; 'Generic Info module',   'NavBarName' =&gt; '',   'Title' =&gt; 'Info' };};</pre>

## Frontend::Module###AgentSearch

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AgentSearch' } =  {</pre>

Description	Value
	'Description' => 'Global Search Module', 'NavBarName' => '', 'Title' => 'Search' };

## CustomerFrontend::Module###SpellingInline

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	\$Self->{ 'CustomerFrontend::Module' }->{ 'SpellingInline' } = { 'Description' => 'Spell checker', 'NavBarName' => '', 'Title' => 'Spell Checker' };

## Frontend::Module###AgentHTMLReference

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	\$Self->{ 'Frontend::Module' }->{ 'AgentHTMLReference' } = { 'Description' => 'HTML Reference', 'Group' => [ 'users' ], 'GroupRo' => [ 'users' ], 'Loader' => { 'CSS' => [ 'Core.Agent.HTMLReference.css' ] }, 'NavBarName' => '', 'Title' => 'HTML Reference' };

## Frontend::Module###AgentStats

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'AgentStats' } } = {     'Description' =&gt; 'Stats',     'Group' =&gt; [         'stats'     ],     'GroupRo' =&gt; [         'stats'     ],     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.Stats.js'         ]     },     'NavBar' =&gt; [         {             'AccessKey' =&gt; '',             'Block' =&gt; 'ItemArea',             'Description' =&gt; '',             'Link' =&gt;                 'Action=AgentStats;Subaction=Overview',             'LinkOption' =&gt; '',             'Name' =&gt; 'Statistics',             'NavBar' =&gt; 'Stats',             'Prio' =&gt; '8500',             'Type' =&gt; 'Menu'         },         {             'AccessKey' =&gt; '',             'Block' =&gt; '',             'Description' =&gt; 'Overview',             'GroupRo' =&gt; [                 'stats'             ],             'Link' =&gt;                 'Action=AgentStats;Subaction=Overview',             'LinkOption' =&gt; '',             'Name' =&gt; 'Overview',             'NavBar' =&gt; 'Stats',             'Prio' =&gt; '100',             'Type' =&gt; ''         },         {             'AccessKey' =&gt; '',             'Block' =&gt; '',             'Description' =&gt; 'Overview',             'GroupRo' =&gt; [                 'stats'             ],             'Link' =&gt;                 'Action=AgentStats;Subaction=Overview',             'LinkOption' =&gt; '',             'Name' =&gt; 'Overview',             'NavBar' =&gt; 'Stats',             'Prio' =&gt; '100',             'Type' =&gt; ''         }     ] }</pre>

Description	Value
	<pre>'AccessKey' =&gt; '', 'Block' =&gt; '', 'Description' =&gt; 'New', 'Group' =&gt; [     'stats' ], 'Link' =&gt; 'Action=AgentStats;Subaction=Add', 'LinkOption' =&gt; '', 'Name' =&gt; 'New', 'NavBar' =&gt; 'Stats', 'Prio' =&gt; '200', 'Type' =&gt; '' }, {     'AccessKey' =&gt; '',     'Block' =&gt; '',     'Description' =&gt; 'Import',     'Group' =&gt; [         'stats'     ],     'Link' =&gt;         'Action=AgentStats;Subaction=Import',         'LinkOption' =&gt; '',         'Name' =&gt; 'Import',         'NavBar' =&gt; 'Stats',         'Prio' =&gt; '300',         'Type' =&gt; ''     } ], 'NavBarName' =&gt; 'Stats', 'Title' =&gt; 'Stats' };</pre>

## Frontend::Agent::NavBarModule

### Frontend::NavBarModule###6-CustomerCompany

Description	Value
Description:	Frontend module registration (disable company link if no company feature is used).
Group:	Framework
SubGroup:	Frontend::Agent::NavBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NavBarModule'}-&gt;{ '6- CustomerCompany' } = {     'Module' =&gt;         'Kernel::Output::HTML::NavBarCustomerCompany'</pre>

Description	Value
	<code>};</code>

## Frontend::Agent::Preferences

### PreferencesTableValue

Description	Value
Description:	Defines the name of the column to store the data in the preferences table.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PreferencesTableValue' } = 'preferences_value';</code>

### PreferencesTableUserID

Description	Value
Description:	Defines the name of the column to store the user identifier in the preferences table.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PreferencesTableUserID' } = 'user_id';</code>

### PreferencesView

Description	Value
Description:	Sets the display order of the different items in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PreferencesView' } = [ 'User Profile', 'Email Settings', 'Other Settings' ];</code>

## PreferencesGroups###Password

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Password'} = {     'Active' =&gt; '1',     'Area' =&gt; 'Agent',     'Column' =&gt; 'User Profile',     'Label' =&gt; 'Change password',     'Module' =&gt;         'Kernel::Output::HTML::PreferencesPassword',     'PasswordMaxLoginFailed' =&gt; '0',     'PasswordMin2Characters' =&gt; '0',     'PasswordMin2Lower2UpperCharacters' =&gt; '0',     'PasswordMinSize' =&gt; '0',     'PasswordNeedDigit' =&gt; '0',     'PasswordRegExp' =&gt; '',     'Prio' =&gt; '0500' };</pre>

## PreferencesGroups###SpellDict

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view. Take care to maintain the dictionaries installed in the system in the data section.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'SpellDict'} = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Data' =&gt; {         'deutsch' =&gt; 'Deutsch',         'english' =&gt; 'English'     },     'DataSelected' =&gt; 'english',     'Key' =&gt; 'Default spelling dictionary',     'Label' =&gt; 'Spelling Dictionary',     'Module' =&gt;         'Kernel::Output::HTML::PreferencesGeneric',</pre>

Description	Value
	'PrefKey' => 'UserSpellDict', 'Prio' => '2000' };

**PreferencesGroups###Comment**

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'Comment' } = {     'Active' =&gt; '0',     'Block' =&gt; 'Input',     'Column' =&gt; 'Other Settings',     'Data' =&gt; '\$Env{"UserComment"}',     'Key' =&gt; 'Comment',     'Label' =&gt; 'Comment',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesGeneric',     'PrefKey' =&gt; 'UserComment',     'Prio' =&gt; '6000' };</pre>

**PreferencesGroups###Language**

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'Language' } = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Key' =&gt; 'Frontend language',     'Label' =&gt; 'Language',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesLanguage',     'PrefKey' =&gt; 'UserLanguage',     'Prio' =&gt; '1000' };</pre>

## PreferencesGroups###Skin

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Skin'} = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Key' =&gt; 'Wear this frontend skin',     'Label' =&gt; 'Skin',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesSkin',     'PrefKey' =&gt; 'UserSkin',     'Prio' =&gt; '2000' };</pre>

## PreferencesGroups###Theme

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Theme'} = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Key' =&gt; 'Frontend theme',     'Label' =&gt; 'Theme',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesTheme',     'PrefKey' =&gt; 'UserTheme',     'Prio' =&gt; '3000' };</pre>

## PreferencesGroups###OutOfOffice

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework

Description	Value
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'OutOfOffice'} = {     'Active' =&gt; '1',     'Block' =&gt; 'OutOfOffice',     'Column' =&gt; 'User Profile',     'Key' =&gt; '',     'Label' =&gt; 'Out Of Office Time',     'Module' =&gt;         'Kernel::Output::HTML::PreferencesOutOfOffice',     'PrefKey' =&gt; 'UserOutOfOffice',     'Prio' =&gt; '4000' };</pre>

## PreferencesGroups###TimeZone

Description	Value
Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'TimeZone'} = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Key' =&gt; 'Time Zone',     'Label' =&gt; 'Time Zone',     'Module' =&gt;         'Kernel::Output::HTML::PreferencesTimeZone',     'PrefKey' =&gt; 'UserTimeZone',     'Prio' =&gt; '5000' };</pre>

## PreferencesGroups###CSVSeparator

Description	Value
Description:	Gives end users the possibility to override the separator character for CSV files, defined in the translation files.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'CSVSeparator' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Other Settings',     'Data' =&gt; {         '' =&gt; '',         ',' =&gt; ',',         ';' =&gt; ';',         '\\t' =&gt; 'tab',         ' ' =&gt; ' '     },     'DataSelected' =&gt; '0',     'Desc' =&gt; 'Select the separator character used in CSV files (stats and searches). If you don\'t select a separator here, the default separator for your language will be used.',     'Key' =&gt; 'CSV Separator',     'Label' =&gt; 'CSV Separator',     'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',     'PrefKey' =&gt; 'UserCSVSeparator',     'Prio' =&gt; '4000' };</pre>

## Frontend::Agent::SearchRouter

### Frontend::SearchDefault

Description	Value
Description:	Search backend default router.
Group:	Framework
SubGroup:	Frontend::Agent::SearchRouter
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::SearchDefault' } = 'Action=AgentTicketSearch;Subaction=AJAX';</pre>

## Frontend::Agent::Stats

### Stats::SearchPageShown

Description	Value
Description:	Defines the default maximum number of search results shown on the overview page.
Group:	Framework

Description	Value
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::SearchPageShown' } = '20';</pre>

## Stats::DefaultSelectedDynamicObject

Description	Value
Description:	Defines the default selection at the drop down menu for dynamic objects (Form: Common Specification).
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::DefaultSelectedDynamicObject' } = 'Ticket';</pre>

## Stats::DefaultSelectedPermissions

Description	Value
Description:	Defines the default selection at the drop down menu for permissions (Form: Common Specification).
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::DefaultSelectedPermissions' } = [ 'stats' ];</pre>

## Stats::DefaultSelectedFormat

Description	Value
Description:	Defines the default selection at the drop down menu for stats format (Form: Common Specification). Please insert the format key (see Stats::Format).
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	\$Self->{'Stats::DefaultSelectedFormat'} = [ 'Print', 'CSV' ];

## Stats::SearchLimit

Description	Value
Description:	Defines the search limit for the stats.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	\$Self->{'Stats::SearchLimit'} = '500';

## Stats::Format

Description	Value
Description:	Defines all the possible stats output formats.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	\$Self->{'Stats::Format'} = { 'CSV' => 'CSV', 'GD::Graph::area' => 'graph-area', 'GD::Graph::bars' => 'graph-bars', 'GD::Graph::hbars' => 'graph-hbars', 'GD::Graph::lines' => 'graph-lines', 'GD::Graph::linepoints' => 'graph-lines-points', 'GD::Graph::pie' => 'graph-pie', 'GD::Graph::points' => 'graph-points', 'Print' => 'Print' };

## Stats::GraphSize

Description	Value
Description:	Sets the size of the statistic graph.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::GraphSize' } = {     '1200x800' =&gt; '1200x800',     '1600x1200' =&gt; '1600x1200',     '800x600' =&gt; '800x600' };</pre>

## Stats::TimeType

Description	Value
Description:	Sets the time type which should be shown.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::TimeType' } = 'Extended';</pre>

## Stats::ExchangeAxis

Description	Value
Description:	Allows agents to exchange the axis of a stat if they generate one.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::ExchangeAxis' } = '0';</pre>

## Stats::UseAgentElementInStats

Description	Value
Description:	Allows agents to generate individual-related stats.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Stats::UseAgentElementInStats' } = '0';</pre>

## Stats::CustomerIDAsMultiSelect

Description	Value
Description:	Shows all the customer identifiers in a multi-select field (not useful if you have a lot of customer identifiers).

Description	Value
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Stats::CustomerIDAsMultiSelect'} = '1';</pre>

## Frontend::Customer

### CustomerHeadline

Description	Value
Description:	The headline shown in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'CustomerHeadline'} = 'Example Company Support';</pre>

### CustomerLogo

Description	Value
Description:	The logo shown in the header of the customer interface. The URL to the image can be a relative URL to the skin image directory, or a full URL to a remote web server.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerLogo'} = {     'StyleHeight' =&gt; '50px',     'StyleRight' =&gt; '25px',     'StyleTop' =&gt; '2px',     'StyleWidth' =&gt; '135px',     'URL' =&gt; 'skins/Customer/default/img/logo.png' };</pre>

### CustomerPanelUserID

Description	Value
Description:	Defines the user identifier for the customer panel.

Description	Value
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'CustomerPanelUserID' } = '1';</code>

## CustomerGroupSupport

Description	Value
Description:	Activates support for customer groups.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'CustomerGroupSupport' } = '0';</code>

## CustomerGroupAlwaysGroups

Description	Value
Description:	Defines the groups every customer user will be in (if CustomerGroupSupport is enabled and you don't want to manage every user for these groups).
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'CustomerGroupAlwaysGroups' } = [ 'users' ];</code>

## CustomerPanelLoginURL

Description	Value
Description:	Defines an alternate login URL for the customer panel..
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'CustomerPanelLoginURL'} = 'http:// host.example.com/cgi-bin/login.pl';</pre>

## CustomerPanelLogoutURL

Description	Value
Description:	Defines an alternate logout URL for the customer panel.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerPanelLogoutURL'} = 'http:// host.example.com/cgi-bin/login.pl';</pre>

## Frontend::CustomerUser::Item###1-GoogleMaps

Description	Value
Description:	Defines a customer item, which generates a google maps icon at the end of a customer info block.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{ '1- GoogleMaps' } = {   'Attributes' =&gt;   'UserStreet;UserCity;UserCountry;',   'CSS' =&gt;   'Core.Agent.CustomerUser.GoogleMaps.css',   'CSSClass' =&gt; 'GoogleMaps',   'Module' =&gt;   'Kernel::Output::HTML::CustomerUserGeneric',   'Required' =&gt; 'UserStreet;UserCity;',   'Target' =&gt; '_blank',   'Text' =&gt; 'Location',   'URL' =&gt; 'http://maps.google.com/maps?z=7&amp;q=' };</pre>

## Frontend::CustomerUser::Item###2-Google

Description	Value
Description:	Defines a customer item, which generates a google icon at the end of a customer info block.
Group:	Framework

Description	Value
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'2-Google'} = {     'Attributes' =&gt; 'UserFirstname;UserLastname;',     'CSS' =&gt; 'Core.Agent.CustomerUser.Google.css',     'CSSClass' =&gt; 'Google',     'Module' =&gt;         'Kernel::Output::HTML::CustomerUserGeneric',     'Required' =&gt; 'UserFirstname;UserLastname;',     'Target' =&gt; '_blank',     'Text' =&gt; 'Google',     'URL' =&gt; 'http://google.com/search?q=' };</pre>

## Frontend::CustomerUser::Item##2-LinkedIn

Description	Value
Description:	Defines a customer item, which generates a LinkedIn icon at the end of a customer info block.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'2-LinkedIn'} = {     'Attributes' =&gt; 'UserFirstname;UserLastname;',     'CSS' =&gt; 'Core.Agent.CustomerUser.LinkedIn.css',     'CSSClass' =&gt; 'LinkedIn',     'Module' =&gt;         'Kernel::Output::HTML::CustomerUserGeneric',     'Required' =&gt; 'UserFirstname;UserLastname;',     'Target' =&gt; '_blank',     'Text' =&gt; 'LinkedIn',     'URL' =&gt; 'http://www.linkedin.com/commonSearch? type=people&amp;keywords=' };</pre>

## Frontend::CustomerUser::Item##3-XING

Description	Value
Description:	Defines a customer item, which generates a XING icon at the end of a customer info block.
Group:	Framework

Description	Value
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CustomerUser::Item' }-&gt;{ '3-XING' } = {     'Attributes' =&gt; 'UserFirstname;UserLastname;',     'CSS' =&gt; 'Core.Agent.CustomerUser.Xing.css',     'CSSClass' =&gt; 'Xing',     'Module' =&gt;         'Kernel::Output::HTML::CustomerUserGeneric',     'Required' =&gt; 'UserFirstname;UserLastname;',     'Target' =&gt; '_blank',     'Text' =&gt; 'XING',     'URL' =&gt; 'https://www.xing.com/app/search?op=search;keywords=' };</pre>

## CustomerPanelPreApplicationModule###CustomerAccept

Description	Value
Description:	This module and its PreRun() function will be executed, if defined, for every request. This module is useful to check some user options or to display news about new applications.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelPreApplicationModule' }-&gt;{ 'CustomerAccept' } =     'Kernel::Modules::CustomerAccept';</pre>

## CustomerPanel::InfoKey

Description	Value
Description:	Defines the key to check with CustomerAccept. If this user preferences key is true, then the message is accepted by the system.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanel::InfoKey' } =     'CustomerAccept1';</pre>

## CustomerPanel::InfoFile

Description	Value
Description:	Defines the path of the shown info file, that is located under Kernel/Output/HTML/Standard/CustomerAccept.dtl.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanel::InfoFile' } = 'CustomerAccept';</pre>

## CustomerPanelLostPassword

Description	Value
Description:	Activates lost password feature for customers.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelLostPassword' } = '1';</pre>

## CustomerPanelCreateAccount

Description	Value
Description:	Enables customers to create their own accounts.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelCreateAccount' } = '1';</pre>

## CustomerPanelSubjectLostPasswordToken

Description	Value
Description:	Defines the subject for notification mails sent to customers, with token about new requested password.
Group:	Framework
SubGroup:	Frontend::Customer

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelSubjectLostPasswordToken' } = 'New OTRS password request';</pre>

## CustomerPanelBodyLostPasswordToken

Description	Value
Description:	Defines the body text for notification mails sent to customers, with token about new requested password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelBodyLostPasswordToken' } = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  You or someone impersonating you has requested to change your OTRS password.  If you want to do this, click on this link. You will receive another email containing the password.  &lt;OTRS_CONFIG_HttpType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;customer.pl? Action=CustomerLostPassword;Token=&lt;OTRS_TOKEN&gt;  If you did not request a new password, please ignore this email. ';</pre>

## CustomerPanelSubjectLostPassword

Description	Value
Description:	Defines the subject for notification mails sent to customers, about new password.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'CustomerPanelSubjectLostPassword' } = 'New OTRS password';</pre>

## CustomerPanelBodyLostPassword

Description	Value
Description:	Defines the body text for notification mails sent to customers, about new password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelBodyLostPassword' } = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  New password: &lt;OTRS_NEWPW&gt;  &lt;OTRS_CONFIG_HttpType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;customer.pl ';</pre>

## CustomerPanelSubjectNewAccount

Description	Value
Description:	Defines the subject for notification mails sent to customers, about new account.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelSubjectNewAccount' } = 'New OTRS Account!';</pre>

## CustomerPanelBodyNewAccount

Description	Value
Description:	Defines the body text for notification mails sent to customers, about new account.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelBodyNewAccount' } = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  You or someone impersonating you has created a new OTRS account for you.  Full name: &lt;OTRS_USERFIRSTNAME&gt; &lt;OTRS_USERLASTNAME&gt; User name: &lt;OTRS_USERLOGIN&gt; Password : &lt;OTRS_USERPASSWORD&gt;  You can log in via the following URL. We encourage you to change your password via the Preferences button after logging in.  &lt;OTRS_CONFIG_HttpType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;customer.pl ';</pre>

## Loader::Customer::Skin###000-default

Description	Value
Description:	Default skin for OTRS 3.0 interface.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Customer::Skin' }-&gt;{ '000-default' } = {     'Description' =&gt; 'This is the default orange - black skin for OTRS 3.0.',     'HomePage' =&gt; 'www.otrs.org',     'InternalName' =&gt; 'default',     'VisibleName' =&gt; 'Default' };</pre>

## Loader::Customer::SelectedSkin

Description	Value
Description:	The customer skin's InternalName which should be used in the customer interface. Please check the available skins in Frontend::Customer::Skins.
Group:	Framework
SubGroup:	Frontend::Customer

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Loader::Customer::SelectedSkin' } = 'default';</pre>

## Frontend::Customer::Auth

### Customer::AuthModule

Description	Value
Description:	Defines the module to authenticate customers.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule' } = 'Kernel::System::CustomerAuth::DB';</pre>

### Customer::AuthModule::DB::CryptType

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, the crypt type of passwords must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::CryptType' } = 'md5';</pre>

### Customer::AuthModule::DB::Table

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, the name of the table where your customer data should be stored must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::Table' } = 'customer_user';</pre>

## Customer::AuthModule::DB::CustomerKey

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, the name of the column for the CustomerKey in the customer table must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::CustomerKey' } = 'login';</pre>

## Customer::AuthModule::DB::CustomerPassword

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, the column name for the CustomerPassword in the customer table must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::CustomerPassword' } = 'pw';</pre>

## Customer::AuthModule::DB::DSN

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, the DSN for the connection to the customer table must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::DSN' } = 'DBI:mysql:database=customerdb;host=customerdbhost';</pre>

## **Customer::AuthModule::DB::User**

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, a username to connect to the customer table can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::User' } = 'some_user';</pre>

## **Customer::AuthModule::DB::Password**

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, a password to connect to the customer table can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::Password' } = 'some_password';</pre>

## **Customer::AuthModule::DB::Type**

Description	Value
Description:	If "DB" was selected for Customer::AuthModule, a database driver (normally autodetection is used) can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::DB::Type' } = 'mysql';</pre>

## **Customer::AuthModule::HTTPBasicAuth::Replace**

Description	Value
Description:	If "HTTPBasicAuth" was selected for Customer::AuthModule, you can specify to strip leading parts of user names (e. g. for domains like example_domain\user to user).

Description	Value
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Customer::AuthModule::HTTPBasicAuth::Replace' } = 'example_domain\\\'';</pre>

## Customer::AuthModule::HTTPBasicAuth::ReplaceRegExp

Description	Value
Description:	If "HTTPBasicAuth" was selected for Customer::AuthModule, you can specify (by using a RegExp) to strip parts of REMOTE_USER (e. g. for to remove trailing domains). RegExp-Note, \$1 will be the new Login.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Customer::AuthModule::HTTPBasicAuth::ReplaceRegExp' } = '^(.+?)@.+?\$/';</pre>

## Customer::AuthModule::LDAP::Host

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule, the LDAP host can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::Host' } = 'ldap.example.com';</pre>

## Customer::AuthModule::LDAP::BaseDN

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule, the BaseDN must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth

Description	Value
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::BaseDN' } = 'dc=example,dc=com';</pre>

## Customer::AuthModule::LDAP::UID

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule, the user identifier must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::UID' } = 'uid';</pre>

## Customer::AuthModule::LDAP::GroupDN

Description	Value
Description:	If "LDAP" was selected for Customer::Authmodule, you can check if the user is allowed to authenticate because he is in a posixGroup, e.g. user needs to be in a group xyz to use OTRS. Specify the group, who may access the system.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::GroupDN' } = 'cn=otrsallow,ou=posixGroups,dc=example,dc=com';</pre>

## Customer::AuthModule::LDAP::AccessAttr

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule, you can specify access attributes here.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::AccessAttr' } = 'memberUid';</pre>

## Customer::AuthModule::LDAP::UserAttr

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule, user attributes can be specified. For LDAP posixGroups use UID, for non LDAP posixGroups use full user DN.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::UserAttr' } = 'UID';</pre>

## Customer::AuthModule::LDAP::SearchUserDN

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule and your users have only anonymous access to the LDAP tree, but you want to search through the data, you can do this with a user who has access to the LDAP directory. Specify the username for this special user here.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::SearchUserDN' } = 'cn=binduser,ou=users,dc=example,dc=com';</pre>

## Customer::AuthModule::LDAP::SearchUserPw

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule and your users have only anonymous access to the LDAP tree, but you want to search through the data, you can do this with a user who has access to the LDAP directory. Specify the password for this special user here.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::SearchUserPw' } = 'some_password';</pre>

## Customer::AuthModule::LDAP::AlwaysFilter

Description	Value
Description:	If "LDAP" was selected, you can add a filter to each LDAP query, e.g. (mail=*) , (objectclass=user) or (!objectclass=computer).
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::AlwaysFilter' } = '(!objectclass=computer)';</pre>

## Customer::AuthModule::LDAP::UserSuffix

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule and if you want to add a suffix to every customer login name, specify it here, e. g. you just want to write the username user but in your LDAP directory exists user@domain.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::UserSuffix' } = '@domain.com';</pre>

## Customer::AuthModule::LDAP::Params

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule and special parameters are needed for the Net::LDAP perl module, you can specify them here. See "perldoc Net::LDAP" for more information about the parameters.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::Params' } = {     'async' =&gt; '0',     'port' =&gt; '389',     'timeout' =&gt; '120',     'version' =&gt; '3' };</pre>

## Customer::AuthModule::LDAP::Die

Description	Value
Description:	If "LDAP" was selected for Customer::AuthModule, you can specify if the applications will stop if e. g. a connection to a server can't be established due to network problems.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::LDAP::Die' } = '1';</pre>

## Customer::AuthModule::Radius::Host

Description	Value
Description:	If "Radius" was selected for Customer::AuthModule, the radius host must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::Radius::Host' } =     'radiushost';</pre>

## Customer::AuthModule::Radius::Password

Description	Value
Description:	If "Radius" was selected for Customer::AuthModule, the password to authenticate to the radius host must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Customer::AuthModule::Radius::Password' } = 'radiussecret';</pre>

## Customer::AuthModule::Radius::Die

Description	Value
Description:	If "Radius" was selected for Customer::AuthModule, you can specify if the applications will stop if e. g. a connection to a server can't be established due to network problems.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Customer::AuthModule::Radius::Die' } = '1';</pre>

## Frontend::Customer::ModuleMetaHead

### CustomerFrontend::HeaderMetaModule###1-Refresh

Description	Value
Description:	Defines the module to generate html refresh headers of html sites, in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleMetaHead
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::HeaderMetaModule' }-&gt;{ '1-Refresh' } = { 'Module' =&gt; 'Kernel::Output::HTML::HeaderMetaRefresh' };</pre>

## Frontend::Customer::ModuleNotify

### CustomerFrontend::NotifyModule###1>ShowAgentOnline

Description	Value
Description:	Defines the module that shows the currently loged in agents in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleNotify

Description	Value
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::NotifyModule' }-&gt;{ '1-ShowAgentOnline' } = {     'IdleMinutes' =&gt; '60',     'Module' =&gt;     'Kernel::Output::HTML::NotificationAgentOnline',     'ShowEmail' =&gt; '1' };</pre>

## **CustomerFrontend::NotifyModule###1-ShowCustomerOnline**

Description	Value
Description:	Defines the module that shows the currently loged in customers in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::NotifyModule' }-&gt;{ '1-ShowCustomerOnline' } = {     'Module' =&gt;     'Kernel::Output::HTML::NotificationCustomerOnline',     'ShowEmail' =&gt; '1' };</pre>

## **Frontend::Customer::ModuleRegistration**

### **CustomerFrontend::Module###Logout**

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::Module' }-&gt;{ 'Logout' } = {     'Description' =&gt; 'Logout of customer panel',     'NavBarName' =&gt; '',     'Title' =&gt; '' };</pre>

## **CustomerFrontend::Module###CustomerPreferences**

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerPreferences'} = {     'Description' =&gt; 'Customer preferences',     'NavBarName' =&gt; '',     'Title' =&gt; 'Preferences' };</pre>

## **CustomerFrontend::Module###CustomerAccept**

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerAccept'} = {     'Description' =&gt; 'To accept login information, such as an EULA or license.',     'NavBarName' =&gt; '',     'Title' =&gt; 'Info' };</pre>

## **CustomerFrontend::Module###PictureUpload**

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'PictureUpload'} = {     'Description' =&gt; 'Picture upload module',</pre>

Description	Value
	<pre>'NavBarName' =&gt; 'Ticket', &gt;Title' =&gt; 'Picture-Upload' };</pre>

## Frontend::Customer::Preferences

### PreferencesTable

Description	Value
Description:	Defines the name of the table, where the customer preferences are stored.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesTable' } = 'user_preferences';</pre>

### PreferencesTableKey

Description	Value
Description:	Defines the column to store the keys for the preferences table.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesTableKey' } = 'preferences_key';</pre>

### CustomerPreferences

Description	Value
Description:	Defines the parameters for the customer preferences table.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferences' } = { 'Module' =&gt; 'Kernel::System::CustomerUser::Preferences::DB',</pre>

Description	Value
	<pre>'Params' =&gt; {     'Table' =&gt; 'customer_preferences',     'TableKey' =&gt; 'preferences_key',     'TableUserID' =&gt; 'user_id',     'TableValue' =&gt; 'preferences_value' } };</pre>

## CustomerPreferencesView

Description	Value
Description:	Sets the order of the different items in the customer preferences view.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesView' } = [     'User Profile',     'Other Settings' ];</pre>

## CustomerPreferencesGroups###Password

Description	Value
Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesGroups' }-&gt;{ 'Password' } = {     'Active' =&gt; '1',     'Area' =&gt; 'Customer',     'Column' =&gt; 'Other Settings',     'Label' =&gt; 'Change password',     'Module' =&gt;         'Kernel::Output::HTML::PreferencesPassword',     'PasswordMin2Characters' =&gt; '0',     'PasswordMin2Lower2UpperCharacters' =&gt; '0',     'PasswordMinSize' =&gt; '0',     'PasswordNeedDigit' =&gt; '0',     'PasswordRegExp' =&gt; '',     'Prio' =&gt; '1000' };</pre>

## CustomerPreferencesGroups###Language

Description	Value
Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesGroups' }-&gt;{ 'Language' } = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Key' =&gt; 'Your language',     'Label' =&gt; 'Interface language',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesLanguage',     'PrefKey' =&gt; 'UserLanguage',     'Prio' =&gt; '2000' };</pre>

## CustomerPreferencesGroups###Theme

Description	Value
Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesGroups' }-&gt;{ 'Theme' } = {     'Active' =&gt; '0',     'Column' =&gt; 'User Profile',     'Key' =&gt; 'Select your frontend Theme.',     'Label' =&gt; 'Theme',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesTheme',     'PrefKey' =&gt; 'UserTheme',     'Prio' =&gt; '1000' };</pre>

## CustomerPreferencesGroups###TimeZone

Description	Value
Description:	Defines all the parameters for this item in the customer preferences.

Description	Value
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesGroups' }-&gt;{ 'TimeZone' } = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Key' =&gt; 'Time Zone',     'Label' =&gt; 'Time Zone',     'Module' =&gt;         'Kernel::Output::HTML::PreferencesTimeZone',     'PrefKey' =&gt; 'UserTimeZone',     'Prio' =&gt; '5000' };</pre>

## CustomerPreferencesGroups###PGP

Description	Value
Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesGroups' }-&gt;{ 'PGP' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Other Settings',     'Key' =&gt; 'PGP Key Upload',     'Label' =&gt; 'PGP Key',     'Module' =&gt;         'Kernel::Output::HTML::PreferencesPGP',     'PrefKey' =&gt; 'UserPGPKey',     'Prio' =&gt; '10000' };</pre>

## CustomerPreferencesGroups###SMIME

Description	Value
Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesGroups' }-&gt;{ 'SMIME' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Other Settings',     'Key' =&gt; 'S/MIME Certificate Upload',     'Label' =&gt; 'S/MIME Certificate',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesSMIME',     'PrefKey' =&gt; 'UserSMIMEKey',     'Prio' =&gt; '11000' };</pre>

## Frontend::Public

### PublicFrontend::CommonParam###Action

Description	Value
Description:	Defines the default value for the action parameter for the public frontend. The action parameter is used in the scripts of the system.
Group:	Framework
SubGroup:	Frontend::Public
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PublicFrontend::CommonParam' }-&gt;{ 'Action' } = 'PublicDefault';</pre>

## Frontend::Public::ModuleRegistration

### PublicFrontend::Module###PublicDefault

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Public::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PublicFrontend::Module' }- &gt;{ 'PublicDefault' } = {     'Description' =&gt; 'PublicDefault',     'NavBarName' =&gt; '',     'Title' =&gt; 'PublicDefault' };</pre>

## **PublicFrontend::Module###PublicRepository**

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Public::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PublicFrontend::Module' }- &gt;{ 'PublicRepository' } =  {     'Description' =&gt; 'PublicRepository',     'NavBarName' =&gt; '',     'Title' =&gt; 'PublicRepository' };</pre>

## **Ticket**

### **Core**

#### **OTRSEscalationEvents::DecayTime**

Description	Value
Description:	The duration in minutes after emitting an event, in which the new escalation notify and start events are suppressed.
Group:	Ticket
SubGroup:	Core
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'OTRSEscalationEvents::DecayTime' } = '1440';</pre>

### **Core::FulltextSearch**

#### **Ticket::SearchIndexModule**

Description	Value
Description:	Helps to extend your articles full-text search (From, To, Cc, Subject and Body search). Runtime will do full-text searches on live data (it works fine for up to 50.000 tickets). StaticDB will strip all articles and will build an index after article creation, increasing fulltext searches about 50%. To create an initial index use "bin/otrs.RebuildFulltextIndex.pl".
Group:	Ticket
SubGroup:	Core::FulltextSearch

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::SearchIndexModule' } = 'Kernel::System::Ticket::ArticleSearchIndex::RuntimeDB';</pre>

## Ticket::SearchIndex::Attribute

Description	Value
Description:	Configures the full-text index. Execute "bin/otrs.RebuildFulltextIndex.pl" in order to generate a new index.
Group:	Ticket
SubGroup:	Core::FulltextSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::SearchIndex::Attribute' } =  {     'WordCountMax' =&gt; '1000',     'WordLengthMax' =&gt; '30',     'WordLengthMin' =&gt; '3' };</pre>

## Ticket::EventModulePost##98-ArticleSearchIndex

Description	Value
Description:	Builds an article index right after the article's creation.
Group:	Ticket
SubGroup:	Core::FulltextSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '98- ArticleSearchIndex' } =  {     'Event' =&gt; '(ArticleCreate ArticleUpdate)',     'Module' =&gt;     'Kernel::System::Ticket::Event::ArticleSearchIndex' };</pre>

## Core::LinkObject

### LinkObject::PossibleLink##0200

Description	Value
Description:	Links 2 tickets with a "Normal" type link.
Group:	Ticket

Description	Value
SubGroup:	Core::LinkObject
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'LinkObject::PossibleLink' }-&gt;{ '0200' } = {     'Object1' =&gt; 'Ticket',     'Object2' =&gt; 'Ticket',     'Type' =&gt; 'Normal' };</pre>

## LinkObject::PossibleLink###0201

Description	Value
Description:	Links 2 tickets with a "ParentChild" type link.
Group:	Ticket
SubGroup:	Core::LinkObject
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'LinkObject::PossibleLink' }-&gt;{ '0201' } = {     'Object1' =&gt; 'Ticket',     'Object2' =&gt; 'Ticket',     'Type' =&gt; 'ParentChild' };</pre>

## Core::PostMaster

### PostmasterMaxEmails

Description	Value
Description:	Maximal auto email responses to own email-address a day (Loop-Protection).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterMaxEmails' } = '40';</pre>

### PostMasterMaxEmailSize

Description	Value
Description:	Maximal size in KBytes for mails that can be fetched via POP3/POP3S/IMAP/IMAPS (KBytes).

Description	Value
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PostMasterMaxEmailSize' } = '16384';</code>

## PostMasterReconnectMessage

Description	Value
Description:	The "bin/PostMasterMailAccount.pl" will reconnect to POP3/POP3S/IMAP/IMAPS host after the specified count of messages.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'PostMasterReconnectMessage' } = '20';</code>

## LoopProtectionModule

Description	Value
Description:	Default loop protection module.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'LoopProtectionModule' } = 'Kernel::System::PostMaster::LoopProtection::DB';</code>

## LoopProtectionLog

Description	Value
Description:	Path for the log file (it only applies if "FS" was selected for LoopProtectionModule and it is mandatory).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{'LoopProtectionLog'} = '&lt;&gt;/var/log/LoopProtection';</code>

## PostmasterAutoHTML2Text

Description	Value
Description:	Converts HTML mails into text messages.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterAutoHTML2Text'} = '1';</code>

## PostmasterFollowUpSearchInReferences

Description	Value
Description:	Executes follow up checks on In-Reply-To or References headers for mails that don't have a ticket number in the subject.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpSearchInReferences'} = '0';</code>

## PostmasterFollowUpSearchInBody

Description	Value
Description:	Executes follow up mail body checks in mails that don't have a ticket number in the subject.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpSearchInBody'} = '0';</code>

## PostmasterFollowUpSearchInAttachment

Description	Value
Description:	Executes follow up mail attachments checks in mails that don't have a ticket number in the subject.

Description	Value
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterFollowUpSearchInAttachment' } = '0';</pre>

## PostmasterFollowUpSearchInRaw

Description	Value
Description:	Executes follow up plain/raw mail checks in mails that don't have a ticket number in the subject.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterFollowUpSearchInRaw' } = '0';</pre>

## PostmasterUserID

Description	Value
Description:	Specifies user id of the postmaster data base.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterUserID' } = '1';</pre>

## PostmasterDefaultQueue

Description	Value
Description:	Defines the postmaster default queue.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterDefaultQueue' } = 'Raw';</pre>

## PostmasterDefaultPriority

Description	Value
Description:	Defines the default priority of new tickets.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterDefaultPriority' } = '3 normal';</pre>

## PostmasterDefaultState

Description	Value
Description:	Defines the default state of new tickets.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterDefaultState' } = 'new';</pre>

## PostmasterFollowUpState

Description	Value
Description:	Defines the state of a ticket if it gets a follow-up.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterFollowUpState' } = 'open';</pre>

## PostmasterFollowUpStateClosed

Description	Value
Description:	Defines the state of a ticket if it gets a follow-up and the ticket was already closed.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterFollowUpStateClosed' } = 'open';</pre>

## PostmasterFollowUpOnUnlockAgentNotifyOnlyToOwner

Description	Value
Description:	Sends agent follow-up notification only to the owner, if a ticket is unlocked (the default is to send the notification to all agents).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'PostmasterFollowUpOnUnlockAgentNotifyOnlyToOwner' } = '0';</pre>

## PostmasterX-Header

Description	Value
Description:	Defines all the X-headers that should be scanned.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostmasterX-Header' } = [     'From',     'To',     'Cc',     'Reply-To',     'ReplyTo',     'Subject',     'Message-ID',     'Message-Id',     'Resent-To',     'Resent-From',     'Precedence',     'Mailing-List',     'List-Id',     'List-Archive',     'Errors-To',     'References',     'In-Reply-To',     'X-Loop',</pre>

Description	Value
	<pre>'X-Spam-Flag', 'X-Spam-Status', 'X-Spam-Level', 'X-No-Loop', 'X-Priority', 'Importance', 'X-Mailer', 'User-Agent', 'Organization', 'X-Original-To', 'Delivered-To', 'Envelope-To', 'Return-Path', 'X-OTRS-Loop', 'X-OTRS-Info', 'X-OTRS-Priority', 'X-OTRS-Queue', 'X-OTRS-Lock', 'X-OTRS-Ignore', 'X-OTRS-State', 'X-OTRS-State-PendingTime', 'X-OTRS-Type', 'X-OTRS-Service', 'X-OTRS-SLA', 'X-OTRS-CustomerNo', 'X-OTRS-CustomerUser', 'X-OTRS-SenderType', 'X-OTRS-ArticleType', 'X-OTRS-FollowUp-Priority', 'X-OTRS-FollowUp-Queue', 'X-OTRS-FollowUp-Lock', 'X-OTRS-FollowUp-State', 'X-OTRS-FollowUp-State-PendingTime', 'X-OTRS-FollowUp-Type', 'X-OTRS-FollowUp-Service', 'X-OTRS-FollowUp-SLA', 'X-OTRS-FollowUp-SenderType', 'X-OTRS-FollowUp-ArticleType' ];</pre>

## PostMaster::PreFilterModule###1-Match

Description	Value
Description:	Module to filter and manipulate incoming messages. Block/ignore all spam email with From: noreply@ address.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'PostMaster::PreFilterModule' }-&gt;{ '1-Match' } = {     'Match' =&gt; {         'From' =&gt; 'noreply@',     },     'Module' =&gt;     'Kernel::System::PostMaster::Filter::Match',     'Set' =&gt; {         'X-OTRS-Ignore' =&gt; 'yes'     },     'StopAfterMatch' =&gt; '0' };</pre>

## PostMaster::PreFilterModule###2-Match

Description	Value
Description:	Module to filter and manipulate incoming messages. Get a 4 digit number to ticket free text, use regex in Match e. g. From => '(.+?)@.+?', and use () as [***] in Set =>.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PostMaster::PreFilterModule' }-&gt;{ '2-Match' } = {     'Match' =&gt; {         'Subject' =&gt; 'SomeNumber:(\\d\\d\\d\\d) ',     },     'Module' =&gt;     'Kernel::System::PostMaster::Filter::Match',     'Set' =&gt; {         'X-OTRS-DynamicField-TicketFreeKey1' =&gt;         'SomeNumber',         'X-OTRS-DynamicField-TicketFreeText1' =&gt;         '[***]',     },     'StopAfterMatch' =&gt; '0' };</pre>

## PostMaster::PreFilterModule###3-NewTicketReject

Description	Value
Description:	Blocks all the incoming emails that do not have a valid ticket number in subject with From: @example.com address.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PostMaster::PreFilterModule' }-&gt;{ '3-NewTicketReject' } = {     'Match' =&gt; {         'From' =&gt; '@example.com'     },     'Module' =&gt;     'Kernel::System::PostMaster::Filter::NewTicketReject',     'Set' =&gt; {         'X-OTRS-Ignore' =&gt; 'yes'     },     'StopAfterMatch' =&gt; '0' };</pre>

## PostMaster::PreFilterModule::NewTicketReject::Sender

Description	Value
Description:	Defines the sender for rejected emails.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'PostMaster::PreFilterModule::NewTicketReject::Sender' } = 'noreply@example.com';</pre>

## PostMaster::PreFilterModule::NewTicketReject::Subject

Description	Value
Description:	Defines the subject for rejected emails.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'PostMaster::PreFilterModule::NewTicketReject::Subject' } = 'Email Rejected';</pre>

## PostMaster::PreFilterModule::NewTicketReject::Body

Description	Value
Description:	Defines the body text for rejected emails.

Description	Value
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'PostMaster::PreFilterModule::NewTicketReject::Body' } = Dear Customer,  Unfortunately we could not detect a valid ticket number in your subject, so this email can't be processed.  Please create a new ticket via the customer panel.  Thanks for your help!  Your Helpdesk Team ';</pre>

## PostMaster::PreFilterModule###4-CMD

Description	Value
Description:	CMD example setup. Ignores emails where external CMD returns some output on STDOUT (email will be piped into STDIN of some.bin).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PostMaster::PreFilterModule' }-&gt;{ '4-CMD' } = {     'CMD' =&gt; '/usr/bin/some.bin',     'Module' =&gt;         'Kernel::System::PostMaster::Filter::CMD',     'Set' =&gt; {         'X-OTRS-Ignore' =&gt; 'yes'     } };</pre>

## PostMaster::PreFilterModule###5-SpamAssassin

Description	Value
Description:	Spam Assassin example setup. Ignores emails that are marked with SpamAssassin.
Group:	Ticket

Description	Value
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PostMaster::PreFilterModule' }-&gt;{ '5-SpamAssassin' } = {     'CMD' =&gt; '/usr/bin/spamassassin   grep -i "X-Spam-Status: yes"',     'Module' =&gt;         'Kernel::System::PostMaster::Filter::CMD',     'Set' =&gt; {         'X-OTRS-Ignore' =&gt; 'yes'     } };</pre>

## PostMaster::PreFilterModule###6-SpamAssassin

Description	Value
Description:	Spam Assassin example setup. Moves marked mails to spam queue.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PostMaster::PreFilterModule' }-&gt;{ '6-SpamAssassin' } = {     'CMD' =&gt; '/usr/bin/spamassassin   grep -i "X-Spam-Status: yes"',     'Module' =&gt;         'Kernel::System::PostMaster::Filter::CMD',     'Set' =&gt; {         'X-OTRS-Queue' =&gt; 'spam'     } };</pre>

## PostMaster::PreFilterModule###000-MatchDBSource

Description	Value
Description:	Module to use database filter storage.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'PostMaster::PreFilterModule' }-&gt;{ '000-MatchDBSource' } = {</pre>

Description	Value
	'Module' => 'Kernel::System::PostMaster::Filter::MatchDBSource' };

## PostMaster::PostFilterModule###000-FollowUpArticleTypeCheck

Description	Value
Description:	Module to check if arrived emails should be marked as email-internal (because of original forwarded internal email it college). ArticleType and SenderType define the values for the arrived email/article.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	0
Config-Setting:	\$Self->{ 'PostMaster::PostFilterModule' }->{ '000-FollowUpArticleTypeCheck' } = { 'ArticleType' => 'email-internal', 'Module' => 'Kernel::System::PostMaster::Filter::FollowUpArticleTypeCheck', 'SenderType' => 'customer' };

## SendNoAutoResponseRegExp

Description	Value
Description:	If this regex matches, no message will be send by the autoresponder.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	\$Self->{ 'SendNoAutoResponseRegExp' } = '(MAILER-DAEMON postmaster abuse)@.+?\.\.+?';

## Core::Stats

### Stats::DynamicObjectRegistration###Ticket

Description	Value
Description:	Module to generate ticket statistics.
Group:	Ticket
SubGroup:	Core::Stats
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Stats::DynamicObjectRegistration'}-&gt;{'Ticket'} = {     'Module' =&gt;     'Kernel::System::Stats::Dynamic::Ticket' };</pre>

## Stats::DynamicObjectRegistration###TicketList

Description	Value
Description:	Determines if the statistics module may generate ticket lists.
Group:	Ticket
SubGroup:	Core::Stats
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Stats::DynamicObjectRegistration'}-&gt;{'TicketList'} = {     'Module' =&gt;     'Kernel::System::Stats::Dynamic::TicketList' };</pre>

## Stats::DynamicObjectRegistration###TicketAccountedTime

Description	Value
Description:	Module to generate accounted time ticket statistics.
Group:	Ticket
SubGroup:	Core::Stats
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Stats::DynamicObjectRegistration'}-&gt;{'TicketAccountedTime'} = {     'Module' =&gt;     'Kernel::System::Stats::Dynamic::TicketAccountedTime' };</pre>

## Stats::DynamicObjectRegistration###TicketSolutionResponseTime

Description	Value
Description:	Module to generate ticket solution and response time statistics.
Group:	Ticket
SubGroup:	Core::Stats
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Stats:::DynamicObjectRegistration' }-&gt;{ 'TicketSolutionResponseTime' } = {     'Module' =&gt;     'Kernel:::System:::Stats:::Dynamic:::TicketSolutionResponseTime' };</pre>

## Core::Ticket

### Ticket::Hook

Description	Value
Description:	The identifier for a ticket, e.g. Ticket#, Call#, MyTicket#. The default is Ticket#.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket:::Hook' } = 'Ticket#';</pre>

### Ticket::HookDivider

Description	Value
Description:	The divider between TicketHook and ticket number. E.g ':'. Default is ':'.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket:::HookDivider' } = '';</pre>

### Ticket::SubjectSize

Description	Value
Description:	Max size of the subjects in an email reply.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket:::SubjectSize' } = '100';</pre>

## Ticket::SubjectRe

Description	Value
Description:	The text at the beginning of the subject in an email reply, e.g. RE, AW, or AS.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::SubjectRe' } = 'Re';</code>

## Ticket::SubjectFwd

Description	Value
Description:	The text at the beginning of the subject when an email is forwarded, e.g. FW, Fwd, or WG.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::SubjectFwd' } = 'Fwd';</code>

## Ticket::SubjectFormat

Description	Value
Description:	The format of the subject. 'Left' means '[TicketHook#:12345] Some Subject', 'Right' means 'Some Subject [TicketHook#:12345]', 'None' means 'Some Subject' and no ticket number. In the last case you should enable PostmasterFollowupSearchInRaw or PostmasterFollowUpSearchInReferences to recognize followups based on email headers and/or body.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::SubjectFormat' } = 'Left';</code>

## Ticket::CustomQueue

Description	Value
Description:	Name of custom queue. The custom queue is a queue selection of your preferred queues and can be selected in the preferences settings.

Description	Value
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::CustomQueue' } = 'My Queues';</code>

## **Ticket::NewArticleIgnoreSystemSender**

Description	Value
Description:	Ignore article with system sender type for new article feature (e.g. auto responses or email notifications).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::NewArticleIgnoreSystemSender' } = '0';</code>

## **Ticket::ChangeOwnerToEveryone**

Description	Value
Description:	Changes the owner of tickets to everyone (useful for ASP). Normally only agent with rw permissions in the queue of the ticket will be shown.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::ChangeOwnerToEveryone' } = '0';</code>

## **Ticket::Responsible**

Description	Value
Description:	Enables ticket responsible feature, to keep track of a specific ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::Responsible' } = '0';</code>

## Ticket::ResponsibleAutoSet

Description	Value
Description:	Automatically sets the owner of a ticket as the responsible for it (if ticket responsible feature is enabled).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::ResponsibleAutoSet'} = '1';</pre>

## Ticket::Type

Description	Value
Description:	Allows defining new types for ticket (if ticket type feature is enabled).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Type'} = '0';</pre>

## Ticket::Service

Description	Value
Description:	Allows defining services and SLAs for tickets (e. g. email, desktop, network, ...), and escalation attributes for SLAs (if ticket service/SLA feature is enabled).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Service'} = '0';</pre>

## Ticket::Service::Default::UnknownCustomer

Description	Value
Description:	Allows default services to be selected also for non existing customers.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Service::Default::UnknownCustomer' } = '0';</pre>

## Ticket::ArchiveSystem

Description	Value
Description:	Activates the ticket archive system to have a faster system by moving some tickets out of the daily scope. To search for these tickets, the archive flag has to be enabled in the ticket search.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::ArchiveSystem' } = '0';</pre>

## Ticket::CustomerArchiveSystem

Description	Value
Description:	Activates the ticket archive system search in the customer interface.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::CustomerArchiveSystem' } = '0';</pre>

## Ticket::NumberGenerator

Description	Value
Description:	Selects the ticket number generator module. "AutoIncrement" increments the ticket number, the SystemID and the counter are used with SystemID.counter format (e.g. 1010138, 1010139). With "Date" the ticket numbers will be generated by the current date, the SystemID and the counter. The format looks like Year.Month.Day.SystemID.Counter (e.g. 200206231010138, 200206231010139). With "DateChecksum" the counter will be appended as checksum to the string of date and SystemID. The checksum will be rotated on a daily basis. The format looks like Year.Month.Day.SystemID.Counter.CheckSum (e.g. 2002070110101520, 2002070110101535). "Random" generates randomized ticket numbers in the format "SystemID.Random" (e.g. 100057866352, 103745394596).
Group:	Ticket

Description	Value
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::NumberGenerator' } = 'Kernel::System::Ticket::Number::DateChecksum';</pre>

## Ticket::NumberGenerator::MinCounterSize

Description	Value
Description:	Sets the minimal ticket counter size (if "AutoIncrement" was selected as TicketNumberGenerator). Default is 5, this means the counter starts from 10000.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::NumberGenerator::MinCounterSize' } = '5';</pre>

## Ticket::NumberGenerator::CheckSystemID

Description	Value
Description:	Checks the SystemID in ticket number detection for follow-ups (use "No" if SystemID has been changed after using the system).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::NumberGenerator::CheckSystemID' } = '1';</pre>

## Ticket::CounterLog

Description	Value
Description:	Log file for the ticket counter.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::CounterLog'} = '&lt;OTRS_CONFIG_Home&gt;/var/log/TicketCounter.log';</pre>

## Ticket::IndexModule

Description	Value
Description:	IndexAccelerator: to choose your backend TicketViewAccelerator module. "RuntimeDB" generates each queue view on the fly from ticket table (no performance problems up to approx. 60.000 tickets in total and 6.000 open tickets in the system). "StaticDB" is the most powerful module, it uses an extra ticket-index table that works like a view (recommended if more than 80.000 and 6.000 open tickets are stored in the system). Use the script "bin/otrs.RebuildTicketIndex.pl" for initial index update.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::IndexModule'} = 'Kernel::System::Ticket::IndexAccelerator::RuntimeDB';</pre>

## Ticket::StorageModule

Description	Value
Description:	Saves the attachments of articles. "DB" stores all data in the database (not recommended for storing big attachments). "FS" stores the data on the filesystem; this is faster but the webserver should run under the OTRS user. You can switch between the modules even on a system that is already in production without any loss of data.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::StorageModule'} = 'Kernel::System::Ticket::ArticleStorageDB';</pre>

## ArticleDir

Description	Value
Description:	Specifies the directory to store the data in, if "FS" was selected for TicketStorageModule.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'ArticleDir' } = '&lt;OTRS_CONFIG_Home&gt;/var/article';</pre>

## Ticket::EventModulePost##100-ArchiveRestore

Description	Value
Description:	Restores a ticket from the archive (only if the event is a state change, from closed to any open available state).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '100-ArchiveRestore' } = {     'Event' =&gt; 'TicketStateUpdate',     'Module' =&gt;     'Kernel::System::Ticket::Event::ArchiveRestore' };</pre>

## Ticket::EventModulePost##110-AcceleratorUpdate

Description	Value
Description:	Updates the ticket index accelerator.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '110-AcceleratorUpdate' } = {     'Event' =&gt; 'TicketStateUpdate TicketQueueUpdate TicketLockUpdate',     'Module' =&gt;     'Kernel::System::Ticket::Event::TicketAcceleratorUpdate' };</pre>

## Ticket::EventModulePost##120-ForceOwnerResetOnMove

Description	Value
Description:	Resets and unlocks the owner of a ticket if it was moved to another queue.
Group:	Ticket

Description	Value
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '120- ForceOwnerResetOnMove' } = {     'Event' =&gt; 'TicketQueueUpdate',     'Module' =&gt;     'Kernel::System::Ticket::Event::ForceOwnerReset' };</pre>

## Ticket::EventModulePost###130-ForceStateChangeOnLock

Description	Value
Description:	Forces to choose a different ticket state (from current) after lock action. Define the current state as key, and the next state after lock action as content.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '130- ForceStateChangeOnLock' } = {     'Event' =&gt; 'TicketLockUpdate',     'Module' =&gt;     'Kernel::System::Ticket::Event::ForceState',     'new' =&gt; 'open' };</pre>

## Ticket::EventModulePost###140-ResponsibleAutoSet

Description	Value
Description:	Automatically sets the responsible of a ticket (if it is not set yet) after the first owner update.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '140- ResponsibleAutoSet' } = {     'Event' =&gt; 'TicketOwnerUpdate',     'Module' =&gt;     'Kernel::System::Ticket::Event::ResponsibleAutoSet' };</pre>

**Ticket::EventModulePost##150-TicketPendingTimeReset**

Description	Value
Description:	Sets the PendingTime of a ticket to 0 if the state is changed to a non-pending state.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '150- TicketPendingTimeReset' } = {     'Event' =&gt; 'TicketStateUpdate',     'Module' =&gt;     'Kernel::System::Ticket::Event::TicketPendingTimeReset' };</pre>

**Ticket::EventModulePost##500-NotificationEvent**

Description	Value
Description:	Sends the notifications which are configured in the admin interface under "Notification (Event)".
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '500- NotificationEvent' } = {     'Event' =&gt; '',     'Module' =&gt;     'Kernel::System::Ticket::Event::NotificationEvent',     'Transaction' =&gt; '1' };</pre>

**Ticket::EventModulePost##900-EscalationIndex**

Description	Value
Description:	Updates the ticket escalation index after a ticket attribute got updated.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '900- EscalationIndex' } = {</pre>

Description	Value
	'Event' => 'TicketSLAUpdate TicketQueueUpdate TicketStateUpdate TicketCreate ArticleCreate', 'Module' => 'Kernel::System::Ticket::Event::TicketEscalationIndex' };

## Ticket::EventModulePost###900-EscalationStopEvents

Description	Value
Description:	Ticket event module that triggers the escalation stop events.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	\$Self->{ 'Ticket::EventModulePost' }->{ '900-EscalationStopEvents' } = { 'Event' => 'TicketSLAUpdate TicketQueueUpdate TicketStateUpdate ArticleCreate', 'Module' => 'Kernel::System::Ticket::Event::TriggerEscalationStopEvents' };

## Ticket::EventModulePost###910-ForceUnlockOnMove

Description	Value
Description:	Forces to unlock tickets after being moved to another queue.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	\$Self->{ 'Ticket::EventModulePost' }->{ '910-ForceUnlockOnMove' } = { 'Event' => 'TicketQueueUpdate', 'Module' => 'Kernel::System::Ticket::Event::ForceUnlock' };

## Ticket::EventModulePost###920-TicketArticleNewMessageUpdate

Description	Value
Description:	Update Ticket "Seen" flag if every article got seen or a new Article got created.
Group:	Ticket
SubGroup:	Core::Ticket

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }-&gt;{ '920- TicketArticleNewMessageUpdate' } =  {     'Event' =&gt; 'ArticleCreate ArticleFlagSet',     'Module' =&gt;     'Kernel::System::Ticket::Event::TicketNewMessageUpdate' };</pre>

## Ticket::CustomModule###001-CustomModule

Description	Value
Description:	Overloads (redefines) existing functions in Kernel::System::Ticket. Used to easily add customizations.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::CustomModule' }-&gt;{ '001- CustomModule' } =  'Kernel::System::Ticket::Custom';</pre>

## Ticket::ViewableSenderTypes

Description	Value
Description:	Defines the default viewable sender types of a ticket (default: customer).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::ViewableSenderTypes' } =  [     '\customer\'' ];</pre>

## Ticket::ViewableLocks

Description	Value
Description:	Defines the viewable locks of a ticket. Default: unlock, tmp_lock.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::ViewableLocks' } = [     '\'unlock\'',     '\'tmp_lock\'' ];</pre>

## Ticket::ViewableStateType

Description	Value
Description:	Defines the valid state types for a ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::ViewableStateType' } = [     'new',     'open',     'pending reminder',     'pending auto' ];</pre>

## Ticket::UnlockStateType

Description	Value
Description:	Defines the valid states for unlocked tickets. To unlock tickets the script "bin/otrs.UnlockTickets.pl" can be used.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::UnlockStateType' } = [     'new',     'open' ];</pre>

## Ticket::PendingNotificationOnlyToOwner

Description	Value
Description:	Sends reminder notifications of unlocked ticket after reaching the reminder date (only sent to ticket owner).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::PendingNotificationOnlyToOwner' } = '0';</pre>

## Ticket::PendingNotificationNotToResponsible

Description	Value
Description:	Disables sending reminder notifications to the responsible agent of a ticket (Ticket::Responsible needs to be activated).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::PendingNotificationNotToResponsible' } = '0';</pre>

## Ticket::PendingReminderStateType

Description	Value
Description:	Defines the state type of the reminder for pending tickets.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::PendingReminderStateType' } = [ 'pending reminder' ];</pre>

## Ticket::PendingAutoStateType

Description	Value
Description:	Determines the possible states for pending tickets that changed state after reaching time limit.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::PendingAutoStateType' } = [ 'pending auto' ];</pre>

Description	Value
	];

## Ticket::StateAfterPending

Description	Value
Description:	Defines which states should be set automatically (Content), after the pending time of state (Key) has been reached.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::StateAfterPending'} = {     'pending auto close+' =&gt; 'closed successful',     'pending auto close-' =&gt; 'closed unsuccessful' };</pre>

## System::Permission

Description	Value
Description:	Standard available permissions for agents within the application. If more permissions are needed, they can be entered here. Permissions must be defined to be effective. Some other good permissions have also been provided built-in: note, close, pending, customer, freetext, move, compose, responsible, forward, and bounce. Make sure that "rw" is always the last registered permission.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'System::Permission'} = [     'ro',     'move_into',     'create',     'note',     'owner',     'priority',     'rw' ];</pre>

## Ticket::Permission###1-OwnerCheck

Description	Value
Description:	Module to check the owner of a ticket.
Group:	Ticket

Description	Value
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'1-OwnerCheck'} = {     'Granted' =&gt; '1',     'Module' =&gt;         'Kernel::System::Ticket::Permission::OwnerCheck',     'Required' =&gt; '0' };</pre>

## Ticket::Permission##2-ResponsibleCheck

Description	Value
Description:	Module to check the agent responsible of a ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'2- ResponsibleCheck'} = {     'Granted' =&gt; '1',     'Module' =&gt;         'Kernel::System::Ticket::Permission::ResponsibleCheck',     'Required' =&gt; '0' };</pre>

## Ticket::Permission##3-GroupCheck

Description	Value
Description:	Module to check if a user is in a special group. Access is granted, if the user is in the specified group and has ro and rw permissions.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'3-GroupCheck'} = {     'Granted' =&gt; '1',     'Module' =&gt;         'Kernel::System::Ticket::Permission::GroupCheck',     'Required' =&gt; '0' };</pre>

## Ticket::Permission##4-WatcherCheck

Description	Value
Description:	Module to check the watcher agents of a ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'4-WatcherCheck'} =  {     'Granted' =&gt; '1',     'Module' =&gt;     'Kernel::System::Ticket::Permission::WatcherCheck',     'Required' =&gt; '0' };</pre>

## CustomerTicket::Permission##1-GroupCheck

Description	Value
Description:	Module to check the group permissions for the access to customer tickets.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerTicket::Permission'}-&gt;{'1- GroupCheck'} =  {     'Granted' =&gt; '0',     'Module' =&gt;     'Kernel::System::Ticket::CustomerPermission::GroupCheck',     'Required' =&gt; '1' };</pre>

## CustomerTicket::Permission##2-CustomerUserIDCheck

Description	Value
Description:	Grants access, if the customer ID of the ticket matches the customer user's ID and the customer user has group permissions on the queue the ticket is in.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerTicket::Permission' }-&gt;{ '2-CustomerUserIDCheck' } = {     'Granted' =&gt; '1',     'Module' =&gt;         'Kernel::System::Ticket::CustomerPermission::CustomerUserIDCheck',     'Required' =&gt; '0' };</pre>

## CustomerTicket::Permission###3-CustomerIDCheck

Description	Value
Description:	Module to check customer permissions.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerTicket::Permission' }-&gt;{ '3-CustomerIDCheck' } = {     'Granted' =&gt; '1',     'Module' =&gt;         'Kernel::System::Ticket::CustomerPermission::CustomerIDCheck',     'Required' =&gt; '0' };</pre>

## Ticket::DefineEmailFrom

Description	Value
Description:	Defines how the From field from the emails (sent from answers and email tickets) should look like.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::DefineEmailFrom' } = 'SystemAddressName';</pre>

## Ticket::DefineEmailFromSeparator

Description	Value
Description:	Defines the separator between the agents real name and the given queue email address.
Group:	Ticket

Description	Value
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::DefineEmailFromSeparator' } = 'via';</pre>

## CustomerNotifyJustToRealCustomer

Description	Value
Description:	Sends customer notifications just to the mapped customer. Normally, if no customer is mapped, the latest customer sender gets the notification.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerNotifyJustToRealCustomer' } = '0';</pre>

## AgentSelfNotifyOnAction

Description	Value
Description:	Specifies if an agent should receive email notification of his own actions.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'AgentSelfNotifyOnAction' } = '0';</pre>

## Core::TicketACL

### Ticket::Acl::Module###1-Ticket::Acl::Module

Description	Value
Description:	ACL module that allows closing parent tickets only if all its children are already closed ("State" shows which states are not available for the parent ticket until all child tickets are closed).
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Acl::Module' }-&gt;{ '1-Ticket::Acl::Module' } = {     'Module' =&gt;     'Kernel::System::Ticket::Acl::CloseParentAfterClosedChilds',     'State' =&gt; [         'closed successful',         'closed unsuccessful'     ] };</pre>

## TicketACL::Default::Action

Description	Value
Description:	Default ACL values for ticket actions.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'TicketACL::Default::Action' } = {};</pre>

## Core::TicketBulkAction

### Ticket::Frontend::BulkFeature

Description	Value
Description:	Enables ticket bulk action feature for the agent frontend to work on more than one ticket at a time.
Group:	Ticket
SubGroup:	Core::TicketBulkAction
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::BulkFeature' } = '1';</pre>

### Ticket::Frontend::BulkFeatureGroup

Description	Value
Description:	Enables ticket bulk action feature only for the listed groups.
Group:	Ticket
SubGroup:	Core::TicketBulkAction
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::BulkFeatureGroup' } = [     'admin',     'users' ];</pre>

## Core::TicketDynamicFieldDefault

### Ticket::EventModulePost###TicketDynamicFieldDefault

Description	Value
Description:	Event module registration. For more performance you can define a trigger event (e. g. Event => TicketCreate). This is only possible if all Ticket dynamic fields need the same event.
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::EventModulePost' }- &gt;{ 'TicketDynamicFieldDefault' } = {     'Module' =&gt;     'Kernel::System::Ticket::Event::TicketDynamicFieldDefault',     'Transaction' =&gt; '1' };</pre>

### Ticket::TicketDynamicFieldDefault###Element1

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element1' } = {     'Event' =&gt; 'TicketCreate',     'Name' =&gt; 'Field1',     'Value' =&gt; 'Default' };</pre>

**Ticket::TicketDynamicFieldDefault##Element2**

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element2' } =  {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

**Ticket::TicketDynamicFieldDefault##Element3**

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element3' } =  {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

**Ticket::TicketDynamicFieldDefault##Element4**

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault

Description	Value
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element4' } =  {     'Event' =&gt; '',     'Name' =&gt; '',     'Value' =&gt; '' };</pre>

## Ticket::TicketDynamicFieldDefault##Element5

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element5' } =  {     'Event' =&gt; '',     'Name' =&gt; '',     'Value' =&gt; '' };</pre>

## Ticket::TicketDynamicFieldDefault##Element6

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element6' } =  {     'Event' =&gt; '',     'Name' =&gt; '',     'Value' =&gt; ''</pre>

Description	Value
	};

## Ticket::TicketDynamicFieldDefault###Element7

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element7' } =  {     'Event' =&gt; '',     'Name' =&gt; '',     'Value' =&gt; '' };</pre>

## Ticket::TicketDynamicFieldDefault###Element8

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::TicketDynamicFieldDefault' }- &gt;{ 'Element8' } =  {     'Event' =&gt; '',     'Name' =&gt; '',     'Value' =&gt; '' };</pre>

## Ticket::TicketDynamicFieldDefault###Element9

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".

Description	Value
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket' :&gt; 'TicketDynamicFieldDefault' }- &gt;{ 'Element9' } =  {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

## **Ticket::TicketDynamicFieldDefault##Element10**

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket' :&gt; 'TicketDynamicFieldDefault' }- &gt;{ 'Element10' } =  {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

## **Ticket::TicketDynamicFieldDefault##Element11**

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.ots.org/">http://doc.ots.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket' :&gt; 'TicketDynamicFieldDefault' }- &gt;{ 'Element11' } =  {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

Description	Value
	'Name' => '',  'Value' => '' };

## Ticket::TicketDynamicFieldDefault###Element12

Description	Value
Description:	Configures a default TicketDynamcField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otsr.org/">http://doc.otsr.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	\$Self->{ 'Ticket::TicketDynamicFieldDefault' }->{ 'Element12' } = {  'Event' => '',  'Name' => '',  'Value' => '' };

## Ticket::TicketDynamicFieldDefault###Element13

Description	Value
Description:	Configures a default TicketDynamcField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otsr.org/">http://doc.otsr.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	\$Self->{ 'Ticket::TicketDynamicFieldDefault' }->{ 'Element13' } = {  'Event' => '',  'Name' => '',  'Value' => '' };

## Ticket::TicketDynamicFieldDefault###Element14

Description	Value
Description:	Configures a default TicketDynamcField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be

Description	Value
	set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otsr.org/">http://doc.otsr.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket'::TicketDynamicFieldDefault }- &gt;{ 'Element14' } =  {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

## **Ticket::TicketDynamicFieldDefault###Element15**

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otsr.org/">http://doc.otsr.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket'::TicketDynamicFieldDefault }- &gt;{ 'Element15' } =  {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

## **Ticket::TicketDynamicFieldDefault###Element16**

Description	Value
Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otsr.org/">http://doc.otsr.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket'::TicketDynamicFieldDefault }-&gt;{ 'Element16' } = {     'Event' =&gt; '',     'Name' =&gt; '',     'Value' =&gt; '' };</pre>

## Core::TicketWatcher

### Ticket::Watcher

Description	Value
Description:	Enables or disables the ticket watcher feature, to keep track of tickets without being the owner nor the responsible.
Group:	Ticket
SubGroup:	Core::TicketWatcher
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket'::Watcher } = '0';</pre>

### Ticket::WatcherGroup

Description	Value
Description:	Enables ticket watcher feature only for the listed groups.
Group:	Ticket
SubGroup:	Core::TicketWatcher
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket'::WatcherGroup } = [     'admin',     'users' ];</pre>

## Frontend::Admin::ModuleRegistration

### Frontend::Module###AdminQueue

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' =&gt; { 'AdminQueue' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Create and manage queues.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Queues',         'Prio' =&gt; '100'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Queues' };</pre>

## Frontend::Module###AdminResponse

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' =&gt; { 'AdminResponse' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Create and manage response templates.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Responses',         'Prio' =&gt; '200'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Responses' };</pre>

## Frontend::Module###AdminQueueResponses

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminQueueResponses' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Link responses to queues.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'Responses &lt;-&gt; Queues',             'Prio' =&gt; '300'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Responses &lt;-&gt; Queues' };</pre>

## Frontend::Module###AdminAutoResponse

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminAutoResponse' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Create and manage responses that are automatically sent.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'Auto Responses',</pre>

Description	Value
	<pre>'Prio' =&gt; '400' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Auto Responses' };</pre>

## Frontend::Module###AdminQueueAutoResponse

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminQueueAutoResponse' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Link queues to auto responses.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Auto Responses &lt;-&gt; Queues',         'Prio' =&gt; '500'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Auto Responses &lt;-&gt; Queues' };</pre>

## Frontend::Module###AdminAttachment

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminAttachment' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [</pre>

Description	Value
	<pre>         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Create and manage attachments.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Attachments',         'Prio' =&gt; '600'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Attachments' };</pre>

## Frontend::Module###AdminResponseAttachment

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminResponseAttachment' } =  {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Link attachments to responses templates.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Attachments &lt;-&gt; Responses',         'Prio' =&gt; '700'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Attachments &lt;-&gt; Responses' };</pre>

## Frontend::Module###AdminSalutation

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminSalutation' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Create and manage salutations.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Salutations',         'Prio' =&gt; '800'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Salutations' };</pre>

## Frontend::Module###AdminSignature

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminSignature' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Queue',         'Description' =&gt; 'Create and manage signatures.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Signatures',         'Prio' =&gt; '900'     },     'NavBarName' =&gt; 'Admin',</pre>

Description	Value
	'Title' => 'Signatures' };

## Frontend::Module###AdminSystemAddress

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminSystemAddress' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Email',         'Description' =&gt; 'Set sender email addresses for this system.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'Email Addresses',             'Prio' =&gt; '300'         },         'NavBarName' =&gt; 'Admin',         'Title' =&gt; 'Email Addresses'     }; };</pre>

## Frontend::Module###AdminNotification

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminNotification' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {</pre>

Description	Value
	<pre>'Block' =&gt; 'Ticket', 'Description' =&gt; 'Manage notifications that are sent to agents.', 'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'Agent Notifications', 'Prio' =&gt; '400' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Agent Notifications' };</pre>

## Frontend::Module###AdminNotificationEvent

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AdminNotificationEvent' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Ticket',         'Description' =&gt; 'Create and manage event based notifications.',         'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Notifications (Event)',         'Prio' =&gt; '400'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Notifications (Event)' };</pre>

## Frontend::Module###AdminService

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminService' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Ticket',         'Description' =&gt; 'Create and manage services.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'Services',             'Prio' =&gt; '900'         },         'NavBarName' =&gt; 'Admin',         'Title' =&gt; 'Services'     }; };</pre>

## Frontend::Module###AdminSLA

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AdminSLA' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Ticket',         'Description' =&gt; 'Create and manage Service Level Agreements (SLAs).',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'Service Level Agreements',             'Prio' =&gt; '1000'         },         'NavBarName' =&gt; 'Admin',         'Title' =&gt; 'Service Level Agreements'     }; };</pre>

## Frontend::Module###AdminType

Description	Value
Description:	Frontend module registration for the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AdminType' :&gt; {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Ticket',         'Description' =&gt; 'Create and manage ticket types.',         'Module' =&gt;     'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'Types',         'Prio' =&gt; '700'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Types' } };</pre>

## Frontend::Module###AdminState

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'Module' :&gt; { 'AdminState' :&gt; {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Ticket',         'Description' =&gt; 'Create and manage ticket states.',         'Module' =&gt;     'Kernel::Output::HTML::NavBarModuleAdmin',         'Name' =&gt; 'States',         'Prio' =&gt; '800'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'States' } };</pre>

Description	Value
	};

## Frontend::Module###AdminPriority

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'AdminPriority' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'Ticket',         'Description' =&gt; 'Create and manage ticket priorities.',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'Priorities',             'Prio' =&gt; '850'         },         'NavBarName' =&gt; 'Admin',         'Title' =&gt; 'Priorities'     }; };</pre>

## Frontend::Module###AdminGenericAgent

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :&gt; { 'AdminGenericAgent' } = {     'Description' =&gt; 'Admin',     'Group' =&gt; [         'admin'     ],     'NavBarModule' =&gt; {         'Block' =&gt; 'System',         'Module' =&gt;             'Kernel::Output::HTML::NavBarModuleAdmin',             'Name' =&gt; 'Generic Agent',             'Prio' =&gt; '850'         }     }; };</pre>

Description	Value
	<pre>'Description' =&gt; 'Manage periodic tasks.', 'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'GenericAgent', 'Prio' =&gt; '300' , 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'GenericAgent' };</pre>

## Frontend::Agent

### Ticket::Frontend::PendingDiffTime

Description	Value
Description:	Time in seconds that gets added to the actual time if setting a pending-state (default: 86400 = 1 day).
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::PendingDiffTime' } = '86400';</pre>

### Ticket::Frontend::ListType

Description	Value
Description:	Shows existing parent/child queue lists in the system in the form of a tree or a list.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ListType' } = 'tree';</pre>

### Ticket::Frontend::TextAreaEmail

Description	Value
Description:	Permitted width for compose email windows.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::TextAreaEmail' } = '82';</pre>

## Ticket::Frontend::TextAreaNote

Description	Value
Description:	Permitted width for compose note windows.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::TextAreaNote' } = '78';</pre>

## Ticket::Frontend::InformAgentMaxSize

Description	Value
Description:	Max size (in rows) of the informed agents box in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::InformAgentMaxSize' } = '3';</pre>

## Ticket::Frontend::InvolvedAgentMaxSize

Description	Value
Description:	Max size (in rows) of the involved agents box in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::InvolvedAgentMaxSize' } = '3';</pre>

## Ticket::Frontend::CustomerInfoCompose

Description	Value
Description:	Shows the customer user information (phone and email) in the compose screen.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerInfoCompose' } = '1';</pre>

## **Ticket::Frontend::CustomerInfoComposeMaxSize**

Description	Value
Description:	Max size (in characters) of the customer information table (phone and email) in the compose screen.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::CustomerInfoComposeMaxSize' } = '22';</pre>

## **Ticket::Frontend::CustomerInfoZoom**

Description	Value
Description:	Shows the customer user's info in the ticket zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerInfoZoom' } = '1';</pre>

## **Ticket::Frontend::CustomerInfoZoomMaxSize**

Description	Value
Description:	Maximum size (in characters) of the customer information table in the ticket zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerInfoZoomMaxSize' } = '22';</pre>

## Ticket::Frontend::CustomerInfoQueueMaxSize

Description	Value
Description:	Maximum size (in characters) of the customer info table in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerInfoQueueMaxSize' } = '18';</pre>

## Ticket::Frontend::AccountTime

Description	Value
Description:	Activates time accounting.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AccountTime' } = '1';</pre>

## Ticket::Frontend::TimeUnits

Description	Value
Description:	Sets the preferred time units (e.g. work units, hours, minutes).
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::TimeUnits' } = ' (work units) ';</pre>

## Ticket::Frontend::NeedAccountedTime

Description	Value
Description:	Defines if time accounting is mandatory in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::NeedAccountedTime'} = '0';</pre>

## Ticket::Frontend::BulkAccountedTime

Description	Value
Description:	Defines if time accounting must be set to all tickets in bulk action.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::BulkAccountedTime'} = '1';</pre>

## Ticket::Frontend::NeedSpellCheck

Description	Value
Description:	Defines if composed messages have to be spell checked in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::NeedSpellCheck'} = '0';</pre>

## Ticket::Frontend::NewOwnerSelection

Description	Value
Description:	Shows an owner selection in phone and email tickets in the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::NewOwnerSelection' } = '1';</pre>

## Ticket::Frontend::NewResponsibleSelection

Description	Value
Description:	Show a responsible selection in phone and email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::NewResponsibleSelection' } = '1';</pre>

## Ticket::Frontend::NewQueueSelectionType

Description	Value
Description:	Defines the recipient target of the phone ticket and the sender of the email ticket ("Queue" shows all queues, "SystemAddress" displays all system addresses) in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::NewQueueSelectionType' } = 'Queue';</pre>

## Ticket::Frontend::NewQueueSelectionString

Description	Value
Description:	Determines the strings that will be shown as recipient (To:) of the phone ticket and as sender (From:) of the email ticket in the agent interface. For Queue as NewQueueSelectionType "<Queue>" shows the names of the queues and for SystemAddress "<Realname><<Email>>" shows the name and email of the recipient.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::NewQueueSelectionString' } = '&lt;Queue&gt;';</pre>

## Ticket::Frontend::NewQueueOwnSelection

Description	Value
Description:	Determines which options will be valid of the recipient (phone ticket) and the sender (email ticket) in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::NewQueueOwnSelection' } = {     '1' =&gt; 'First Queue!',     '2' =&gt; 'Second Queue!' };</pre>

## Ticket::Frontend::ShowCustomerTickets

Description	Value
Description:	Shows customer history tickets in AgentTicketPhone, AgentTicketEmail and AgentTicketCustomer.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ShowCustomerTickets' } = '1';</pre>

## NewTicketInNewWindow::Enabled

Description	Value
Description:	If enabled, TicketPhone and TicketEmail will be open in new windows.
Group:	Ticket
SubGroup:	Frontend::Agent

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'NewTicketInNewWindow::Enabled' } = '0';</pre>

## CustomerDBLink

Description	Value
Description:	Defines an external link to the database of the customer (e.g. 'http://yourhost/customer.php?CID=\$Data{"CustomerID"}' or '').
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerDBLink' } = '\$Env{ "CGIHandle" }'? Action=AgentTicketCustomer;TicketID= \$Data{ "TicketID" }';</pre>

## CustomerDBLinkTarget

Description	Value
Description:	Defines the target attribute in the link to external customer database. E.g. 'target="cdb"'.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerDBLinkTarget' } = '';</pre>

## Frontend::CommonObject###QueueObject

Description	Value
Description:	Path of the file that stores all the settings for the QueueObject object for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CommonObject' }-&gt;{ 'QueueObject' } = 'Kernel::System::Queue';</pre>

## Frontend::CommonObject###TicketObject

Description	Value
Description:	Path of the file that stores all the settings for the TicketObject for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CommonObject' }-&gt;{ 'TicketObject' } = 'Kernel::System::Ticket';</pre>

## Frontend::CommonParam###Action

Description	Value
Description:	Defines the default used Frontend-Module if no Action parameter given in the url on the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CommonParam' }-&gt;{ 'Action' } = 'AgentDashboard';</pre>

## Frontend::CommonParam###QueueID

Description	Value
Description:	Default queue ID used by the system in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CommonParam' }-&gt;{ 'QueueID' } = '0';</pre>

## Frontend::CommonParam###TicketID

Description	Value
Description:	Default ticket ID used by the system in the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CommonParam'}-&gt;{'TicketID'} = '';</pre>

## Frontend::Agent::CustomerSearch

### Ticket::Frontend::CustomerSearchAutoComplete###Active

Description	Value
Description:	Enables or disables the autocomplete feature for the customer search in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::CustomerSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerSearchAutoComplete'}- &gt;{'Active'} = '1';</pre>

### Ticket::Frontend::CustomerSearchAutoComplete###MinQueryLength

Description	Value
Description:	Sets the minimum number of characters before autocomplete query is sent.
Group:	Ticket
SubGroup:	Frontend::Agent::CustomerSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerSearchAutoComplete'}- &gt;{'MinQueryLength'} = '2';</pre>

### Ticket::Frontend::CustomerSearchAutoComplete###QueryDelay

Description	Value
Description:	Delay time between autocomplete queries in milliseconds.
Group:	Ticket
SubGroup:	Frontend::Agent::CustomerSearch

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerSearchAutoComplete'}- &gt;{'QueryDelay'} = '100';</pre>

## **Ticket::Frontend::CustomerSearchAutoComplete###MaxResultsDisplayed**

Description	Value
Description:	Sets the number of search results to be displayed for the autocomplete feature.
Group:	Ticket
SubGroup:	Frontend::Agent::CustomerSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerSearchAutoComplete'}- &gt;{'MaxResultsDisplayed'} = '20';</pre>

## **Ticket::Frontend::CustomerSearchAutoComplete::DynamicWidth**

Description	Value
Description:	Determines if the search results container for the autocomplete feature should adjust its width dynamically.
Group:	Ticket
SubGroup:	Frontend::Agent::CustomerSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerSearchAutoComplete::DynamicWidth'} = '1';</pre>

## **Frontend::Agent::Dashboard**

### **DashboardBackend###0100-TicketPendingReminder**

Description	Value
Description:	Parameters for the dashboard backend of the ticket pending reminder overview of the agent interface . "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e.g. Group: admin;group1;group2;). "Default" determines if the plugin

Description	Value
	is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0100- TicketPendingReminder' } = {     'Attributes' =&gt;         'TicketPendingTimeOlderMinutes=1;StateType=pending reminder;SortBy=PendingTime;OrderBy=Down;',     'Block' =&gt; 'ContentLarge',     'CacheTTLLocal' =&gt; '0.5',     'Default' =&gt; '1',     'Description' =&gt; 'All tickets with a reminder set where the reminder date has been reached',     'Filter' =&gt; 'Locked',     'Group' =&gt; '',     'Limit' =&gt; '10',     'Module' =&gt;         'Kernel::Output::HTML::DashboardTicketGeneric',     'Permission' =&gt; 'rw',     'Time' =&gt; 'UntilTime',     'Title' =&gt; 'Reminder Tickets' };</pre>

## DashboardBackend###0110-TicketEscalation

Description	Value
Description:	Parameters for the dashboard backend of the ticket escalation overview of the agent interface . "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0110- TicketEscalation' } = {     'Attributes' =&gt;         'TicketEscalationTimeOlderMinutes=1;SortBy=EscalationTime;Order     'Block' =&gt; 'ContentLarge',     'CacheTTLLocal' =&gt; '0.5',     'Default' =&gt; '1',</pre>

Description	Value
	<pre>'Description' =&gt; 'All escalated tickets', 'Filter' =&gt; 'All', 'Group' =&gt; '', 'Limit' =&gt; '10', 'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketGeneric', 'Permission' =&gt; 'rw', 'Time' =&gt; 'EscalationTime', &gt;Title' =&gt; 'Escalated Tickets' };</pre>

**DashboardBackend###0120-TicketNew**

Description	Value
Description:	Parameters for the dashboard backend of the new tickets overview of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{ '0120-TicketNew' } = {     'Attributes' =&gt; 'StateType=new;',     'Block' =&gt; 'ContentLarge',     'CacheTTLLocal' =&gt; '0.5',     'Default' =&gt; '1',     'Description' =&gt; 'All new tickets, these tickets have not been worked on yet',     'Filter' =&gt; 'All',     'Group' =&gt; '',     'Limit' =&gt; '10',     'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketGeneric',     'Permission' =&gt; 'rw',     'Time' =&gt; 'Age',     'Title' =&gt; 'New Tickets' };</pre>

**DashboardBackend###0130-TicketOpen**

Description	Value
Description:	Parameters for the dashboard backend of the ticket pending reminder overview of the agent interface. "Limit" is the number of entries shown

Description	Value
	by default. "Group" is used to restrict the access to the plugin (e.g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0130-TicketOpen' } = {     'Attributes' =&gt; 'StateType=open;',     'Block' =&gt; 'ContentLarge',     'CacheTTLLocal' =&gt; '0.5',     'Default' =&gt; '1',     'Description' =&gt; 'All open tickets, these tickets have already been worked on, but need a response',     'Filter' =&gt; 'All',     'Group' =&gt; '',     'Limit' =&gt; '10',     'Module' =&gt;         'Kernel::Output::HTML::DashboardTicketGeneric',     'Permission' =&gt; 'rw',     'Time' =&gt; 'Age',     'Title' =&gt; 'Open Tickets / Need to be answered' };</pre>

## DashboardBackend###0250-TicketStats

Description	Value
Description:	Parameters for the dashboard backend of the ticket stats of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e.g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0250-TicketStats' } = {     'Block' =&gt; 'ContentSmall',     'CacheTTL' =&gt; '30',     'Closed' =&gt; '1',     'Created' =&gt; '1',     'Default' =&gt; '1',</pre>

Description	Value
	<pre>'Group' =&gt; '', 'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketStatsGeneric', 'Permission' =&gt; 'rw', 'Title' =&gt; '7 Day Stats' };</pre>

## DashboardBackend###0260-TicketCalendar

Description	Value
Description:	Parameters for the dashboard backend of the ticket calendar of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'DashboardBackend' }-&gt;{ '0260- TicketCalendar' } = {     'Block' =&gt; 'ContentSmall',     'CacheTTL' =&gt; '2',     'Default' =&gt; '1',     'Group' =&gt; '',     'Limit' =&gt; '6',     'Module' =&gt; 'Kernel::Output::HTML::DashboardCalendar',     'OwnerOnly' =&gt; '',     'Permission' =&gt; 'rw',     'Title' =&gt; 'Upcoming Events' };</pre>

## Frontend::Agent::ModuleMetaHead

### Frontend::HeaderMetaModule##2-TicketSearch

Description	Value
Description:	Module to generate html OpenSearch profile for short ticket search in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleMetaHead
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::HeaderMetaModule' }-&gt;{ '2-TicketSearch' } = {     'Action' =&gt; 'AgentTicketSearch',     'Module' =&gt;     'Kernel::Output::HTML::HeaderMetaTicketSearch' };</pre>

## Frontend::Agent::ModuleNotify

### Frontend::NotifyModule###5-Ticket::TicketEscalation

Description	Value
Description:	Module to show notifications and escalations (ShownMax: max. shown escalations, EscalationInMinutes: Show ticket which will escalation in, CacheTime: Cache of calculated escalations in seconds).
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::NotifyModule' }-&gt;{ '5-Ticket::TicketEscalation' } = {     'CacheTime' =&gt; '40',     'EscalationInMinutes' =&gt; '120',     'Module' =&gt;     'Kernel::Output::HTML::NotificationAgentTicketEscalation',     'ShownMax' =&gt; '25' };</pre>

## Frontend::Agent::ModuleRegistration

### Frontend::Module###AgentTicketQueue

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketQueue' } = = {     'Description' =&gt; 'Overview of all open Tickets',     'Loader' =&gt; {</pre>

Description	Value
	<pre> 'CSS' =&gt; [     'Core.AgentTicketQueue.css' ] }, 'NavBar' =&gt; [ {     'AccessKey' =&gt; 'o',     'Block' =&gt; '',     'Description' =&gt; 'Overview of all open Tickets',     'Link' =&gt; 'Action=AgentTicketQueue',     'LinkOption' =&gt; '',     'Name' =&gt; 'Queue view',     'NavBar' =&gt; 'Ticket',     'Prio' =&gt; '100',     'Type' =&gt; '' }, {     'AccessKey' =&gt; 't',     'Block' =&gt; 'ItemArea',     'Description' =&gt; '',     'Link' =&gt; 'Action=AgentTicketQueue',     'LinkOption' =&gt; '',     'Name' =&gt; 'Tickets',     'NavBar' =&gt; 'Ticket',     'Prio' =&gt; '200',     'Type' =&gt; 'Menu' } ], 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'QueueView' }; </pre>

## Frontend::Module###AgentTicketPhone

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketPhone' } = {     'Description' =&gt; 'Create new phone ticket',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.CustomerSearch.js',             'Core.Agent.TicketAction.js'         ]     } } </pre>

Description	Value
	<pre> }, 'NavBar' =&gt; [ {     'AccessKey' =&gt; 'n',     'Block' =&gt; '',     'Description' =&gt; 'Create new phone ticket (inbound)',     'Link' =&gt; 'Action=AgentTicketPhone',     'LinkOption' =&gt; '',     'Name' =&gt; 'New phone ticket',     'NavBar' =&gt; 'Ticket',     'Prio' =&gt; '200',     'Type' =&gt; '' } ], 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'New phone ticket' };</pre>

## Frontend::Module###AgentTicketPhoneOutbound

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketPhoneOutbound' } =  {     'Description' =&gt; 'Phone Call',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Phone-Ticket' };</pre>

## Frontend::Module###AgentTicketPhoneInbound

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketPhoneInbound' } = {     'Description' =&gt; 'Incoming Phone Call',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Phone-Ticket' };</pre>

## Frontend::Module###AgentTicketEmail

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketEmail' } = {     'Description' =&gt; 'Create new email ticket',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.CustomerSearch.js',             'Core.Agent.TicketAction.js'         ]     },     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'm',             'Block' =&gt; '',             'Description' =&gt; 'Create new email ticket and send this out (outbound)',             'Link' =&gt; 'Action=AgentTicketEmail',             'LinkOption' =&gt; '',             'Name' =&gt; 'New email ticket',             'NavBar' =&gt; 'Ticket',             'Prio' =&gt; '210',             'Type' =&gt; ''         }     ],     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'New email ticket' };</pre>

**Frontend::Module###AgentTicketSearch**

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module }-&gt;{ 'AgentTicketSearch' } = {     'Description' =&gt; 'Search Ticket',     'NavBar' =&gt; [         {             'AccessKey' =&gt; 's',             'Block' =&gt; '',             'Description' =&gt; 'Search Tickets',             'Link' =&gt; 'Action=AgentTicketSearch',             'LinkOption' =&gt;                 'onclick="window.setTimeout(function() {Core.Agent.Search.OpenSearchDialog(\AgentTicketSearch \});}, 0); return false;"',             'Name' =&gt; 'Search',             'NavBar' =&gt; 'Ticket',             'Prio' =&gt; '300',             'Type' =&gt; ''         }     ],     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Search' };</pre>

**Frontend::Module###AgentTicketLockedView**

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module }- &gt;{ 'AgentTicketLockedView' } = {     'Description' =&gt; 'Locked Tickets',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Locked Tickets' };</pre>

## Frontend::Module###AgentTicketResponsibleView

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AgentTicketResponsibleView'} =  {     'Description' =&gt; 'Responsible Tickets',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Responsible Tickets' };</pre>

## Frontend::Module###AgentTicketWatchView

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AgentTicketWatchView'} =  {     'Description' =&gt; 'Watched Tickets',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Watched Tickets' };</pre>

## Frontend::Module###AgentCustomerSearch

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AgentCustomerSearch'} =  {     'Description' =&gt; 'AgentCustomerSearch',     'NavBarName' =&gt; 'Ticket',</pre>

Description	Value
	'Title' => 'AgentCustomerSearch' };

## Frontend::Module###AgentTicketStatusView

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketStatusView' } = {     'Description' =&gt; 'Overview of all open tickets',     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'v',             'Block' =&gt; '',             'Description' =&gt; 'Overview of all open Tickets.',             'Link' =&gt; 'Action=AgentTicketStatusView',             'LinkOption' =&gt; '',             'Name' =&gt; 'Status view',             'NavBar' =&gt; 'Ticket',             'Prio' =&gt; '110',             'Type' =&gt; ''         }     ],     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Status view' };</pre>

## Frontend::Module###AgentTicketEscalationView

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketEscalationView' } = {     'Description' =&gt; 'Overview of all escalated tickets',     'NavBar' =&gt; [</pre>

Description	Value
	<pre>{     'AccessKey' =&gt; 'e',     'Block' =&gt; '',     'Description' =&gt; 'Overview Escalated Tickets',     'Link' =&gt; 'Action=AgentTicketEscalationView',     'LinkOption' =&gt; '',     'Name' =&gt; 'Escalation view',     'NavBar' =&gt; 'Ticket',     'Prio' =&gt; '120',     'Type' =&gt; '' }, 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Escalation view' };</pre>

## Frontend::Module###AgentZoom

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentZoom'} = {     'Description' =&gt; 'compat module for AgentZoom to AgentTicketZoom',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; '' };</pre>

## Frontend::Module###AgentTicketZoom

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketZoom'} = {     'Description' =&gt; 'Ticket Zoom',     'Loader' =&gt; {         'JavaScript' =&gt; [ </pre>

Description	Value
	<pre>'thirdparty/jquery-tablesorter-2.0.5/ jquery.tablesorter.js', 'Core.UI.Table.Sort.js', 'Core.Agent.TicketZoom.js' ] }, 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Zoom' };</pre>

## Frontend::Module###AgentTicketAttachment

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AgentTicketAttachment'} = { 'Description' =&gt; 'To download attachments', 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; '' };</pre>

## Frontend::Module###AgentTicketPlain

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPlain'} = { 'Description' =&gt; 'Ticket plain view of an email', 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Plain' };</pre>

## Frontend::Module###AgentTicketNote

Description	Value
Description:	Frontend module registration for the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketNote' } = {     'Description' =&gt; 'Ticket Note',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Note' };</pre>

## Frontend::Module###AgentTicketMerge

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketMerge' } = {     'Description' =&gt; 'Ticket Merge',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Merge' };</pre>

## Frontend::Module###AgentTicketPending

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketPending' } = {</pre>

Description	Value
	<pre>'Description' =&gt; 'Ticket Pending', 'Loader' =&gt; {   'JavaScript' =&gt; [     'Core.Agent.TicketAction.js'   ] }, 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Pending' };</pre>

## Frontend::Module###AgentTicketWatcher

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AgentTicketWatcher'} = {   'Description' =&gt; 'A TicketWatcher Module',   'NavBarName' =&gt; 'Ticket-Watcher',   'Title' =&gt; 'Ticket-Watcher' };</pre>

## Frontend::Module###AgentTicketPriority

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AgentTicketPriority'} = {   'Description' =&gt; 'Ticket Priority',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ] }, 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Priority' };</pre>

## Frontend::Module###AgentTicketLock

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module }-&gt;{ 'AgentTicketLock' } = {     'Description' =&gt; 'Ticket Lock',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Lock' };</pre>

## Frontend::Module###AgentTicketMove

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module }-&gt;{ 'AgentTicketMove' } = {     'Description' =&gt; 'Ticket Move',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Move' };</pre>

## Frontend::Module###AgentTicketHistory

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketHistory' } = {     'Description' =&gt; 'Ticket History',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'History' };</pre>

## Frontend::Module###AgentTicketOwner

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketOwner' } = {     'Description' =&gt; 'Ticket Owner',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Owner' };</pre>

## Frontend::Module###AgentTicketResponsible

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketResponsible' } = {     'Description' =&gt; 'Ticket Responsible',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Responsible'</pre>

Description	Value
	};

## Frontend::Module###AgentTicketCompose

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module' }-&gt;{ 'AgentTicketCompose' } = {     'Description' =&gt; 'Ticket Compose email Answer',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.CustomerSearch.js',             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Compose' };</pre>

## Frontend::Module###AgentTicketBounce

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend' :Module' }-&gt;{ 'AgentTicketBounce' } = {     'Description' =&gt; 'Ticket Compose Bounce Email',     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Bounce' };</pre>

## Frontend::Module###AgentTicketForward

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketForward' } = {     'Description' =&gt; 'Ticket Forward Email',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.CustomerSearch.js',             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Forward' };</pre>

## Frontend::Module###AgentTicketCustomer

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }- &gt;{ 'AgentTicketCustomer' } = {     'Description' =&gt; 'Ticket Customer',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.CustomerSearch.js',             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Customer' };</pre>

## Frontend::Module###AgentTicketClose

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketClose' } = {     'Description' =&gt; 'Ticket Close',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Close' };</pre>

## Frontend::Module###AgentTicketFreeText

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketFreeText' } = {     'Description' =&gt; 'Ticket FreeText',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Free Fields' };</pre>

## Frontend::Module###AgentTicketPrint

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketPrint' } = {</pre>

Description	Value
	<pre>'Description' =&gt; 'Ticket Print', 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Print' };</pre>

## Frontend::Module###AgentTicketBulk

Description	Value
Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Module' }-&gt;{ 'AgentTicketBulk' } = {     'Description' =&gt; 'Ticket bulk module',     'Loader' =&gt; {         'JavaScript' =&gt; [             'Core.Agent.TicketAction.js'         ]     },     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Bulk-Action' };</pre>

## Frontend::Agent::Preferences

### PreferencesGroups###NewTicketNotify

Description	Value
Description:	Parameters for the NewTicketNotify object in the preferences view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'NewTicketNotify' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Email Settings',     'Data' =&gt; {         '0' =&gt; 'No',         '1' =&gt; 'Yes'     }, }</pre>

Description	Value
	<pre>'DataSelected' =&gt; '0', 'Desc' =&gt; 'Send me a notification if there is a new ticket in "My Queues".', 'Key' =&gt; 'Send new ticket notifications', 'Label' =&gt; 'New ticket notification', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric', 'PrefKey' =&gt; 'UserSendNewTicketNotification', 'Prio' =&gt; '1000' };</pre>

## PreferencesGroups###FollowUpNotify

Description	Value
Description:	Parameters for the FollowUpNotify object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'FollowUpNotify' } = { 'Active' =&gt; '1', 'Column' =&gt; 'Email Settings', 'Data' =&gt; {   '0' =&gt; 'No',   '1' =&gt; 'Yes' }, 'DataSelected' =&gt; '0', 'Desc' =&gt; 'Send me a notification if a customer sends a follow up and I\'m the owner of the ticket or the ticket is unlocked and is in one of my subscribed queues.', 'Key' =&gt; 'Send ticket follow up notifications', 'Label' =&gt; 'Ticket follow up notification', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric', 'PrefKey' =&gt; 'UserSendFollowUpNotification', 'Prio' =&gt; '2000' };</pre>

## PreferencesGroups###LockTimeoutNotify

Description	Value
Description:	Parameters for the LockTimeoutNotify object in the preference view of the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'LockTimeoutNotify' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Email Settings',     'Data' =&gt; {         '0' =&gt; 'No',         '1' =&gt; 'Yes'     },     'DataSelected' =&gt; '0',     'Desc' =&gt; 'Send me a notification if a ticket is unlocked by the system.',     'Key' =&gt; 'Send ticket lock timeout notifications',     'Label' =&gt; 'Ticket lock timeout notification',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesGeneric',     'PrefKey' =&gt; 'UserSendLockTimeoutNotification',     'Prio' =&gt; '3000' };</pre>

## PreferencesGroups###MoveNotify

Description	Value
Description:	Parameters for the MoveNotify object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'MoveNotify' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Email Settings',     'Data' =&gt; {         '0' =&gt; 'No',         '1' =&gt; 'Yes'     },     'DataSelected' =&gt; '0',     'Desc' =&gt; 'Send me a notification if a ticket is moved into one of "My Queues".',     'Key' =&gt; 'Send ticket move notifications',     'Label' =&gt; 'Ticket move notification',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesGeneric',</pre>

Description	Value
	'PrefKey' => 'UserSendMoveNotification', 'Prio' => '4000' };

## PreferencesGroups###WatcherNotify

Description	Value
Description:	Parameters for the WatcherNotify object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'WatcherNotify'} = {     'Active' =&gt; '1',     'Column' =&gt; 'Email Settings',     'Data' =&gt; {         '0' =&gt; 'No',         '1' =&gt; 'Yes'     },     'DataSelected' =&gt; '0',     'Desc' =&gt; 'Send me the same notifications for my watched tickets that the ticket owners will get.',     'Key' =&gt; 'Send ticket watch notifications',     'Label' =&gt; 'Ticket watch notification',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesTicketWatcher',     'PrefKey' =&gt; 'UserSendWatcherNotification',     'Prio' =&gt; '5000' };</pre>

## PreferencesGroups###CustomQueue

Description	Value
Description:	Parameters for the CustomQueue object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'CustomQueue'} =  {     'Active' =&gt; '1',     'Column' =&gt; 'Other Settings',</pre>

Description	Value
	<pre>'Desc' =&gt; 'Your queue selection of your favorite queues. You also get notified about those queues via email if enabled.', 'Key' =&gt; 'My Queues', 'Label' =&gt; 'My Queues', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesCustomQueue', 'Permission' =&gt; 'ro', 'Prio' =&gt; '1000' };</pre>

**PreferencesGroups###RefreshTime**

Description	Value
Description:	Parameters for the RefreshTime object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'RefreshTime' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Other Settings',     'Data' =&gt; {         '0' =&gt; 'off',         '10' =&gt; '10 minutes',         '15' =&gt; '15 minutes',         '2' =&gt; ' 2 minutes',         '5' =&gt; ' 5 minutes',         '7' =&gt; ' 7 minutes'     },     'DataSelected' =&gt; '0',     'Desc' =&gt; 'If enabled, the different overviews (Dashboard, LockedView, QueueView) will automatically refresh after the specified time.',     'Key' =&gt; 'Refresh Overviews after',     'Label' =&gt; 'Overview Refresh Time',     'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',     'PrefKey' =&gt; 'UserRefreshTime',     'Prio' =&gt; '2000' };</pre>

**PreferencesGroups###TicketOverviewSmallPageShown**

Description	Value
Description:	Parameters for the pages (in which the tickets are shown) of the small ticket overview.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}- &gt;{'TicketOverviewSmallPageShown'} =  {     'Active' =&gt; '0',     'Column' =&gt; 'Other Settings',     'Data' =&gt; {         '10' =&gt; '10',         '15' =&gt; '15',         '20' =&gt; '20',         '25' =&gt; '25',         '30' =&gt; '30',         '35' =&gt; '35'     },     'DataSelected' =&gt; '25',     'Key' =&gt; 'Ticket limit per page for Ticket Overview "Small"',     'Label' =&gt; 'Ticket Overview "Small" Limit',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesGeneric',     'PrefKey' =&gt; 'UserTicketOverviewSmallPageShown',     'Prio' =&gt; '8000' };</pre>

## PreferencesGroups###TicketOverviewMediumPageShown

Description	Value
Description:	Parameters for the pages (in which the tickets are shown) of the medium ticket overview.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}- &gt;{'TicketOverviewMediumPageShown'} =  {     'Active' =&gt; '0',     'Column' =&gt; 'Other Settings',     'Data' =&gt; {         '10' =&gt; '10',         '15' =&gt; '15',         '20' =&gt; '20',         '25' =&gt; '25',         '30' =&gt; '30',         '35' =&gt; '35'</pre>

Description	Value
	<pre> }, 'DataSelected' =&gt; '20', 'Key' =&gt; 'Ticket limit per page for Ticket Overview "Medium"', 'Label' =&gt; 'Ticket Overview "Medium" Limit', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric', 'PrefKey' =&gt; 'UserTicketOverviewMediumPageShown', 'Prio' =&gt; '8100' };</pre>

## PreferencesGroups###TicketOverviewPreviewPageShown

Description	Value
Description:	Parameters for the pages (in which the tickets are shown) of the ticket preview overview.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{ 'PreferencesGroups' }- &gt;{ 'TicketOverviewPreviewPageShown' } = {     'Active' =&gt; '0',     'Column' =&gt; 'Other Settings',     'Data' =&gt; {         '10' =&gt; '10',         '15' =&gt; '15',         '20' =&gt; '20',         '25' =&gt; '25',         '30' =&gt; '30',         '35' =&gt; '35'     },     'DataSelected' =&gt; '15',     'Key' =&gt; 'Ticket limit per page for Ticket Overview "Preview"',     'Label' =&gt; 'Ticket Overview "Preview" Limit',     'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',     'PrefKey' =&gt; 'UserTicketOverviewPreviewPageShown',     'Prio' =&gt; '8200' };</pre>

## PreferencesGroups###CreateNextMask

Description	Value
Description:	Parameters for the CreateNextMask object in the preference view of the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'PreferencesGroups' }-&gt;{ 'CreateNextMask' } = {     'Active' =&gt; '1',     'Column' =&gt; 'Other Settings',     'Data' =&gt; {         '' =&gt; 'CreateTicket',         'AgentTicketZoom' =&gt; 'TicketZoom'     },     'DataSelected' =&gt; '',     'Key' =&gt; 'Show this screen after I created a new ticket',     'Label' =&gt; 'Screen after new ticket',     'Module' =&gt;     'Kernel::Output::HTML::PreferencesGeneric',     'PrefKey' =&gt; 'UserCreateNextMask',     'Prio' =&gt; '3000' };</pre>

## Frontend::Agent::SearchRouter

### Frontend::Search###Ticket

Description	Value
Description:	Search backend router.
Group:	Ticket
SubGroup:	Frontend::Agent::SearchRouter
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::Search' }-&gt;{ 'Ticket' } = {     '^AgentTicket' =&gt;     'Action=AgentTicketSearch;Subaction=AJAX' };</pre>

## Frontend::Agent::Ticket::ArticleAttachmentModule

### Ticket::Frontend::ArticleAttachmentModule###1-Download

Description	Value
Description:	Shows a link to download article attachments in the zoom view of the article in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleAttachmentModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::ArticleAttachmentModule' }- &gt;{ '1-Download' } =  {     'Module' =&gt;     'Kernel::Output::HTML::ArticleAttachmentDownload' };</pre>

## **Ticket::Frontend::ArticleAttachmentModule###2-HTML-Viewer**

Description	Value
Description:	Shows a link to access article attachments via a html online viewer in the zoom view of the article in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleAttachmentModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::ArticleAttachmentModule' }- &gt;{ '2-HTML-Viewer' } =  {     'Module' =&gt;     'Kernel::Output::HTML::ArticleAttachmentHTMLViewer' };</pre>

## **Frontend::Agent::Ticket::ArticleComposeModule**

### **Ticket::Frontend::ArticleComposeModule###1-SignEmail**

Description	Value
Description:	Module to compose signed messages (PGP or S/MIME).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleComposeModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ArticleComposeModule' }- &gt;{ '1-SignEmail' } =  {     'Module' =&gt;     'Kernel::Output::HTML::ArticleComposeSign'</pre>

Description	Value
	};

## Ticket::Frontend::ArticleComposeModule###2-CryptEmail

Description	Value
Description:	Module to crypt composed messages (PGP or S/MIME).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleComposeModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ArticleComposeModule' }- &gt;{ '2-CryptEmail' } =  {     'Module' =&gt;     'Kernel::Output::HTML::ArticleComposeCrypt' };</pre>

## Frontend::Agent::Ticket::ArticleViewModule

### Ticket::Frontend::ArticleViewModule###1-PGP

Description	Value
Description:	Agent interface article notification module to check PGP.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ArticleViewModule' }- &gt;{ '1-PGP' } =  {     'Module' =&gt;     'Kernel::Output::HTML::ArticleCheckPGP' };</pre>

### Ticket::Frontend::ArticleViewModule###1-SMIME

Description	Value
Description:	Agent interface module to check incoming emails in the Ticket-Zoom-View if the S/MIME-key is available and true.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModule
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Ticket::Frontend::ArticleViewModule' }- &gt;{ '1-SMIME' } =  {   'Module' =&gt;   'Kernel::Output::HTML::ArticleCheckSMIME' };</pre>

## Frontend::Agent::Ticket::ArticleViewModulePre

### Ticket::Frontend::ArticlePreViewModule###1-PGP

Description	Value
Description:	Agent interface article notification module to check PGP.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModulePre
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ArticlePreViewModule' }- &gt;{ '1-PGP' } =  {   'Module' =&gt;   'Kernel::Output::HTML::ArticleCheckPGP' };</pre>

### Ticket::Frontend::ArticlePreViewModule###1-SMIME

Description	Value
Description:	Agent interface article notification module to check S/MIME.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModulePre
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ArticlePreViewModule' }- &gt;{ '1-SMIME' } =  {   'Module' =&gt;   'Kernel::Output::HTML::ArticleCheckSMIME' };</pre>

## Frontend::Agent::Ticket::MenuModule

### Ticket::Frontend::MenuModule###000-Back

Description	Value
Description:	Shows a link in the menu to go back in the ticket zoom view of the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'000-Back'} = {     'Action' =&gt; '',     'Description' =&gt; 'Back',     'Link' =&gt; '\$Env{"LastScreenOverview"};TicketID=\$QData{"TicketID"}',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Back',     'PopupType' =&gt; '',     'Target' =&gt; '' };</pre>

## **Ticket::Frontend::MenuModule##100-Lock**

Description	Value
Description:	Shows a link in the menu to lock/unlock tickets in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'100-Lock'} = {     'Action' =&gt; 'AgentTicketLock',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuLock',     'Name' =&gt; 'Lock',     'Target' =&gt; '' };</pre>

## **Ticket::Frontend::MenuModule##200-History**

Description	Value
Description:	Shows a link in the menu to access the history of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::MenuModule' }-&gt;{ '200-History' } = {     'Action' =&gt; 'AgentTicketHistory',     'Description' =&gt; 'Show the ticket history',     'Link' =&gt; 'Action=AgentTicketHistory;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'History',     'PopupType' =&gt; 'TicketHistory',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###210-Print

Description	Value
Description:	Shows a link in the menu to print a ticket or an article in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::MenuModule' }-&gt;{ '210-Print' } = {     'Action' =&gt; 'AgentTicketPrint',     'Description' =&gt; 'Print this ticket',     'Link' =&gt; 'Action=AgentTicketPrint;TicketID=\$QData{"TicketID"}',     'LinkParam' =&gt; 'target="print"',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Print',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###300-Priority

Description	Value
Description:	Shows a link in the menu to see the priority of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'300-Priority'} = {     'Action' =&gt; 'AgentTicketPriority',     'Description' =&gt; 'Change the ticket priority',     'Link' =&gt; 'Action=AgentTicketPriority;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Priority',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###310-FreeText

Description	Value
Description:	Shows a link in the menu to add a free text field in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'310-FreeText'} = {     'Action' =&gt; 'AgentTicketFreeText',     'Description' =&gt; 'Change the free fields for this ticket',     'Link' =&gt; 'Action=AgentTicketFreeText;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Free Fields',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###320-Link

Description	Value
Description:	Shows a link in the menu that allows linking a ticket with another object in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::MenuModule' }-&gt;{ '320-Link' } = {     'Action' =&gt; 'AgentLinkObject',     'Description' =&gt; 'Link this ticket to other objects',     'Link' =&gt;         'Action=AgentLinkObject;SourceObject=Ticket;SourceKey=' .         '\$QData{"TicketID"}',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Link',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

**Ticket::Frontend::MenuModule###400-Owner**

Description	Value
Description:	Shows a link in the menu to see the owner of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::MenuModule' }-&gt;{ '400-Owner' } = {     'Action' =&gt; 'AgentTicketOwner',     'Description' =&gt; 'Change the owner for this ticket',     'Link' =&gt; 'Action=AgentTicketOwner;TicketID=' .         '\$QData{"TicketID"}',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Owner',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

**Ticket::Frontend::MenuModule###410-Responsible**

Description	Value
Description:	Shows a link in the menu to see the responsible agent of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'410-Responsible'} = {     'Action' =&gt; 'AgentTicketResponsible',     'Description' =&gt; 'Change the responsible person for this ticket',     'Link' =&gt;     'Action=AgentTicketResponsible;TicketID=' .     \$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuResponsible',     'Name' =&gt; 'Responsible',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###420-Customer

Description	Value
Description:	Shows a link in the menu to see the customer who requested the ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'420-Customer'} = {     'Action' =&gt; 'AgentTicketCustomer',     'Description' =&gt; 'Change the customer for this ticket',     'Link' =&gt; 'Action=AgentTicketCustomer;TicketID=' .     \$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Customer',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###420-Note

Description	Value
Description:	Shows a link in the menu to add a note in the ticket zoom view of the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'420-Note'} = {     'Action' =&gt; 'AgentTicketNote',     'Description' =&gt; 'Add a note to this ticket',     'Link' =&gt; 'Action=AgentTicketNote;TicketID=\$QData{"TicketID"}',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Note',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## **Ticket::Frontend::MenuModule###430-Merge**

Description	Value
Description:	Shows a link in the menu that allows merging tickets in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'430-Merge'} = {     'Action' =&gt; 'AgentTicketMerge',     'Description' =&gt; 'Merge into a different ticket',     'Link' =&gt; 'Action=AgentTicketMerge;TicketID=\$QData{"TicketID"}',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Merge',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## **Ticket::Frontend::MenuModule###440-Pending**

Description	Value
Description:	Shows a link in the menu to set a ticket as pending in the ticket zoom view of the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'440-Pending'} = {     'Action' =&gt; 'AgentTicketPending',     'Description' =&gt; 'Set this ticket to pending',     'Link' =&gt; 'Action=AgentTicketPending;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Pending',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###448-Watch

Description	Value
Description:	Shows a link in the menu for subscribing / unsubscribing from a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'448-Watch'} = {     'Action' =&gt; 'AgentTicketWatcher',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuTicketWatcher',     'Name' =&gt; 'Watch',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###450-Close

Description	Value
Description:	Shows a link in the menu to close a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'450-Close'} = {     'Action' =&gt; 'AgentTicketClose',     'Description' =&gt; 'Close this ticket',     'Link' =&gt; 'Action=AgentTicketClose;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Close',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###460-Delete

Description	Value
Description:	Shows a link in the menu to delete a ticket in the ticket zoom view of the agent interface. Additional access control to show or not show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'460-Delete'} = {     'Action' =&gt; 'AgentTicketMove',     'Description' =&gt; 'Delete this ticket',     'Link' =&gt; 'Action=AgentTicketMove;TicketID=\$Data{"TicketID"};DestQueue=Delete',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Delete',     'PopupType' =&gt; '',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::MenuModule###470-Spam

Description	Value
Description:	Shows a link to set a ticket as spam in the ticket zoom view of the agent interface. Additional access control to show or not show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::MenuModule' }-&gt;{ '470-Spam' } = {     'Action' =&gt; 'AgentTicketMove',     'Description' =&gt; 'Mark as Spam!',     'Link' =&gt; 'Action=AgentTicketMove;TicketID=\$Data{"TicketID"};DestQueue=Delete',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Spam',     'PopupType' =&gt; '',     'Target' =&gt; '' };</pre>

## Frontend::Agent::Ticket::MenuModulePre

### Ticket::Frontend::PreMenuModule###100-Lock

Description	Value
Description:	Shows a link in the menu to lock / unlock a ticket in the ticket overviews of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::PreMenuModule' }-&gt;{ '100-Lock' } = {     'Action' =&gt; 'AgentTicketLock',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuLock',     'Name' =&gt; 'Lock',     'PopupType' =&gt; '',     'Target' =&gt; '' };</pre>

### Ticket::Frontend::PreMenuModule###200-Zoom

Description	Value
Description:	Shows a link in the menu to zoom a ticket in the ticket overviews of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'200-Zoom'} = {     'Action' =&gt; 'AgentTicketZoom',     'Description' =&gt; 'Look into a ticket!',     'Link' =&gt; 'Action=AgentTicketZoom;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Zoom',     'PopupType' =&gt; '',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::PreMenuModule###210-History

Description	Value
Description:	Shows a link in the menu to see the history of a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'210-History'} = {     'Action' =&gt; 'AgentTicketHistory',     'Description' =&gt; 'Show the ticket history',     'Link' =&gt; 'Action=AgentTicketHistory;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'History',     'PopupType' =&gt; 'TicketHistory',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::PreMenuModule###300-Priority

Description	Value
Description:	Shows a link in the menu to set the priority of a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'300-Priority'} = {     'Action' =&gt; 'AgentTicketPriority',     'Description' =&gt; 'Change the priority for this ticket',     'Link' =&gt; 'Action=AgentTicketPriority;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Priority',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::PreMenuModule###420-Note

Description	Value
Description:	Shows a link in the menu to add a note to a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'420-Note'} = {     'Action' =&gt; 'AgentTicketNote',     'Description' =&gt; 'Add a note to this ticket',     'Link' =&gt; 'Action=AgentTicketNote;TicketID=\$QData{"TicketID"}',     'Module' =&gt;     'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Note',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::PreMenuModule###440-Close

Description	Value
Description:	Shows a link in the menu to close a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'440-Close'} = {     'Action' =&gt; 'AgentTicketClose',     'Description' =&gt; 'Close this ticket',     'Link' =&gt; 'Action=AgentTicketClose;TicketID=\$QData{"TicketID"}',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuGeneric',     'Name' =&gt; 'Close',     'PopupType' =&gt; 'TicketAction',     'Target' =&gt; '' };</pre>

## Ticket::Frontend::PreMenuModule###445-Move

Description	Value
Description:	Shows a link in the menu to move a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'445-Move'} = {     'Action' =&gt; 'AgentTicketMove',     'Description' =&gt; 'Change queue!',     'Module' =&gt;         'Kernel::Output::HTML::TicketMenuMove',     'Name' =&gt; 'Move' };</pre>

## Ticket::Frontend::PreMenuModule###450-Delete

Description	Value
Description:	Shows a link in the menu to delete a ticket in every ticket overview of the agent interface. Additional access control to show or not show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'450-Delete'} = {     'Action' =&gt; 'AgentTicketMove',</pre>

Description	Value
	<pre>'Description' =&gt; 'Delete this ticket', 'Link' =&gt; 'Action=AgentTicketMove;TicketID= \$Data{"TicketID"};DestQueue=Delete', 'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric', 'Name' =&gt; 'Delete', 'PopupType' =&gt; '', 'Target' =&gt; '' };</pre>

**Ticket::Frontend::PreMenuModule###460-Spam**

Description	Value
Description:	Shows a link in the menu to set a ticket as spam in every ticket overview of the agent interface. Additional access control to show or not show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::PreMenuModule' }-&gt;{ '460- Spam' } = { &gt;Action' =&gt; 'AgentTicketMove', 'Description' =&gt; 'Mark as Spam!', 'Link' =&gt; 'Action=AgentTicketMove;TicketID= \$Data{"TicketID"};DestQueue=Delete', 'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric', 'Name' =&gt; 'Spam', 'PopupType' =&gt; '', 'Target' =&gt; '' };</pre>

**Frontend::Agent::Ticket::ViewBounce****Ticket::Frontend::AgentTicketBounce###Permission**

Description	Value
Description:	Required permissions to use the ticket bounce screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'Permission'} = 'bounce';</pre>

## Ticket::Frontend::AgentTicketBounce###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket bounce screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'RequiredLock'} = '1';</pre>

## Ticket::Frontend::AgentTicketBounce###StateDefault

Description	Value
Description:	Defines the default next state of a ticket after being bounced, in the ticket bounce screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'StateDefault'} = 'closed successful';</pre>

## Ticket::Frontend::AgentTicketBounce###StateType

Description	Value
Description:	Defines the next state of a ticket after being bounced, in the ticket bounce screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'StateType'} = [ 'open', 'closed' ]</pre>

Description	Value
	];

## Ticket::Frontend::BounceText

Description	Value
Description:	Defines the default ticket bounced notification for customer/sender in the ticket bounce screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::BounceText' } = 'Your email with ticket number "&lt;OTRS_TICKET&gt;" is bounced to "&lt;OTRS_BOUNCE_TO&gt;". Contact this address for further information.';</pre>

## Frontend::Agent::Ticket::ViewBulk

### Ticket::Frontend::AgentTicketBulk###RequiredLock

Description	Value
Description:	Automatically lock and set owner to current Agent after selecting for an Bulk Action.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }- &gt;{ 'RequiredLock' } = '1';</pre>

### Ticket::Frontend::AgentTicketBulk###TicketType

Description	Value
Description:	Sets the ticket type in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }- &gt;{ 'TicketType' } = '1';</pre>

**Ticket::Frontend::AgentTicketBulk###Owner**

Description	Value
Description:	Sets the ticket owner in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }- &gt;{ 'Owner' } = '1';</pre>

**Ticket::Frontend::AgentTicketBulk###Responsible**

Description	Value
Description:	Sets the responsible agent of the ticket in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }- &gt;{ 'Responsible' } = '1';</pre>

**Ticket::Frontend::AgentTicketBulk###State**

Description	Value
Description:	If a note is added by an agent, sets the state of a ticket in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }- &gt;{ 'State' } = '1';</pre>

**Ticket::Frontend::AgentTicketBulk###StateType**

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'StateType'} = [     'open',     'closed',     'pending reminder',     'pending auto' ];</pre>

## Ticket::Frontend::AgentTicketBulk###StateDefault

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'StateDefault'} = 'open';</pre>

## Ticket::Frontend::AgentTicketBulk###Priority

Description	Value
Description:	Shows the ticket priority options in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'Priority'} = '1';</pre>

## Ticket::Frontend::AgentTicketBulk###PriorityDefault

Description	Value
Description:	Defines the default ticket priority in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk

Description	Value
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }-&gt;{ 'PriorityDefault' } = '3 normal';</pre>

## Ticket::Frontend::AgentTicketBulk###ArticleTypeDefault

Description	Value
Description:	Defines the default type of the note in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }-&gt;{ 'ArticleTypeDefault' } = 'note-internal';</pre>

## Ticket::Frontend::AgentTicketBulk###ArticleTypes

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketBulk' }-&gt;{ 'ArticleTypes' } = {     'note-external' =&gt; '1',     'note-internal' =&gt; '1',     'note-report' =&gt; '0' };</pre>

## Frontend::Agent::Ticket::ViewClose

### Ticket::Frontend::AgentTicketClose###Permission

Description	Value
Description:	Required permissions to use the close ticket screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }--&gt;{ 'Permission' } = 'close';</pre>

## **Ticket::Frontend::AgentTicketClose###RequiredLock**

Description	Value
Description:	Defines if a ticket lock is required in the close ticket screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }--&gt;{ 'RequiredLock' } = '1';</pre>

## **Ticket::Frontend::AgentTicketClose###TicketType**

Description	Value
Description:	Sets the ticket type in the close ticket screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }--&gt;{ 'TicketType' } = '0';</pre>

## **Ticket::Frontend::AgentTicketClose###Service**

Description	Value
Description:	Sets the service in the close ticket screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Service'} = '0';</pre>

**Ticket::Frontend::AgentTicketClose###Owner**

Description	Value
Description:	Sets the ticket owner in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Owner'} = '0';</pre>

**Ticket::Frontend::AgentTicketClose###OwnerMandatory**

Description	Value
Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'OwnerMandatory'} = '0';</pre>

**Ticket::Frontend::AgentTicketClose###Responsible**

Description	Value
Description:	Sets the responsible agent of the ticket in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Responsible'} = '0';</pre>

**Ticket::Frontend::AgentTicketClose###State**

Description	Value
Description:	If a note is added by an agent, sets the state of a ticket in the close ticket screen of the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }- &gt;{ 'State' } = '1';</pre>

## **Ticket::Frontend::AgentTicketClose###StateType**

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }- &gt;{ 'StateType' } = [     'closed' ];</pre>

## **Ticket::Frontend::AgentTicketClose###StateDefault**

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }- &gt;{ 'StateDefault' } = 'closed successful';</pre>

## **Ticket::Frontend::AgentTicketClose###Note**

Description	Value
Description:	Allows adding notes in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }- &gt;{ 'Note' } = '1';</pre>

## Ticket::Frontend::AgentTicketClose###Subject

Description	Value
Description:	Sets the default subject for notes added in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }- &gt;{ 'Subject' } = '\$Text{"Close"}';</pre>

## Ticket::Frontend::AgentTicketClose###Body

Description	Value
Description:	Sets the default body text for notes added in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }- &gt;{ 'Body' } = '';</pre>

## Ticket::Frontend::AgentTicketClose###InvolvedAgent

Description	Value
Description:	Shows a list of all the involved agents on this ticket, in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }-&gt;{ 'InvolvedAgent' } = '0';</pre>

**Ticket::Frontend::AgentTicketClose###InformAgent**

Description	Value
Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }-&gt;{ 'InformAgent' } = '0';</pre>

**Ticket::Frontend::AgentTicketClose###ArticleTypeDefault**

Description	Value
Description:	Defines the default type of the note in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }-&gt;{ 'ArticleTypeDefault' } = 'note-internal';</pre>

**Ticket::Frontend::AgentTicketClose###ArticleTypes**

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }-&gt;{ 'ArticleTypes' } = {     'note-external' =&gt; '0',     'note-internal' =&gt; '1',     'note-report' =&gt; '0' };</pre>

**Ticket::Frontend::AgentTicketClose###Priority**

Description	Value
Description:	Shows the ticket priority options in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Priority'} = '0';</pre>

**Ticket::Frontend::AgentTicketClose###PriorityDefault**

Description	Value
Description:	Defines the default ticket priority in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'PriorityDefault'} = '3 normal';</pre>

**Ticket::Frontend::AgentTicketClose###Title**

Description	Value
Description:	Shows the title fields in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Title'} = '0';</pre>

**Ticket::Frontend::AgentTicketClose###HistoryType**

Description	Value
Description:	Defines the history type for the close ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }--&gt;{ 'HistoryType' } = 'AddNote';</pre>

## Ticket::Frontend::AgentTicketClose###HistoryComment

Description	Value
Description:	Defines the history comment for the close ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }--&gt;{ 'HistoryComment' } = '%Close';</pre>

## Ticket::Frontend::AgentTicketClose###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket close screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketClose' }--&gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::Ticket::ViewCompose

### Ticket::Frontend::AgentTicketCompose###Permission

Description	Value
Description:	Required permissions to use the ticket compose screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketCompose' }-&gt;{ 'Permission' } = 'compose';</pre>

## Ticket::Frontend::AgentTicketCompose###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket compose screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketCompose' }-&gt;{ 'RequiredLock' } = '1';</pre>

## Ticket::Frontend::AgentTicketCompose###StateDefault

Description	Value
Description:	Defines the default next state of a ticket if it is composed / answered in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketCompose' }-&gt;{ 'StateDefault' } = 'open';</pre>

## Ticket::Frontend::AgentTicketCompose###StateType

Description	Value
Description:	Defines the next possible states after composing / answering a ticket in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketCompose' }-&gt;{ 'StateType' } = [ 'open', 'closed', ];</pre>

Description	Value
	'pending auto', 'pending reminder' ];

## Ticket::Frontend::ResponseFormat

Description	Value
Description:	Defines the format of responses in the ticket compose screen of the agent interface (\$QData{"OrigFrom"} is From 1:1, \$QData{"OrigFromName"} is only realname of From).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ResponseFormat'} = '\$QData{"Salutation" \$QData{"StdResponse" \$QData{"Signature"  \$TimeShort{"\$QData{"Created"}"} - \$QData{"OrigFromName"} \$Text{"wrote"}: \$QData{"Body" ';</pre>

## Ticket::Frontend::Quote

Description	Value
Description:	Defines the used character for email quotes in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	\$Self->{'Ticket::Frontend::Quote'} = '>';

## Ticket::Frontend::ComposeAddCustomerAddress

Description	Value
Description:	Adds customers email addresses to recipients in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::ComposeAddCustomerAddress'} = '1';</pre>

## Ticket::Frontend::ComposeReplaceSenderAddress

Description	Value
Description:	Replaces the original sender with current customer's email address on compose answer in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::ComposeReplaceSenderAddress'} = '0';</pre>

## Ticket::Frontend::ComposeExcludeCcRecipients

Description	Value
Description:	Uses Cc recipients in reply Cc list on compose an email answer in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::ComposeExcludeCcRecipients'} = '0';</pre>

## Ticket::Frontend::AgentTicketCompose###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket compose screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketCompose' }-&gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::Ticket::ViewCustomer

### Ticket::Frontend::AgentTicketCustomer###Permission

Description	Value
Description:	Required permissions to change the customer of a ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCustomer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketCustomer' }-&gt;{ 'Permission' } = 'customer';</pre>

### Ticket::Frontend::AgentTicketCustomer###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required to change the customer of a ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCustomer
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketCustomer' }-&gt;{ 'RequiredLock' } = '0';</pre>

## Frontend::Agent::Ticket::ViewEmailNew

### Ticket::Frontend::AgentTicketEmail###Priority

Description	Value
Description:	Sets the default priority for new email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'Priority'} = '3 normal';</code>

**Ticket::Frontend::AgentTicketEmail###ArticleType**

Description	Value
Description:	Sets the default article type for new email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'ArticleType'} = 'email-external';</code>

**Ticket::Frontend::AgentTicketEmail###SenderType**

Description	Value
Description:	Sets the default sender type for new email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'SenderType'} = 'agent';</code>

**Ticket::Frontend::AgentTicketEmail###Subject**

Description	Value
Description:	Sets the default subject for new email tickets (e.g. 'email Outbound') in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'Subject'} = '';</code>

**Ticket::Frontend::AgentTicketEmail###Body**

Description	Value
Description:	Sets the default text for new email tickets in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketEmail' }- &gt;{ 'Body' } = '';</pre>

## **Ticket::Frontend::AgentTicketEmail###StateDefault**

Description	Value
Description:	Sets the default next ticket state, after the creation of an email ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketEmail' }- &gt;{ 'StateDefault' } = 'open';</pre>

## **Ticket::Frontend::AgentTicketEmail###StateType**

Description	Value
Description:	Determines the next possible ticket states, after the creation of a new email ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketEmail' }- &gt;{ 'StateType' } = [     'open',     'pending auto',     'pending reminder',     'closed' ];</pre>

## **Ticket::Frontend::AgentTicketEmail###HistoryType**

Description	Value
Description:	Defines the history type for the email ticket screen action, which gets used for ticket history in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketEmail' }-&gt;{ 'HistoryType' } = 'EmailAgent';</pre>

## **Ticket::Frontend::AgentTicketEmail###HistoryComment**

Description	Value
Description:	Defines the history comment for the email ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketEmail' }-&gt;{ 'HistoryComment' } = '';</pre>

## **Ticket::Frontend::AgentTicketEmail###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket email screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketEmail' }-&gt;{ 'DynamicField' } = {};</pre>

## **Frontend::Agent::Ticket::ViewEscalation**

### **Ticket::Frontend::AgentTicketEscalationView###TicketPermission**

Description	Value
Description:	Defines the required permission to show a ticket in the escalation view of the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewEscalation
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketEscalationView'}- &gt;{'TicketPermission'} = 'ro';</pre>

## Ticket::Frontend::AgentTicketEscalationView###ViewableTicketsPage

Description	Value
Description:	Shows all open tickets (even if they are locked) in the escalation view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketEscalationView'}- &gt;{'ViewableTicketsPage'} = '50';</pre>

## Ticket::Frontend::AgentTicketEscalationView###SortBy::Default

Description	Value
Description:	Defines the default ticket attribute for ticket sorting in the escalation view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketEscalationView'}- &gt;{'SortBy::Default'} = 'EscalationTime';</pre>

## Ticket::Frontend::AgentTicketEscalationView###Order::Default

Description	Value
Description:	Defines the default ticket order (after priority sort) in the escalation view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketEscalationView'}-&gt;{'Order::Default'} = 'Up';</pre>

## Frontend::Agent::Ticket::ViewForward

### Ticket::Frontend::AgentTicketForward###Permission

Description	Value
Description:	Required permissions to use the ticket forward screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'Permission'} = 'forward';</pre>

### Ticket::Frontend::AgentTicketForward###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket forward screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'RequiredLock'} = '1';</pre>

### Ticket::Frontend::AgentTicketForward###StateDefault

Description	Value
Description:	Defines the default next state of a ticket after being forwarded, in the ticket forward screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketForward' }-&gt;{ 'StateDefault' } = 'closed successful';</pre>

## Ticket::Frontend::AgentTicketForward###StateType

Description	Value
Description:	Defines the next possible states after forwarding a ticket in the ticket forward screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketForward' }-&gt;{ 'StateType' } = [     'open',     'closed',     'pending reminder',     'pending auto' ];</pre>

## Ticket::Frontend::AgentTicketForward###ArticleTypeDefault

Description	Value
Description:	Defines the default type of forwarded message in the ticket forward screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketForward' }-&gt;{ 'ArticleTypeDefault' } = 'email-external';</pre>

## Ticket::Frontend::AgentTicketForward###ArticleTypes

Description	Value
Description:	Specifies the different article types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketForward' }- &gt;{ 'ArticleTypes' } = [     'email-external',     'email-internal' ];</pre>

## **Ticket::Frontend::AgentTicketForward###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket forward screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketForward' }- &gt;{ 'DynamicField' } = {};</pre>

## **Frontend::Agent::Ticket::ViewFreeText**

### **Ticket::Frontend::AgentTicketFreeText###Permission**

Description	Value
Description:	Required permissions to use the ticket free text screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }- &gt;{ 'Permission' } = 'rw';</pre>

### **Ticket::Frontend::AgentTicketFreeText###RequiredLock**

Description	Value
Description:	Defines if a ticket lock is required in the ticket free text screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'RequiredLock' } = '0';</pre>

## Ticket::Frontend::AgentTicketFreeText###TicketType

Description	Value
Description:	Sets the ticket type in the ticket free text screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'TicketType' } = '1';</pre>

## Ticket::Frontend::AgentTicketFreeText###Service

Description	Value
Description:	Sets the service in the ticket free text screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'Service' } = '1';</pre>

## Ticket::Frontend::AgentTicketFreeText###Owner

Description	Value
Description:	Sets the ticket owner in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'Owner' } = '0';</pre>

**Ticket::Frontend::AgentTicketFreeText###OwnerMandatory**

Description	Value
Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'OwnerMandatory' } = '0';</pre>

**Ticket::Frontend::AgentTicketFreeText###Responsible**

Description	Value
Description:	Sets the responsible agent of the ticket in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'Responsible' } = '0';</pre>

**Ticket::Frontend::AgentTicketFreeText###State**

Description	Value
Description:	If a note is added by an agent, sets the state of a ticket in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'State' } = '0';</pre>

**Ticket::Frontend::AgentTicketFreeText###StateType**

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the ticket free text screen of the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'StateType' } = [     'open',     'closed',     'pending reminder',     'pending auto' ];</pre>

## Ticket::Frontend::AgentTicketFreeText###StateDefault

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'StateDefault' } = 'open';</pre>

## Ticket::Frontend::AgentTicketFreeText###Note

Description	Value
Description:	Allows adding notes in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'Note' } = '0';</pre>

## Ticket::Frontend::AgentTicketFreeText###Subject

Description	Value
Description:	Defines the default subject of a note in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }- &gt;{ 'Subject' } = '\$Text{"Note"}';</pre>

## **Ticket::Frontend::AgentTicketFreeText###Body**

Description	Value
Description:	Defines the default body of a note in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }- &gt;{ 'Body' } = '';</pre>

## **Ticket::Frontend::AgentTicketFreeText###InvolvedAgent**

Description	Value
Description:	Shows a list of all the involved agents on this ticket, in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }- &gt;{ 'InvolvedAgent' } = '0';</pre>

## **Ticket::Frontend::AgentTicketFreeText###InformAgent**

Description	Value
Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'InformAgent' } = '0';</pre>

## Ticket::Frontend::AgentTicketFreeText###ArticleTypeDefault

Description	Value
Description:	Defines the default type of the note in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'ArticleTypeDefault' } = 'note-internal';</pre>

## Ticket::Frontend::AgentTicketFreeText###ArticleTypes

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'ArticleTypes' } = {     'note-external' =&gt; '1',     'note-internal' =&gt; '1',     'note-report' =&gt; '0' };</pre>

## Ticket::Frontend::AgentTicketFreeText###Priority

Description	Value
Description:	Shows the ticket priority options in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'Priority' } = '0';</pre>

**Ticket::Frontend::AgentTicketFreeText###PriorityDefault**

Description	Value
Description:	Defines the default ticket priority in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'PriorityDefault' } = '3 normal';</pre>

**Ticket::Frontend::AgentTicketFreeText###Title**

Description	Value
Description:	Shows the title fields in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'Title' } = '1';</pre>

**Ticket::Frontend::AgentTicketFreeText###HistoryType**

Description	Value
Description:	Defines the history type for the ticket free text screen action, which gets used for ticket history.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'HistoryType' } = 'AddNote';</pre>

**Ticket::Frontend::AgentTicketFreeText###HistoryComment**

Description	Value
Description:	Defines the history comment for the ticket free text screen action, which gets used for ticket history.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'HistoryComment' } = '%%FreeText';</pre>

## **Ticket::Frontend::AgentTicketFreeText###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket free text screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketFreeText' }-&gt;{ 'DynamicField' } = {};</pre>

## **Frontend::Agent::Ticket::ViewHistory**

### **Ticket::Frontend::HistoryOrder**

Description	Value
Description:	Shows the ticket history (reverse ordered) in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewHistory
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::HistoryOrder' } = 'normal';</pre>

## **Frontend::Agent::Ticket::ViewMailbox**

### **Ticket::Frontend::AgentTicketLockedView###SortBy::Default**

Description	Value
Description:	Defines the default ticket attribute for ticket sorting in the locked ticket view of the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMailbox
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketLockedView' }- &gt;{ 'SortBy::Default' } = 'Age';</pre>

## **Ticket::Frontend::AgentTicketLockedView###Order::Default**

Description	Value
Description:	Defines the default ticket order in the ticket locked view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMailbox
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketLockedView' }- &gt;{ 'Order::Default' } = 'Up';</pre>

## **Ticket::Frontend::AgentTicketResponsibleView###SortBy::Default**

Description	Value
Description:	Defines the default ticket attribute for ticket sorting in the responsible view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMailbox
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketResponsibleView' }- &gt;{ 'SortBy::Default' } = 'Age';</pre>

## **Ticket::Frontend::AgentTicketResponsibleView###Order::Default**

Description	Value
Description:	Defines the default ticket order in the responsible view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewMailbox
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt; &gt;{ 'Ticket::Frontend::AgentTicketResponsibleView' }- &gt;{ 'Order::Default' } = 'Up';</pre>

## **Ticket::Frontend::AgentTicketWatchView###SortBy::Default**

Description	Value
Description:	Defines the default ticket attribute for ticket sorting in the watch view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMailbox
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketWatchView' }- &gt;{ 'SortBy::Default' } = 'Age';</pre>

## **Ticket::Frontend::AgentTicketWatchView###Order::Default**

Description	Value
Description:	Defines the default ticket order in the watch view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMailbox
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketWatchView' }- &gt;{ 'Order::Default' } = 'Up';</pre>

## **Frontend::Agent::Ticket::ViewMerge**

### **Ticket::Frontend::AgentTicketMerge###Permission**

Description	Value
Description:	Required permissions to use the ticket merge screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMerge' }--&gt;{ 'Permission' } = 'rw';</pre>

## Ticket::Frontend::AgentTicketMerge###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket merge screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMerge' }--&gt;{ 'RequiredLock' } = '1';</pre>

## Ticket::Frontend::MergeText

Description	Value
Description:	When tickets are merged, the customer can be informed per email by setting the check box "Inform Sender". In this text area, you can define a pre-formatted text which can later be modified by the agents.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::MergeText' } = 'Your email with ticket number "&lt;OTRS_TICKET&gt;" is merged to "&lt;OTRS_MERGE_TO_TICKET&gt;".';</pre>

## Ticket::Frontend::AutomaticMergeText

Description	Value
Description:	When tickets are merged, a note will be added automatically to the ticket which is no longer active. In this text area you can define this text (This text cannot be changed by the agent).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AutomaticMergeText' } = 'Merged Ticket &lt;OTRS_TICKET&gt; to &lt;OTRS_MERGE_TO_TICKET&gt;.';</pre>

## Frontend::Agent::Ticket::ViewMove

### Ticket::Frontend::MoveType

Description	Value
Description:	Determines if the list of possible queues to move to ticket into should be displayed in a dropdown list or in a new window in the agent interface. If "New Window" is set you can add a move note to the ticket.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::MoveType' } = 'form';</pre>

### Ticket::Frontend::AgentTicketMove###State

Description	Value
Description:	Allows to set a new ticket state in the move ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMove' }- &gt;{ 'State' } = '1';</pre>

### Ticket::DefaultNextMoveStateType

Description	Value
Description:	Defines the next state of a ticket after being moved to another queue, in the move ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::DefaultNextMoveStateType' } = [     'open',     'closed' ];</pre>

**Ticket::Frontend::AgentTicketMove###Priority**

Description	Value
Description:	Shows the ticket priority options in the move ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMove' }-&gt;{ 'Priority' } = '0';</pre>

**Ticket::Frontend::AgentTicketMove###NextScreen**

Description	Value
Description:	Determines the next screen after the ticket is moved. LastScreenOverview will return to search results, queueview, dashboard or the like, LastScreenView will return to TicketZoom.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMove' }-&gt;{ 'NextScreen' } = 'LastScreenView';</pre>

**Ticket::Frontend::AgentTicketMove###Subject**

Description	Value
Description:	Sets the default subject for notes added in the ticket move screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMove' }- &gt;{ 'Subject' } = '\$Text{"Change Queue"}';</pre>

## Ticket::Frontend::AgentTicketMove###Body

Description	Value
Description:	Sets the default body text for notes added in the ticket move screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMove' }- &gt;{ 'Body' } = '';</pre>

## Ticket::Frontend::AgentTicketMove###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket move screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketMove' }- &gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::Ticket::ViewNote

### Ticket::Frontend::AgentTicketNote###Permission

Description	Value
Description:	Required permissions to use the ticket note screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'Permission' } = 'note';</pre>

**Ticket::Frontend::AgentTicketNote###RequiredLock**

Description	Value
Description:	Defines if a ticket lock is required in the ticket note screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'RequiredLock' } = '0';</pre>

**Ticket::Frontend::AgentTicketNote###TicketType**

Description	Value
Description:	Sets the ticket type in the ticket note screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'TicketType' } = '0';</pre>

**Ticket::Frontend::AgentTicketNote###Service**

Description	Value
Description:	Sets the service in the ticket note screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'Service' } = '0';</pre>

**Ticket::Frontend::AgentTicketNote###Owner**

Description	Value
Description:	Sets the ticket owner in the ticket note screen of the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'Owner' } = '0';</pre>

## **Ticket::Frontend::AgentTicketNote###OwnerMandatory**

Description	Value
Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'OwnerMandatory' } = '0';</pre>

## **Ticket::Frontend::AgentTicketNote###Responsible**

Description	Value
Description:	Sets the responsible agent of the ticket in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'Responsible' } = '0';</pre>

## **Ticket::Frontend::AgentTicketNote###State**

Description	Value
Description:	If a note is added by an agent, sets the state of a ticket in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'State'} = '0';</pre>

## Ticket::Frontend::AgentTicketNote###StateType

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'StateType'} = [     'open',     'closed',     'pending reminder',     'pending auto' ];</pre>

## Ticket::Frontend::AgentTicketNote###StateDefault

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'StateDefault'} = 'open';</pre>

## Ticket::Frontend::AgentTicketNote###Note

Description	Value
Description:	Allows adding notes in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Note'} = '1';</pre>

**Ticket::Frontend::AgentTicketNote###Subject**

Description	Value
Description:	Sets the default subject for notes added in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'Subject' } = '\$Text{"Note"}';</pre>

**Ticket::Frontend::AgentTicketNote###Body**

Description	Value
Description:	Sets the default body text for notes added in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'Body' } = '';</pre>

**Ticket::Frontend::AgentTicketNote###InvolvedAgent**

Description	Value
Description:	Shows a list of all the involved agents on this ticket, in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'InvolvedAgent' } = '0';</pre>

**Ticket::Frontend::AgentTicketNote###InformAgent**

Description	Value
Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket note screen of the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'InformAgent' } = '0';</pre>

## **Ticket::Frontend::AgentTicketNote###ArticleTypeDefault**

Description	Value
Description:	Defines the default type of the note in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'ArticleTypeDefault' } = 'note-internal';</pre>

## **Ticket::Frontend::AgentTicketNote###ArticleTypes**

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }- &gt;{ 'ArticleTypes' } = {     'note-external' =&gt; '1',     'note-internal' =&gt; '1',     'note-report' =&gt; '0' };</pre>

## **Ticket::Frontend::AgentTicketNote###Priority**

Description	Value
Description:	Shows the ticket priority options in the ticket note screen of the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }-&gt;{ 'Priority' } = '0';</pre>

## Ticket::Frontend::AgentTicketNote###PriorityDefault

Description	Value
Description:	Defines the default ticket priority in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }-&gt;{ 'PriorityDefault' } = '3 normal';</pre>

## Ticket::Frontend::AgentTicketNote###Title

Description	Value
Description:	Shows the title fields in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }-&gt;{ 'Title' } = '0';</pre>

## Ticket::Frontend::AgentTicketNote###HistoryType

Description	Value
Description:	Defines the history type for the ticket note screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }-&gt;{ 'HistoryType' } = 'AddNote';</pre>

## Ticket::Frontend::AgentTicketNote###HistoryComment

Description	Value
Description:	Defines the history comment for the ticket note screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }-&gt;{ 'HistoryComment' } = '%%Note';</pre>

## Ticket::Frontend::AgentTicketNote###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket note screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketNote' }-&gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::Ticket::ViewOwner

### Ticket::Frontend::AgentTicketOwner###Permission

Description	Value
Description:	Required permissions to use the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }-&gt;{ 'Permission' } = 'owner';</pre>

**Ticket::Frontend::AgentTicketOwner###RequiredLock**

Description	Value
Description:	Defines if a ticket lock is required in the ticket owner screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'RequiredLock' } = '0';</pre>

**Ticket::Frontend::AgentTicketOwner###TicketType**

Description	Value
Description:	Sets the ticket type in the ticket owner screen of a zoomed ticket in the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'TicketType' } = '0';</pre>

**Ticket::Frontend::AgentTicketOwner###Service**

Description	Value
Description:	Sets the service in the ticket owner screen of a zoomed ticket in the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'Service' } = '0';</pre>

**Ticket::Frontend::AgentTicketOwner###Owner**

Description	Value
Description:	Sets the ticket owner in the ticket owner screen of a zoomed ticket in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'Owner' } = '1';</pre>

## **Ticket::Frontend::AgentTicketOwner###OwnerMandatory**

Description	Value
Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'OwnerMandatory' } = '1';</pre>

## **Ticket::Frontend::AgentTicketOwner###Responsible**

Description	Value
Description:	Sets the responsible agent of the ticket in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'Responsible' } = '0';</pre>

## **Ticket::Frontend::AgentTicketOwner###State**

Description	Value
Description:	If a note is added by an agent, sets the state of the ticket in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'State'} = '0';</pre>

**Ticket::Frontend::AgentTicketOwner###StateType**

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'StateType'} = [     'open',     'pending reminder',     'pending auto' ];</pre>

**Ticket::Frontend::AgentTicketOwner###StateDefault**

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'StateDefault'} = 'open';</pre>

**Ticket::Frontend::AgentTicketOwner###Note**

Description	Value
Description:	Allows adding notes in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Note'} = '1';</pre>

**Ticket::Frontend::AgentTicketOwner###Subject**

Description	Value
Description:	Sets the default subject for notes added in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'Subject' } = '\$Text{"Owner Update"}!';</pre>

**Ticket::Frontend::AgentTicketOwner###Body**

Description	Value
Description:	Sets the default body text for notes added in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'Body' } = '';</pre>

**Ticket::Frontend::AgentTicketOwner###InvolvedAgent**

Description	Value
Description:	Shows a list of all the involved agents on this ticket, in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }- &gt;{ 'InvolvedAgent' } = '0';</pre>

**Ticket::Frontend::AgentTicketOwner###InformAgent**

Description	Value
Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket owner screen of a zoomed ticket in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }-&gt;{ 'InformAgent' } = '0';</pre>

## **Ticket::Frontend::AgentTicketOwner###ArticleTypeDefault**

Description	Value
Description:	Defines the default type of the note in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }-&gt;{ 'ArticleTypeDefault' } = 'note-internal';</pre>

## **Ticket::Frontend::AgentTicketOwner###ArticleTypes**

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }-&gt;{ 'ArticleTypes' } = {     'note-external' =&gt; '0',     'note-internal' =&gt; '1',     'note-report' =&gt; '0' };</pre>

## **Ticket::Frontend::AgentTicketOwner###Priority**

Description	Value
Description:	Shows the ticket priority options in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }-&gt;{ 'Priority' } = '0';</pre>

## **Ticket::Frontend::AgentTicketOwner###PriorityDefault**

Description	Value
Description:	Defines the default ticket priority in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }-&gt;{ 'PriorityDefault' } = '3 normal';</pre>

## **Ticket::Frontend::AgentTicketOwner###Title**

Description	Value
Description:	Shows the title fields in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketOwner' }-&gt;{ 'Title' } = '0';</pre>

## **Ticket::Frontend::AgentTicketOwner###HistoryType**

Description	Value
Description:	Defines the history type for the ticket owner screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'HistoryType'} = 'AddNote';</pre>

## Ticket::Frontend::AgentTicketOwner###HistoryComment

Description	Value
Description:	Defines the history comment for the ticket owner screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'HistoryComment'} = '%%Owner';</pre>

## Ticket::Frontend::AgentTicketOwner###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket owner screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'DynamicField'} = {};</pre>

## Frontend::Agent::Ticket::ViewPending

### Ticket::Frontend::AgentTicketPending###Permission

Description	Value
Description:	Required permissions to use the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Permission'} = 'pending';</pre>

**Ticket::Frontend::AgentTicketPending###RequiredLock**

Description	Value
Description:	Defines if a ticket lock is required in the ticket pending screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'RequiredLock' } = '1';</pre>

**Ticket::Frontend::AgentTicketPending###TicketType**

Description	Value
Description:	Sets the ticket type in the ticket pending screen of a zoomed ticket in the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'TicketType' } = '0';</pre>

**Ticket::Frontend::AgentTicketPending###Service**

Description	Value
Description:	Sets the service in the ticket pending screen of a zoomed ticket in the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'Service' } = '0';</pre>

**Ticket::Frontend::AgentTicketPending###Owner**

Description	Value
Description:	Sets the ticket owner in the ticket pending screen of a zoomed ticket in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }- &gt;{ 'Owner' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPending###OwnerMandatory**

Description	Value
Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }- &gt;{ 'OwnerMandatory' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPending###Responsible**

Description	Value
Description:	Sets the responsible agent of the ticket in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }- &gt;{ 'Responsible' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPending###State**

Description	Value
Description:	If a note is added by an agent, sets the state of the ticket in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'State'} = '1';</pre>

**Ticket::Frontend::AgentTicketPending###StateType**

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'StateType'} = [ 'pending reminder', 'pending auto' ];</pre>

**Ticket::Frontend::AgentTicketPending###StateDefault**

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'StateDefault'} = 'pending reminder';</pre>

**Ticket::Frontend::AgentTicketPending###Note**

Description	Value
Description:	Allows adding notes in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Note'} = '1';</pre>

**Ticket::Frontend::AgentTicketPending###Subject**

Description	Value
Description:	Sets the default subject for notes added in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }- &gt;{ 'Subject' } = '\$Text{"Pending"}!';</pre>

**Ticket::Frontend::AgentTicketPending###Body**

Description	Value
Description:	Sets the default body text for notes added in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }- &gt;{ 'Body' } = '';</pre>

**Ticket::Frontend::AgentTicketPending###InvolvedAgent**

Description	Value
Description:	Shows a list of all the involved agents on this ticket, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }- &gt;{ 'InvolvedAgent' } = '0';</pre>

**Ticket::Frontend::AgentTicketPending###InformAgent**

Description	Value
Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this

Description	Value
	note, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'InformAgent' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPending###ArticleTypeDefault**

Description	Value
Description:	Defines the default type of the note in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'ArticleTypeDefault' } = 'note-internal';</pre>

## **Ticket::Frontend::AgentTicketPending###ArticleTypes**

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'ArticleTypes' } = {     'note-external' =&gt; '0',     'note-internal' =&gt; '1',     'note-report' =&gt; '0' };</pre>

## **Ticket::Frontend::AgentTicketPending###Priority**

Description	Value
Description:	Shows the ticket priority options in the ticket pending screen of a zoomed ticket in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'Priority' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPending###PriorityDefault**

Description	Value
Description:	Defines the default ticket priority in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'PriorityDefault' } = '3 normal';</pre>

## **Ticket::Frontend::AgentTicketPending###Title**

Description	Value
Description:	Shows the title fields in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'Title' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPending###HistoryType**

Description	Value
Description:	Defines the history type for the ticket pending screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'HistoryType' } = 'AddNote';</pre>

## Ticket::Frontend::AgentTicketPending###HistoryComment

Description	Value
Description:	Defines the history comment for the ticket pending screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'HistoryComment' } = '%Pending';</pre>

## Ticket::Frontend::AgentTicketPending###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket pending screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPending' }-&gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::Ticket::ViewPhoneInbound

### Ticket::Frontend::AgentTicketPhoneInbound###Permission

Description	Value
Description:	Required permissions to use the ticket phone inbound screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketPhoneInbound' }- &gt;{ 'Permission' } = 'phone';</pre>

## Ticket::Frontend::AgentTicketPhoneInbound###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket phone inbound screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketPhoneInbound' }- &gt;{ 'RequiredLock' } = '0';</pre>

## Ticket::Frontend::AgentTicketPhoneInbound###ArticleType

Description	Value
Description:	Defines the default type of the note in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketPhoneInbound' }- &gt;{ 'ArticleType' } = 'phone';</pre>

## Ticket::Frontend::AgentTicketPhoneInbound###SenderType

Description	Value
Description:	Defines the default sender type for phone tickets in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	\$Self- >{'Ticket::Frontend::AgentTicketPhoneInbound'}- >{'SenderType'} = 'customer';

## Ticket::Frontend::AgentTicketPhoneInbound###Subject

Description	Value
Description:	Defines the default subject for phone tickets in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketPhoneInbound'}- >{'Subject'} = '\$Text{"Phone call"}!';

## Ticket::Frontend::AgentTicketPhoneInbound###Body

Description	Value
Description:	Defines the default note body text for phone tickets in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketPhoneInbound'}- >{'Body'} = '';

## Ticket::Frontend::AgentTicketPhoneInbound###State

Description	Value
Description:	Defines the default ticket next state after adding a phone note in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketPhoneInbound'}- >{'State'} = 'open';

**Ticket::Frontend::AgentTicketPhoneInbound###StateType**

Description	Value
Description:	Next possible ticket states after adding a phone note in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}- &gt;{'StateType'} = [     'open',     'pending auto',     'pending reminder',     'closed' ];</pre>

**Ticket::Frontend::AgentTicketPhoneInbound###HistoryType**

Description	Value
Description:	Defines the history type for the ticket phone inbound screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}- &gt;{'HistoryType'} = 'PhoneCallCustomer';</pre>

**Ticket::Frontend::AgentTicketPhoneInbound###HistoryComment**

Description	Value
Description:	Defines the history comment for the ticket phone inbound screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}- &gt;{'HistoryComment'} = '';</pre>

**Ticket::Frontend::AgentTicketPhoneInbound###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket phone inbound screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'DynamicField'} = {};</pre>

**Frontend::Agent::Ticket::ViewPhoneNew****Ticket::Frontend::AgentTicketPhone###Priority**

Description	Value
Description:	Sets the default priority for new phone tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'Priority'} = '3 normal';</pre>

**Ticket::Frontend::AgentTicketPhone###ArticleType**

Description	Value
Description:	Sets the default article type for new phone tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'ArticleType'} = 'phone';</pre>

**Ticket::Frontend::AgentTicketPhone###SenderType**

Description	Value
Description:	Sets the default sender type for new phone ticket in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }- &gt;{ 'SenderType' } = 'customer';</pre>

## **Ticket::Frontend::AgentTicketPhone::AllowMultipleFrom**

Description	Value
Description:	Controls if more than one from entry can be set in the new phone ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketPhone::AllowMultipleFrom' } = '1';</pre>

## **Ticket::Frontend::AgentTicketPhone###Subject**

Description	Value
Description:	Sets the default subject for new phone tickets (e.g. 'Phone call') in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }- &gt;{ 'Subject' } = '';</pre>

## **Ticket::Frontend::AgentTicketPhone###Body**

Description	Value
Description:	Sets the default note text for new telephone tickets. E.g 'New ticket via call' in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }-&gt;{ 'Body' } = '';</pre>

## Ticket::Frontend::AgentTicketPhone###StateDefault

Description	Value
Description:	Sets the default next state for new phone tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }-&gt;{ 'StateDefault' } = 'open';</pre>

## Ticket::Frontend::AgentTicketPhone###StateType

Description	Value
Description:	Determines the next possible ticket states, after the creation of a new phone ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }-&gt;{ 'StateType' } = [     'open',     'pending auto',     'pending reminder',     'closed' ];</pre>

## Ticket::Frontend::AgentTicketPhone###HistoryType

Description	Value
Description:	Defines the history type for the phone ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }-&gt;{ 'HistoryType' } = 'PhoneCallCustomer';</pre>

## Ticket::Frontend::AgentTicketPhone###HistoryComment

Description	Value
Description:	Defines the history comment for the phone ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }-&gt;{ 'HistoryComment' } = '';</pre>

## Ticket::Frontend::AgentTicketPhone###SplitLinkType

Description	Value
Description:	Sets the default link type of splitted tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }-&gt;{ 'SplitLinkType' } = {     'Direction' =&gt; 'Target',     'LinkType' =&gt; 'ParentChild' };</pre>

## Ticket::Frontend::AgentTicketPhone###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket phone screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPhone' }- &gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::Ticket::ViewPhoneOutbound

### Ticket::Frontend::AgentTicketPhoneOutbound###Permission

Description	Value
Description:	Required permissions to use the ticket phone outbound screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketPhoneOutbound' }- &gt;{ 'Permission' } = 'phone';</pre>

### Ticket::Frontend::AgentTicketPhoneOutbound###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket phone outbound screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketPhoneOutbound' }- &gt;{ 'RequiredLock' } = '1';</pre>

### Ticket::Frontend::AgentTicketPhoneOutbound###ArticleType

Description	Value
Description:	Defines the default type of the note in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}- &gt;{'ArticleType'} = 'phone';</pre>

## Ticket::Frontend::AgentTicketPhoneOutbound###SenderType

Description	Value
Description:	Defines the default sender type for phone tickets in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}- &gt;{'SenderType'} = 'agent';</pre>

## Ticket::Frontend::AgentTicketPhoneOutbound###Subject

Description	Value
Description:	Defines the default subject for phone tickets in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}- &gt;{'Subject'} = '\$Text{"Phone call"}!';</pre>

## Ticket::Frontend::AgentTicketPhoneOutbound###Body

Description	Value
Description:	Defines the default note body text for phone tickets in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	

Description	Value
	\$Self- >{'Ticket::Frontend::AgentTicketPhoneOutbound'}- >{'Body'} = '';

## Ticket::Frontend::AgentTicketPhoneOutbound###State

Description	Value
Description:	Defines the default ticket next state after adding a phone note in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketPhoneOutbound'}- >{'State'} = 'closed successful';

## Ticket::Frontend::AgentTicketPhoneOutbound###StateType

Description	Value
Description:	Next possible ticket states after adding a phone note in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketPhoneOutbound'}- >{'StateType'} = [ 'open', 'pending auto', 'pending reminder', 'closed' ];

## Ticket::Frontend::AgentTicketPhoneOutbound###HistoryType

Description	Value
Description:	Defines the history type for the ticket phone outbound screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}- &gt;{'HistoryType'} = 'PhoneCallAgent';</pre>

## **Ticket::Frontend::AgentTicketPhoneOutbound###HistoryComment**

Description	Value
Description:	Defines the history comment for the ticket phone outbound screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}- &gt;{'HistoryComment'} = '';</pre>

## **Ticket::Frontend::AgentTicketPhoneOutbound###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket phone outbound screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}- &gt;{'DynamicField'} = {};</pre>

## **Frontend::Agent::Ticket::ViewPrint**

### **Ticket::Frontend::AgentTicketPrint###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket print screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPrint
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPrint' }- &gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::Ticket::ViewPriority

### Ticket::Frontend::AgentTicketPriority###Permission

Description	Value
Description:	Required permissions to use the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }- &gt;{ 'Permission' } = 'priority';</pre>

### Ticket::Frontend::AgentTicketPriority###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket priority screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }- &gt;{ 'RequiredLock' } = '1';</pre>

### Ticket::Frontend::AgentTicketPriority###TicketType

Description	Value
Description:	Sets the ticket type in the ticket priority screen of a zoomed ticket in the agent interface (Ticket::Type needs to be activated).
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'TicketType' } = '0';</pre>

## Ticket::Frontend::AgentTicketPriority###Service

Description	Value
Description:	Sets the service in the ticket priority screen of a zoomed ticket in the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'Service' } = '0';</pre>

## Ticket::Frontend::AgentTicketPriority###Owner

Description	Value
Description:	Sets the ticket owner in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'Owner' } = '0';</pre>

## Ticket::Frontend::AgentTicketPriority###OwnerMandatory

Description	Value
Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'OwnerMandatory' } = '0';</pre>

## Ticket::Frontend::AgentTicketPriority###Responsible

Description	Value
Description:	Sets the responsible agent of the ticket in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'Responsible' } = '0';</pre>

## Ticket::Frontend::AgentTicketPriority###State

Description	Value
Description:	If a note is added by an agent, sets the state of the ticket in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'State' } = '0';</pre>

## Ticket::Frontend::AgentTicketPriority###StateType

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'StateType' } = [ 'open', 'pending reminder', 'pending auto' ];</pre>

**Ticket::Frontend::AgentTicketPriority###StateDefault**

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'StateDefault' } = 'open';</pre>

**Ticket::Frontend::AgentTicketPriority###Note**

Description	Value
Description:	Allows adding notes in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'Note' } = '1';</pre>

**Ticket::Frontend::AgentTicketPriority###Subject**

Description	Value
Description:	Sets the default subject for notes added in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'Subject' } = '\$Text{"Priority Update"}!';</pre>

**Ticket::Frontend::AgentTicketPriority###Body**

Description	Value
Description:	Sets the default body text for notes added in the ticket priority screen of a zoomed ticket in the agent interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }- &gt;{ 'Body' } = '';</pre>

## **Ticket::Frontend::AgentTicketPriority###InvolvedAgent**

Description	Value
Description:	Shows a list of all the involved agents on this ticket, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }- &gt;{ 'InvolvedAgent' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPriority###InformAgent**

Description	Value
Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }- &gt;{ 'InformAgent' } = '0';</pre>

## **Ticket::Frontend::AgentTicketPriority###ArticleTypeDefault**

Description	Value
Description:	Defines the default type of the note in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority

Description	Value
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'ArticleTypeDefault' } = 'note-internal';</pre>

## Ticket::Frontend::AgentTicketPriority###ArticleTypes

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'ArticleTypes' } = {     'note-external' =&gt; '0',     'note-internal' =&gt; '1',     'note-report' =&gt; '0' };</pre>

## Ticket::Frontend::AgentTicketPriority###Priority

Description	Value
Description:	Shows the ticket priority options in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'Priority' } = '1';</pre>

## Ticket::Frontend::AgentTicketPriority###PriorityDefault

Description	Value
Description:	Defines the default ticket priority in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'PriorityDefault'} = '3 normal';</pre>

## Ticket::Frontend::AgentTicketPriority###Title

Description	Value
Description:	Shows the title fields in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Title'} = '0';</pre>

## Ticket::Frontend::AgentTicketPriority###HistoryType

Description	Value
Description:	Defines the history type for the ticket priority screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'HistoryType'} = 'AddNote';</pre>

## Ticket::Frontend::AgentTicketPriority###HistoryComment

Description	Value
Description:	Defines the history comment for the ticket priority screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'HistoryComment'} = '%Priority';</pre>

**Ticket::Frontend::AgentTicketPriority###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket priority screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketPriority' }-&gt;{ 'DynamicField' } = {};</pre>

**Frontend::Agent::Ticket::ViewQueue****Ticket::Frontend::AgentTicketQueue###StripEmptyLines**

Description	Value
Description:	Strips empty lines on the ticket preview in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }-&gt;{ 'StripEmptyLines' } = '0';</pre>

**Ticket::Frontend::AgentTicketQueue###ViewAllPossibleTickets**

Description	Value
Description:	Shows all both ro and rw queues in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }-&gt;{ 'ViewAllPossibleTickets' } = '0';</pre>

**Ticket::Frontend::AgentTicketQueue###HighlightAge1**

Description	Value
Description:	Sets the age in minutes (first level) for highlighting queues that contain untouched tickets.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }-&gt;{ 'HighlightAge1' } = '1440';</pre>

## **Ticket::Frontend::AgentTicketQueue###HighlightAge2**

Description	Value
Description:	Sets the age in minutes (second level) for highlighting queues that contain untouched tickets.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }-&gt;{ 'HighlightAge2' } = '2880';</pre>

## **Ticket::Frontend::AgentTicketQueue###Blink**

Description	Value
Description:	Activates a blinking mechanism of the queue that contains the oldest ticket.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }-&gt;{ 'Blink' } = '1';</pre>

## **Ticket::Frontend::AgentTicketQueue###QueueSort**

Description	Value
Description:	Sorts the tickets (ascendingly or descendingly) when a single queue is selected in the queue view and after the tickets are sorted by priority. Values: 0 = ascending (oldest on top, default), 1 = descending (youngest on top). Use the QueueID for the key and 0 or 1 for value.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue

Description	Value
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }- &gt;{ 'QueueSort' } =  {     '3' =&gt; '0',     '7' =&gt; '1' };</pre>

## Ticket::Frontend::AgentTicketQueue###SortBy::Default

Description	Value
Description:	Defines the default sort criteria for all queues displayed in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }- &gt;{ 'SortBy::Default' } = 'Age';</pre>

## Ticket::Frontend::AgentTicketQueue###PreSort::ByPriority

Description	Value
Description:	Defines if a pre-sorting by priority should be done in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }- &gt;{ 'PreSort::ByPriority' } = '1';</pre>

## Ticket::Frontend::AgentTicketQueue###Order::Default

Description	Value
Description:	Defines the default sort order for all queues in the queue view, after priority sort.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketQueue' }- &gt;{ 'Order::Default' } = 'Up';</pre>

## Frontend::Agent::Ticket::ViewResponsible

### Ticket::Frontend::AgentTicketResponsible###Permission

Description	Value
Description:	Required permissions to use the ticket responsible screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketResponsible' }- &gt;{ 'Permission' } = 'responsible';</pre>

### Ticket::Frontend::AgentTicketResponsible###RequiredLock

Description	Value
Description:	Defines if a ticket lock is required in the ticket responsible screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketResponsible' }- &gt;{ 'RequiredLock' } = '0';</pre>

### Ticket::Frontend::AgentTicketResponsible###TicketType

Description	Value
Description:	Sets the ticket type in the ticket responsible screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketResponsible'}- &gt;{'TicketType'} = '0';</pre>

## Ticket::Frontend::AgentTicketResponsible###Service

Description	Value
Description:	Sets the service in the ticket responsible screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketResponsible'}- &gt;{'Service'} = '0';</pre>

## Ticket::Frontend::AgentTicketResponsible###Owner

Description	Value
Description:	Sets the ticket owner in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketResponsible'}- &gt;{'Owner'} = '0';</pre>

## Ticket::Frontend::AgentTicketResponsible###OwnerMandatory

Description	Value
Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'OwnerMandatory'} = '0';

## Ticket::Frontend::AgentTicketResponsible###Responsible

Description	Value
Description:	Sets the responsible agent of the ticket in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'Responsible'} = '1';

## Ticket::Frontend::AgentTicketResponsible###State

Description	Value
Description:	If a note is added by an agent, sets the state of a ticket in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'State'} = '0';

## Ticket::Frontend::AgentTicketResponsible###StateType

Description	Value
Description:	Defines the next state of a ticket after adding a note, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	1
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'StateType'} = [

Description	Value
	'open', 'pending reminder', 'pending auto' ];

**Ticket::Frontend::AgentTicketResponsible###StateDefault**

Description	Value
Description:	Defines the default next state of a ticket after adding a note, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self->{'Ticket::Frontend::AgentTicketResponsible'}->{'StateDefault'} = 'open';

**Ticket::Frontend::AgentTicketResponsible###Note**

Description	Value
Description:	Allows adding notes in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self->{'Ticket::Frontend::AgentTicketResponsible'}->{'Note'} = '1';

**Ticket::Frontend::AgentTicketResponsible###Subject**

Description	Value
Description:	Sets the default subject for notes added in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'Subject'} = '\$Text{"Responsible Update"}!';

## Ticket::Frontend::AgentTicketResponsible###Body

Description	Value
Description:	Sets the default body text for notes added in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'Body'} = '';

## Ticket::Frontend::AgentTicketResponsible###InvolvedAgent

Description	Value
Description:	Shows a list of all the involved agents on this ticket, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'InvolvedAgent'} = '0';

## Ticket::Frontend::AgentTicketResponsible###InformAgent

Description	Value
Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0
Required:	0
Config-Setting:	

Description	Value
	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'InformAgent'} = '0';

## **Ticket::Frontend::AgentTicketResponsible###ArticleTypeDefault**

Description	Value
Description:	Defines the default type of the note in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'ArticleTypeDefault'} = 'note-internal';

## **Ticket::Frontend::AgentTicketResponsible###ArticleTypes**

Description	Value
Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'ArticleTypes'} = { 'note-external' => '0', 'note-internal' => '1', 'note-report' => '0' };

## **Ticket::Frontend::AgentTicketResponsible###Priority**

Description	Value
Description:	Shows the ticket priority options in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketResponsible'}- &gt;{'Priority'} = '0';</pre>

## Ticket::Frontend::AgentTicketResponsible###PriorityDefault

Description	Value
Description:	Defines the default ticket priority in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketResponsible'}- &gt;{'PriorityDefault'} = '3 normal';</pre>

## Ticket::Frontend::AgentTicketResponsible###Title

Description	Value
Description:	Shows the title fields in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketResponsible'}- &gt;{'Title'} = '1';</pre>

## Ticket::Frontend::AgentTicketResponsible###HistoryType

Description	Value
Description:	Defines the history type for the ticket responsible screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	

Description	Value
	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'HistoryType'} = 'AddNote';

## Ticket::Frontend::AgentTicketResponsible###HistoryComment

Description	Value
Description:	Defines the history comment for the ticket responsible screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'HistoryComment'} = '%Responsible';

## Ticket::Frontend::AgentTicketResponsible###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket responsible screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	\$Self- >{'Ticket::Frontend::AgentTicketResponsible'}- >{'DynamicField'} = {};

## Frontend::Agent::Ticket::ViewSearch

### Ticket::Frontend::AgentTicketSearch###ExtendedSearchCondition

Description	Value
Description:	Allows extended search conditions in ticket search of the agent interface. With this feature you can search w. g. with this kind of conditions like "(key1&&key2)" or "(key1  key2)".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1

Description	Value
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'ExtendedSearchCondition' } = '1';</pre>

## Ticket::Frontend::AgentTicketSearch###SearchLimit

Description	Value
Description:	Maximum number of tickets to be displayed in the result of a search in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'SearchLimit' } = '2000';</pre>

## Ticket::Frontend::AgentTicketSearch###SearchPageShown

Description	Value
Description:	Number of tickets to be displayed in each page of a search result in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'SearchPageShown' } = '40';</pre>

## Ticket::Frontend::AgentTicketSearch###SearchViewableTicketLines

Description	Value
Description:	Number of lines (per ticket) that are shown by the search utility in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'SearchViewableTicketLines' } = '10';</pre>

**Ticket::Frontend::AgentTicketSearch###SortBy::Default**

Description	Value
Description:	Defines the default ticket attribute for ticket sorting of the ticket search result of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SortBy::Default'} = 'Age';</pre>

**Ticket::Frontend::AgentTicketSearch###Order::Default**

Description	Value
Description:	Defines the default ticket order in the ticket search result of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Order::Default'} = 'Down';</pre>

**Ticket::Frontend::AgentTicketSearch###SearchArticleCSVTree**

Description	Value
Description:	Exports the whole article tree in search result (it can affect the system performance).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SearchArticleCSVTree'} = '0';</pre>

**Ticket::Frontend::AgentTicketSearch###SearchCSVData**

Description	Value
Description:	Data used to export the search result in CSV format.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'SearchCSVData' } = [     'TicketNumber',     'Age',     'Created',     'Closed',     'FirstLock',     'FirstResponse',     'State',     'Priority',     'Queue',     'Lock',     'Owner',     'UserFirstname',     'UserLastname',     'CustomerID',     'CustomerName',     'From',     'Subject',     'AccountedTime',     'ArticleTree',     'SolutionInMin',     'SolutionDiffInMin',     'FirstResponseInMin',     'FirstResponseDiffInMin' ];</pre>

## Ticket::Frontend::AgentTicketSearch###ArticleCreateTime

Description	Value
Description:	Includes article create times in the ticket search of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'ArticleCreateTime' } = '0';</pre>

## Ticket::Frontend::AgentTicketSearch###Defaults###Fulltext

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'Fulltext' } = '';</pre>

## **Ticket::Frontend::AgentTicketSearch###Defaults###TicketNumber**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'TicketNumber' } = '';</pre>

## **Ticket::Frontend::AgentTicketSearch###Defaults###Title**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'Title' } = '';</pre>

## **Ticket::Frontend::AgentTicketSearch###Defaults###From**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }-&gt;{ 'Defaults' }-&gt;{ 'From' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###To**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }-&gt;{ 'Defaults' }-&gt;{ 'To' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###Cc**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }-&gt;{ 'Defaults' }-&gt;{ 'Cc' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###Subject**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }-&gt;{ 'Defaults' }-&gt;{ 'Subject' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###Body**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'Body'} = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###CustomerID**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'CustomerID'} = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###CustomerUserLogin**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'CustomerUserLogin'} = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###StateIDs**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }-&gt;{ 'Defaults' }-&gt;{ 'StateIDs' } = [];</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###QueueIDs**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }-&gt;{ 'Defaults' }-&gt;{ 'QueueIDs' } = [];</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###TicketCreateTimePoint**

Description	Value
Description:	Default data to use on attribute for ticket search screen. Example: "TicketCreateTimePointFormat=year;TicketCreateTimePointStart=Last;TicketCreateTimePointEnd=Today"
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }-&gt;{ 'Defaults' }-&gt;{ 'TicketCreateTimePoint' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###TicketCreateTimeSlot**

Description	Value
Description:	Default data to use on attribute for ticket search screen. Example: "TicketCreateTimeStartYear=2010;TicketCreateTimeStartMonth=10;TicketCreateTimeEndYear=2011;TicketCreateTimeEndMonth=11"
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'TicketCreateTimeSlot' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###TicketChangeTimePoint**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'TicketChangeTimePoint' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###TicketChangeTimeSlot**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'TicketChangeTimeSlot' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###TicketCloseTimePoint**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'TicketCloseTimePoint' } = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###TicketCloseTimeSlot**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketCloseTimeSlot'} = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###ArticleCreateTimePoint**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'ArticleCreateTimePoint'} = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###ArticleCreateTimeSlot**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'ArticleCreateTimeSlot'} = '';</pre>

**Ticket::Frontend::AgentTicketSearch###Defaults###SearchInArchive**

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'SearchInArchive'} = '';</pre>

## Ticket::Frontend::CustomerTicketSearch###SearchArticleCSVTree

Description	Value
Description:	Exports the whole article tree in search result (it can affect the system performance).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketSearch'}-&gt;{'SearchArticleCSVTree'} = '0';</pre>

## Ticket::Frontend::AgentTicketSearch###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket search screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'DynamicField'} = {};</pre>

## Ticket::Frontend::AgentTicketSearch###Defaults###DynamicField

Description	Value
Description:	Defines the default shown ticket search attribute for ticket search screen. Example: a text, 1, DynamicField_Field1StartYear=2002; DynamicField_Field1StartMonth=12; DynamicField_Field1StartDay=12; DynamicField_Field1StartHour=00; DynamicField_Field1StartMinute=00; DynamicField_Field1StartSecond=00; DynamicField_Field1StopYear=2009; DynamicField_Field1StopMonth=02; DynamicField_Field1StopDay=10; DynamicField_Field1StopHour=23;

Description	Value
	DynamicField_Field1StopMinute=59; DynamicField_Field1StopSecond=59;.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'Defaults' }-&gt;{ 'DynamicField' } = {};</pre>

## **Ticket::Frontend::AgentTicketSearch###SearchCSVDynamicField**

Description	Value
Description:	Dynamic Fields used to export the search result in CSV format.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketSearch' }- &gt;{ 'SearchCSVDynamicField' } = {};</pre>

## **Frontend::Agent::Ticket::ViewStatus**

### **Ticket::Frontend::AgentTicketStatusView###ViewableTicketsPage**

Description	Value
Description:	Shows all open tickets (even if they are locked) in the status view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewStatus
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::AgentTicketStatusView' }- &gt;{ 'ViewableTicketsPage' } = '50';</pre>

### **Ticket::Frontend::AgentTicketStatusView###SortBy::Default**

Description	Value
Description:	Defines the default ticket attribute for ticket sorting in the status view of the agent interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::Ticket::ViewStatus
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketStatusView'}- &gt;{'SortBy::Default'} = 'Age';</pre>

## Ticket::Frontend::AgentTicketStatusView###Order::Default

Description	Value
Description:	Defines the default ticket order (after priority sort) in the status view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewStatus
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::AgentTicketStatusView'}- &gt;{'Order::Default'} = 'Down';</pre>

## Frontend::Agent::Ticket::ViewZoom

### Ticket::Frontend::PlainView

Description	Value
Description:	Shows a link to see a zoomed email ticket in plain text.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PlainView'} = '0';</pre>

### Ticket::Frontend::ZoomExpand

Description	Value
Description:	Shows all the articles of the ticket (expanded) in the zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1

Description	Value
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::Frontend::ZoomExpand' } = '0';</code>

## Ticket::Frontend::ZoomExpandSort

Description	Value
Description:	Shows the articles sorted normally or in reverse, under ticket zoom in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::Frontend::ZoomExpandSort' } = 'normal';</code>

## Ticket::ZoomAttachmentDisplayCount

Description	Value
Description:	Shows a count of icons in the ticket zoom, if the article has attachments.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::ZoomAttachmentDisplayCount' } = '20';</code>

## Ticket::ZoomTimeDisplay

Description	Value
Description:	Displays the accounted time for an article in the ticket zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{ 'Ticket::ZoomTimeDisplay' } = '0';</code>

## Ticket::UseArticleColors

Description	Value
Description:	Shows colors for different article types in the article table.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::UseArticleColors'} = '0';</pre>

## **Ticket::Frontend::TicketArticleFilter**

Description	Value
Description:	Activates the article filter in the zoom view to specify which articles should be shown.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::TicketArticleFilter'} = '0';</pre>

## **Ticket::Frontend::HTMLArticleHeightDefault**

Description	Value
Description:	Set the default height (in pixels) of inline HTML articles in AgentTicketZoom.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::HTMLArticleHeightDefault'} = '100';</pre>

## **Ticket::Frontend::HTMLArticleHeightMax**

Description	Value
Description:	Set the maximum height (in pixels) of inline HTML articles in AgentTicketZoom.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::HTMLArticleHeightMax' } = '2500';</pre>

## Ticket::Frontend::ZoomRichTextForce

Description	Value
Description:	Show article as rich text even if rich text writing is disabled.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::ZoomRichTextForce' } = '0';</pre>

## Ticket::Frontend::AgentTicketZoom###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket zoom screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::AgentTicketZoom' }-&gt;{ 'DynamicField' } = {};</pre>

## Frontend::Agent::TicketOverview

### Ticket::Frontend::Overview###Small

Description	Value
Description:	Allows having a small format ticket overview (CustomerInfo => 1 - shows also the customer information).
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::Overview' }-&gt;{ 'Small' } = {}</pre>

Description	Value
	<pre>'CustomerInfo' =&gt; '1', 'Module' =&gt; 'Kernel::Output::HTML::TicketOverviewSmall', 'Name' =&gt; 'Small', 'NameShort' =&gt; 'S' };</pre>

## Ticket::Frontend::OverviewSmall###ColumnHeader

Description	Value
Description:	Shows either the last customer article's subject or the ticket title in the small format overview.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::OverviewSmall' }- &gt;{ 'ColumnHeader' } = 'LastCustomerSubject';</pre>

## Ticket::Frontend::Overview###Medium

Description	Value
Description:	Allows having a medium format ticket overview (CustomerInfo => 1 - shows also the customer information).
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::Overview' }-&gt;{ 'Medium' } = { 'CustomerInfo' =&gt; '0', 'Module' =&gt; 'Kernel::Output::HTML::TicketOverviewMedium', 'Name' =&gt; 'Medium', 'NameShort' =&gt; 'M', 'TicketActionsPerTicket' =&gt; '0' };</pre>

## Ticket::Frontend::Overview###Preview

Description	Value
Description:	Shows a preview of the ticket overview (CustomerInfo => 1 - shows also Customer-Info, CustomerInfoMaxSize max. size in characters of Customer-Info).

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::Overview' }-&gt;{ 'Preview' } =  {     'CustomerInfo' =&gt; '0',     'CustomerInfoMaxSize' =&gt; '18',     'DefaultPreViewLines' =&gt; '25',     'DefaultViewNewLine' =&gt; '90',     'Module' =&gt;         'Kernel::Output::HTML::TicketOverviewPreview',     'Name' =&gt; 'Preview',     'NameShort' =&gt; 'L',     'StripEmptyLines' =&gt; '0',     'TicketActionsPerTicket' =&gt; '0' };</pre>

## Ticket::Frontend::Overview::PreviewArticleSenderTypes

Description	Value
Description:	Defines which article sender types should be shown in the preview of a ticket.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::Overview::PreviewArticleSenderTypes' } =  {     'agent' =&gt; '1',     'customer' =&gt; '1',     'system' =&gt; '1' };</pre>

## Ticket::Frontend::Overview::PreviewArticleTypeExpanded

Description	Value
Description:	Defines which article type should be expanded when entering the overview. If nothing defined, latest article will be expanded.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::Overview::PreviewArticleTypeExpanded'} = '';</pre>

**Ticket::Frontend::OverviewSmall###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket small format overview screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::OverviewSmall'}-&gt;{'DynamicField'} = {};</pre>

**Ticket::Frontend::OverviewMedium###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket medium format overview screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::OverviewMedium'}-&gt;{'DynamicField'} = {};</pre>

**Ticket::Frontend::OverviewPreview###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket preview format overview screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::OverviewPreview'}-&gt;{'DynamicField'} = {};</pre>

## Frontend::Agent::ToolBarModule

### Frontend::ToolBarModule###1-Ticket::AgentTicketQueue

Description	Value
Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '1-Ticket::AgentTicketQueue' } = {     'AccessKey' =&gt; 'q',     'Action' =&gt; 'AgentTicketQueue',     'CssClass' =&gt; 'QueueView',     'Link' =&gt; 'Action=AgentTicketQueue',     'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',     'Name' =&gt; 'Queue view',     'Priority' =&gt; '1010010' };</pre>

### Frontend::ToolBarModule###2-Ticket::AgentTicketStatus

Description	Value
Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '2-Ticket::AgentTicketStatus' } = {     'AccessKey' =&gt; 'o',     'Action' =&gt; 'AgentTicketStatusView',     'CssClass' =&gt; 'StatusView',     'Link' =&gt; 'Action=AgentTicketStatusView',     'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',     'Name' =&gt; 'Status view',     'Priority' =&gt; '1010020' };</pre>

### Frontend::ToolBarModule###3-Ticket::AgentTicketEscalation

Description	Value
Description:	Toolbar Item for a shortcut.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '3-Ticket::AgentTicketEscalation' } = {     'AccessKey' =&gt; 'w',     'Action' =&gt; 'AgentTicketEscalationView',     'CssClass' =&gt; 'EscalationView',     'Link' =&gt; 'Action=AgentTicketEscalationView',     'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',     'Name' =&gt; 'Escalation view',     'Priority' =&gt; '1010030' };</pre>

## Frontend::ToolBarModule###4-Ticket::AgentTicketPhone

Description	Value
Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '4-Ticket::AgentTicketPhone' } = {     'AccessKey' =&gt; 'l',     'Action' =&gt; 'AgentTicketPhone',     'CssClass' =&gt; 'PhoneTicket',     'Link' =&gt; 'Action=AgentTicketPhone',     'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',     'Name' =&gt; 'New phone ticket',     'Priority' =&gt; '1020010' };</pre>

## Frontend::ToolBarModule###5-Ticket::AgentTicketEmail

Description	Value
Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '5-Ticket::AgentTicketEmail' } = {</pre>

Description	Value
	<pre>'AccessKey' =&gt; '1', 'Action' =&gt; 'AgentTicketEmail', 'CssClass' =&gt; 'EmailTicket', 'Link' =&gt; 'Action=AgentTicketEmail', 'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink', 'Name' =&gt; 'New email ticket', 'Priority' =&gt; '1020020' };</pre>

## Frontend::ToolBarModule###6-Ticket::TicketResponsible

Description	Value
Description:	Agent interface notification module to see the number of tickets an agent is responsible for.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '6- Ticket::TicketResponsible' } = {     'CssClass' =&gt; 'Responsible',     'CssClassNew' =&gt; 'Responsible New',     'CssClassReached' =&gt; 'Responsible Reached',     'Module' =&gt;     'Kernel::Output::HTML::ToolBarTicketResponsible',     'Priority' =&gt; '1030010' };</pre>

## Frontend::ToolBarModule###7-Ticket::TicketWatcher

Description	Value
Description:	Agent interface notification module to see the number of watched tickets.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '7- Ticket::TicketWatcher' } = {     'CssClass' =&gt; 'Watcher',     'CssClassNew' =&gt; 'Watcher New',     'CssClassReached' =&gt; 'Watcher Reached',     'Module' =&gt;     'Kernel::Output::HTML::ToolBarTicketWatcher',     'Priority' =&gt; '1030020'</pre>

Description	Value
	};

## Frontend::ToolBarModule###8-Ticket::TicketLocked

Description	Value
Description:	Agent interface notification module to check the used charset.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '8- Ticket::TicketLocked' } =  {   'CssClass' =&gt; 'Locked',   'CssClassNew' =&gt; 'Locked New',   'CssClassReached' =&gt; 'Locked Reached',   'Module' =&gt;   'Kernel::Output::HTML::ToolBarTicketLocked',   'Priority' =&gt; '1030030' };</pre>

## Frontend::ToolBarModule###9-Ticket::TicketSearchProfile

Description	Value
Description:	Agent interface module to access search profiles via nav bar.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '9- Ticket::TicketSearchProfile' } =  {   'Block' =&gt; 'ToolBarSearchProfile',   'Description' =&gt; 'Search-Template',   'MaxWidth' =&gt; '40',   'Module' =&gt;   'Kernel::Output::HTML::ToolBarTicketSearchProfile',   'Name' =&gt; 'Search-Template',   'Priority' =&gt; '1990010' };</pre>

## Frontend::ToolBarModule###10-Ticket::TicketSearchFulltext

Description	Value
Description:	Agent interface module to access fulltext search via nav bar.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::ToolBarModule' }-&gt;{ '10- Ticket::TicketSearchFulltext' } = {     'Block' =&gt; 'ToolBarSearchFulltext',     'CSS' =&gt; 'Core.Agent.Toolbar.FulltextSearch.css',     'Description' =&gt; 'Fulltext-Search',     'Module' =&gt;     'Kernel::Output::HTML::ToolBarTicketSearchFulltext',     'Name' =&gt; 'Fulltext-Search',     'Priority' =&gt; '1990020',     'Size' =&gt; '10' };</pre>

## Frontend::Customer

### Ticket::Frontend::CustomerTicketOverviewSortable

Description	Value
Description:	Controls if customers have the ability to sort their tickets.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::CustomerTicketOverviewSortable' } = '';</pre>

### Ticket::Frontend::CustomerTicketOverviewCustomEmptyText

Description	Value
Description:	Custom text for the page shown to customers that have no tickets yet.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::CustomerTicketOverviewCustomEmptyText' } = {</pre>

Description	Value
	'Button' => 'Create your first ticket', 'Text' => 'Please click the button below to create your first ticket.', 'Title' => 'Welcome!' };

**Ticket::Frontend::CustomerTicketOverview###ColumnHeader**

Description	Value
Description:	Shows either the last customer article's subject or the ticket title in the small format overview.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	\$Self->{'Ticket::Frontend::CustomerTicketOverview'}->{'ColumnHeader'} = 'TicketTitle';

**Frontend::CustomerUser::Item###15-OpenTickets**

Description	Value
Description:	Customer item (icon) which shows the open tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	\$Self->{'Frontend::CustomerUser::Item'}->{'15-OpenTickets'} = { 'Action' => 'AgentTicketSearch', 'Attributes' => 'StateType=Open;', 'CSS' => 'Core.Agent.CustomerUser.OpenTicket.css', 'CSSClassNoOpenTicket' => 'NoOpenTicket', 'CSSClassOpenTicket' => 'OpenTicket', 'CustomerUserLogin' => '0', 'Module' => 'Kernel::Output::HTML::CustomerUserGenericTicket', 'Subaction' => 'Search', 'Target' => '_blank', 'Text' => 'Open tickets' };

## Frontend::CustomerUser::Item###16- OpenTicketsForCustomerUserLogin

Description	Value
Description:	Customer item (icon) which shows the open tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CustomerUser::Item' }-&gt;{ '16-OpenTicketsForCustomerUserLogin' } = {     'Action' =&gt; 'AgentTicketSearch',     'Attributes' =&gt; 'StateType=Open;',     'CSS' =&gt;         'Core.Agent.CustomerUser.OpenTicket.css',     'CSSClassNoOpenTicket' =&gt; 'NoOpenTicket',     'CSSClassOpenTicket' =&gt; 'OpenTicket',     'CustomerUserLogin' =&gt; '1',     'Module' =&gt;         'Kernel::Output::HTML::CustomerUserGenericTicket',     'Subaction' =&gt; 'Search',     'Target' =&gt; '_blank',     'Text' =&gt; 'Open tickets of customer' };</pre>

## Frontend::CustomerUser::Item###17-ClosedTickets

Description	Value
Description:	Customer item (icon) which shows the closed tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CustomerUser::Item' }-&gt;{ '17-ClosedTickets' } = {     'Action' =&gt; 'AgentTicketSearch',     'Attributes' =&gt; 'StateType=Closed;',     'CSS' =&gt;         'Core.Agent.CustomerUser.OpenTicket.css',     'CSSClassNoOpenTicket' =&gt; 'NoOpenTicket',     'CSSClassOpenTicket' =&gt; 'OpenTicket',     'CustomerUserLogin' =&gt; '0',</pre>

Description	Value
	<pre>'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGenericTicket', 'Subaction' =&gt; 'Search', 'Target' =&gt; '_blank', 'Text' =&gt; 'Closed tickets' };</pre>

## Frontend::CustomerUser::Item###18-ClosedTicketsForCustomerUserLogin

Description	Value
Description:	Customer item (icon) which shows the closed tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Frontend::CustomerUser::Item' }-&gt;{ '18-ClosedTicketsForCustomerUserLogin' } = {     'Action' =&gt; 'AgentTicketSearch',     'Attributes' =&gt; 'StateType=Closed;',     'CSS' =&gt;         'Core.Agent.CustomerUser.OpenTicket.css',     'CSSClassNoOpenTicket' =&gt; 'NoOpenTicket',     'CSSClassOpenTicket' =&gt; 'OpenTicket',     'CustomerUserLogin' =&gt; '1',     'Module' =&gt;         'Kernel::Output::HTML::CustomerUserGenericTicket',     'Subaction' =&gt; 'Search',     'Target' =&gt; '_blank',     'Text' =&gt; 'Closed tickets of customer' };</pre>

## CustomerFrontend::CommonObject###QueueObject

Description	Value
Description:	Path of the file that stores all the settings for the QueueObject object for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::CommonObject' }-&gt;{ 'QueueObject' } = 'Kernel::System::Queue';</pre>

## **CustomerFrontend::CommonObject###TicketObject**

Description	Value
Description:	Path of the file that stores all the settings for the TicketObject for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::CommonObject' }- &gt;{ 'TicketObject' } = 'Kernel::System::Ticket';</pre>

## **CustomerFrontend::CommonParam###Action**

Description	Value
Description:	Defines the default used Frontend-Module if no Action parameter given in the url on the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::CommonParam' }- &gt;{ 'Action' } = 'CustomerTicketOverview';</pre>

## **CustomerFrontend::CommonParam###TicketID**

Description	Value
Description:	Default ticket ID used by the system in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::CommonParam' }- &gt;{ 'TicketID' } = '';</pre>

## **Frontend::Customer::ModuleMetaHead**

### **CustomerFrontend::HeaderMetaModule###2-TicketSearch**

Description	Value
Description:	Module to generate html OpenSearch profile for short ticket search in the customer interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleMetaHead
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::HeaderMetaModule' }- &gt;{ '2-TicketSearch' } = {     'Action' =&gt; 'CustomerTicketSearch',     'Module' =&gt;     'Kernel::Output::HTML::CustomerHeaderMetaTicketSearch' };</pre>

## Frontend::Customer::ModuleRegistration

### CustomerFrontend::Module###CustomerTicketOverview

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::Module' }- &gt;{ 'CustomerTicketOverview' } = {     'Description' =&gt; 'Overview of customer tickets',     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'm',             'Block' =&gt; '',             'Description' =&gt; 'My Tickets',             'Link' =&gt;                 'Action=CustomerTicketOverview;Subaction=MyTickets',             'LinkOption' =&gt; '',             'Name' =&gt; 'My Tickets',             'NavBar' =&gt; '',             'Prio' =&gt; '110',             'Type' =&gt; ''         },         {             'AccessKey' =&gt; 'c',             'Block' =&gt; '',             'Description' =&gt; 'Company Tickets',             'Link' =&gt;                 'Action=CustomerTicketOverview;Subaction=CompanyTickets',             'LinkOption' =&gt; '',             'Name' =&gt; 'Company Tickets',             'NavBar' =&gt; ''         }     ] };</pre>

Description	Value
	<pre>'Prio' =&gt; '120', 'Type' =&gt; '' } ], 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Overview' };</pre>

## CustomerFrontend::Module###CustomerTicketMessage

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::Module' }- &gt;{ 'CustomerTicketMessage' } = {     'Description' =&gt; 'Create tickets',     'NavBar' =&gt; [         {             'AccessKey' =&gt; 'n',             'Block' =&gt; '',             'Description' =&gt; 'Create new Ticket',             'Link' =&gt; 'Action=CustomerTicketMessage',             'LinkOption' =&gt; '',             'Name' =&gt; 'New Ticket',             'NavBar' =&gt; '',             'Prio' =&gt; '100',             'Type' =&gt; ''         }     ],     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'New Ticket' };</pre>

## CustomerFrontend::Module###CustomerTicketZoom

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::Module' }- &gt;{ 'CustomerTicketZoom' } = {</pre>

Description	Value
	<pre>'Description' =&gt; 'Ticket zoom view', 'Loader' =&gt; {   'JavaScript' =&gt; [     'Core.Customer.TicketZoom.js',     'Core.UI.Popup.js'   ] }, 'NavBarName' =&gt; 'Ticket', 'Title' =&gt; 'Zoom' };</pre>

## CustomerFrontend::Module###CustomerTicketPrint

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::Module' }- &gt;{ 'CustomerTicketPrint' } =  {   'Description' =&gt; 'Customer Ticket Print Module',   'NavBarName' =&gt; '',   'Title' =&gt; 'Print' };</pre>

## CustomerFrontend::Module###CustomerTicketAttachment

Description	Value
Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerFrontend::Module' }- &gt;{ 'CustomerTicketAttachment' } =  {   'Description' =&gt; 'To download attachments',   'NavBarName' =&gt; '',   'Title' =&gt; '' };</pre>

## CustomerFrontend::Module###CustomerTicketSearch

Description	Value
Description:	Frontend module registration for the customer interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}- &gt;{'CustomerTicketSearch'} = {     'Description' =&gt; 'Customer ticket search',     'NavBar' =&gt; [         {             'AccessKey' =&gt; 's',             'Block' =&gt; '',             'Description' =&gt; 'Search',             'Link' =&gt; 'Action=CustomerTicketSearch',             'LinkOption' =&gt; '',             'Name' =&gt; 'Search',             'NavBar' =&gt; '',             'Prio' =&gt; '300',             'Type' =&gt; ''         }     ],     'NavBarName' =&gt; 'Ticket',     'Title' =&gt; 'Search' };</pre>

## Frontend::Customer::Preferences

### CustomerPreferencesGroups###ShownTickets

Description	Value
Description:	Defines all the parameters for the ShownTickets object in the customer preferences of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerPreferencesGroups'}- &gt;{'ShownTickets'} = {     'Active' =&gt; '1',     'Column' =&gt; 'User Profile',     'Data' =&gt; {         '15' =&gt; '15',         '20' =&gt; '20',         '25' =&gt; '25',         '30' =&gt; '30'     },     'DataSelected' =&gt; '25',</pre>

Description	Value
	<pre>'Key' =&gt; 'Tickets per page', 'Label' =&gt; 'Number of displayed tickets', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric', 'PrefKey' =&gt; 'UserShowTickets', 'Prio' =&gt; '4000' };</pre>

## CustomerPreferencesGroups###RefreshTime

Description	Value
Description:	Defines all the parameters for the RefreshTime object in the customer preferences of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPreferencesGroups' }- &gt;{ 'RefreshTime' } = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Data' =&gt; {     '' =&gt; 'off',     '10' =&gt; '10 minutes',     '15' =&gt; '15 minutes',     '2' =&gt; ' 2 minutes',     '5' =&gt; ' 5 minutes',     '7' =&gt; ' 7 minutes'   },   'DataSelected' =&gt; '',   'Key' =&gt; 'Refresh interval',   'Label' =&gt; 'Ticket overview',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserRefreshTime',   'Prio' =&gt; '4000' };</pre>

## Frontend::Customer::Ticket::ViewNew

### Ticket::Frontend::CustomerTicketMessage###NextScreenAfterNewTicket

Description	Value
Description:	Determines the next screen after new customer ticket in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'NextScreenAfterNewTicket'} = 'CustomerTicketOverview';</pre>

## Ticket::Frontend::CustomerTicketMessage###Priority

Description	Value
Description:	Allows customers to set the ticket priority in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'Priority'} = '1';</pre>

## Ticket::Frontend::CustomerTicketMessage###PriorityDefault

Description	Value
Description:	Defines the default priority of new customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'PriorityDefault'} = '3 normal';</pre>

## Ticket::Frontend::CustomerTicketMessage###Queue

Description	Value
Description:	Allows customers to set the ticket queue in the customer interface. If this is set to 'No', QueueDefault should be configured.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'Queue'} = '1';</pre>

## Ticket::Frontend::CustomerTicketMessage###QueueDefault

Description	Value
Description:	Defines the default queue for new customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'QueueDefault'} = 'Postmaster';</pre>

## Ticket::Frontend::CustomerTicketMessage###Service

Description	Value
Description:	Allows customers to set the ticket service in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'Service'} = '1';</pre>

## Ticket::Frontend::CustomerTicketMessage###SLA

Description	Value
Description:	Allows customers to set the ticket SLA in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'SLA'} = '1';</pre>

**Ticket::Frontend::CustomerTicketMessage###StateDefault**

Description	Value
Description:	Defines the default state of new customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::CustomerTicketMessage' }- &gt;{ 'StateDefault' } = 'new';</pre>

**Ticket::Frontend::CustomerTicketMessage###ArticleType**

Description	Value
Description:	Defines the default type for article in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::CustomerTicketMessage' }- &gt;{ 'ArticleType' } = 'webrequest';</pre>

**Ticket::Frontend::CustomerTicketMessage###SenderType**

Description	Value
Description:	Sender type for new tickets from the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'Ticket::Frontend::CustomerTicketMessage' }- &gt;{ 'SenderType' } = 'customer';</pre>

**Ticket::Frontend::CustomerTicketMessage###HistoryType**

Description	Value
Description:	Defines the default history type in the customer interface.
Group:	Ticket

Description	Value
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'HistoryType'} = 'WebRequestCustomer';</pre>

## Ticket::Frontend::CustomerTicketMessage###HistoryComment

Description	Value
Description:	Comment for new history entries in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'HistoryComment'} = '';</pre>

## CustomerPanelSelectionType

Description	Value
Description:	Defines the recipient target of the tickets ("Queue" shows all queues, "SystemAddress" displays all system addresses) in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'CustomerPanelSelectionType'} = 'Queue';</pre>

## CustomerPanelSelectionString

Description	Value
Description:	Determines the strings that will be shown as recipient (To:) of the ticket in the customer interface. For Queue as CustomerPanelSelectionType, "<Queue>" shows the names of the queues, and for SystemAddress, "<Realname> <>Email>" shows the name and email of the recipient.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelSelectionString' } = '&lt;Queue&gt;';</pre>

## CustomerPanelOwnSelection

Description	Value
Description:	Determines which queues will be valid for ticket's recipients in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'CustomerPanelOwnSelection' } = {     'Junk' =&gt; 'First Queue',     'Misc' =&gt; 'Second Queue' };</pre>

## CustomerPanel::NewTicketQueueSelectionModule

Description	Value
Description:	Module for To-selection in new ticket screen in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{ 'CustomerPanel::NewTicketQueueSelectionModule' } = 'Kernel::Output::HTML::CustomerNewTicketQueueSelectionGeneric';</pre>

## Ticket::Frontend::CustomerTicketMessage###DynamicField

Description	Value
Description:	Dynamic fields options shown in the ticket message screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required. NOTE. If you want to display these fields also in the ticket zoom of the customer interface, you have to enable them in CustomerTicketZoom###AttributesView.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1

Description	Value
Required:	0
Config-Setting:	<pre>\$Self-&gt; &gt;{'Ticket::Frontend::CustomerTicketMessage'}- &gt;{'DynamicField'} = {};</pre>

## Frontend::Customer::Ticket::ViewPrint

### Ticket::Frontend::CustomerTicketPrint###DynamicField

Description	Value
Description:	Dynamic fields shown in the ticket print screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewPrint
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketPrint'}- &gt;{'DynamicField'} = {};</pre>

## Frontend::Customer::Ticket::ViewSearch

### Ticket::CustomerTicketSearch::SearchLimit

Description	Value
Description:	Maximum number of tickets to be displayed in the result of a search in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt; &gt;{'Ticket::CustomerTicketSearch::SearchLimit'} = '5000';</pre>

### Ticket::CustomerTicketSearch::SearchPageShown

Description	Value
Description:	Number of tickets to be displayed in each page of a search result in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::CustomerTicketSearch::SearchPageShown'} = '40';</pre>

## Ticket::CustomerTicketSearch::SortBy::Default

Description	Value
Description:	Defines the default ticket attribute for ticket sorting in a ticket search of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::CustomerTicketSearch::SortBy::Default'} = 'Age';</pre>

## Ticket::CustomerTicketSearch::Order::Default

Description	Value
Description:	Defines the default ticket order of a search result in the customer interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self- &gt;{'Ticket::CustomerTicketSearch::Order::Default'} = 'Down';</pre>

## Ticket::Frontend::CustomerTicketSearch###ExtendedSearchCondition

Description	Value
Description:	Allows extended search conditions in ticket search of the customer interface. With this feature you can search w. g. with this kind of conditions like "(key1&&key2)" or "(key1  key2)".
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketSearch' }-&gt;{ 'ExtendedSearchCondition' } = '1';</pre>

**Ticket::Frontend::CustomerTicketSearch###SearchCSVData**

Description	Value
Description:	Data used to export the search result in CSV format.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketSearch' }-&gt;{ 'SearchCSVData' } = [     'TicketNumber',     'Age',     'Created',     'Closed',     'State',     'Priority',     'Lock',     'CustomerID',     'CustomerName',     'From',     'Subject' ];</pre>

**Ticket::Frontend::CustomerTicketSearch###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket search screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketSearch' }-&gt;{ 'DynamicField' } = {};</pre>

**Ticket::Frontend::CustomerTicketSearch###SearchOverviewDynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket search overview results screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketSearch' }- &gt;{ 'SearchOverviewDynamicField' } = {};</pre>

**Ticket::Frontend::CustomerTicketSearch###SearchCSVDynamicField**

Description	Value
Description:	Dynamic Fields used to export the search result in CSV format.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketSearch' }- &gt;{ 'SearchCSVDynamicField' } = {};</pre>

**Frontend::Customer::Ticket::ViewZoom****Ticket::Frontend::CustomerTicketZoom###NextScreenAfterFollowUp**

Description	Value
Description:	Determines the next screen after the follow up screen of a zoomed ticket in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketZoom' }- &gt;{ 'NextScreenAfterFollowUp' } = 'CustomerTicketOverview';</pre>

**Ticket::Frontend::CustomerTicketZoom###ArticleType**

Description	Value
Description:	Defines the default type of the note in the ticket zoom screen of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom

Description	Value
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'ArticleType'} = 'webrequest';</pre>

## Ticket::Frontend::CustomerTicketZoom###SenderType

Description	Value
Description:	Defines the default sender type for tickets in the ticket zoom screen of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'SenderType'} = 'customer';</pre>

## Ticket::Frontend::CustomerTicketZoom###HistoryType

Description	Value
Description:	Defines the history type for the ticket zoom action, which gets used for ticket history in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'HistoryType'} = 'FollowUp';</pre>

## Ticket::Frontend::CustomerTicketZoom###HistoryComment

Description	Value
Description:	Defines the history comment for the ticket zoom action, which gets used for ticket history in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'HistoryComment'} = '';</pre>

**Ticket::Frontend::CustomerTicketZoom###Priority**

Description	Value
Description:	Allows customers to change the ticket priority in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'Priority'} = '1';</pre>

**Ticket::Frontend::CustomerTicketZoom###PriorityDefault**

Description	Value
Description:	Defines the default priority of follow up customer tickets in the ticket zoom screen in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'PriorityDefault'} = '3 normal';</pre>

**Ticket::Frontend::CustomerTicketZoom###State**

Description	Value
Description:	Allows choosing the next compose state for customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'State'} = '1';</pre>

**Ticket::Frontend::CustomerTicketZoom###StateDefault**

Description	Value
Description:	Defines the default next state for a ticket after customer follow up in the customer interface.

Description	Value
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketZoom' }-&gt;{ 'StateDefault' } = 'open';</pre>

## **Ticket::Frontend::CustomerTicketZoom###StateType**

Description	Value
Description:	Defines the next possible states for customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketZoom' }-&gt;{ 'StateType' } = [     'open',     'closed' ];</pre>

## **Ticket::Frontend::CustomerTicketZoom###AttributesView**

Description	Value
Description:	Shows the activated ticket attributes in the customer interface (0 = Disabled and 1 = Enabled).
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketZoom' }-&gt;{ 'AttributesView' } = {     'Owner' =&gt; '0',     'Priority' =&gt; '1',     'Queue' =&gt; '1',     'Responsible' =&gt; '0',     'SLA' =&gt; '0',     'Service' =&gt; '0',     'State' =&gt; '1',     'Type' =&gt; '0' };</pre>

**Ticket::Frontend::CustomerTicketZoom###DynamicField**

Description	Value
Description:	Dynamic fields shown in the ticket zoom screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'Ticket::Frontend::CustomerTicketZoom' }-&gt;{ 'DynamicField' } = {};</pre>

**Frontend::Queue::Preferences****QueuePreferences###Comment2**

Description	Value
Description:	Parameters of the example queue attribute Comment2.
Group:	Ticket
SubGroup:	Frontend::Queue::Preferences
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'QueuePreferences' }-&gt;{ 'Comment2' } = {     'Block' =&gt; 'TextArea',     'Cols' =&gt; '50',     'Desc' =&gt; 'Define the queue comment 2.',     'Label' =&gt; 'Comment2',     'Module' =&gt;     'Kernel::Output::HTML::QueuePreferencesGeneric',     'PrefKey' =&gt; 'Comment2',     'Rows' =&gt; '5' };</pre>

**Frontend::SLA::Preferences****SLAPreferences###Comment2**

Description	Value
Description:	Parameters of the example SLA attribute Comment2.
Group:	Ticket
SubGroup:	Frontend::SLA::Preferences
Valid:	0
Required:	0

Description	Value
Config-Setting:	<pre>\$Self-&gt;{ 'SLAPreferences' }-&gt;{ 'Comment2' } = {     'Block' =&gt; 'TextArea',     'Cols' =&gt; '50',     'Desc' =&gt; 'Define the sla comment 2.',     'Label' =&gt; 'Comment2',     'Module' =&gt;     'Kernel::Output::HTML::SLAPreferencesGeneric',     'PrefKey' =&gt; 'Comment2',     'Rows' =&gt; '5' };</pre>

## Frontend::Service::Preferences

### ServicePreferences###Comment2

Description	Value
Description:	Parameters of the example service attribute Comment2.
Group:	Ticket
SubGroup:	Frontend::Service::Preferences
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{ 'ServicePreferences' }-&gt;{ 'Comment2' } = {     'Block' =&gt; 'TextArea',     'Cols' =&gt; '50',     'Desc' =&gt; 'Define the service comment 2.',     'Label' =&gt; 'Comment2',     'Module' =&gt;     'Kernel::Output::HTML::ServicePreferencesGeneric',     'PrefKey' =&gt; 'Comment2',     'Rows' =&gt; '5' };</pre>

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# Appendix C. Credits

OTRS is an open source project, and we wish to thank many people for their help and support. The following list is surely incomplete, and we apologize for that! Just drop us a note if you are not on this list.

The following persons have especially pushed the project or are still active supporters:

- Robert Kehl, who created the Win32-installer for the 1.x releases. Thanks a lot, Robert!
- Torsten Werner, who maintains the Debian-installer for OTRS. Thanks a lot, Torsten, by making OTRS also available for the Debian community.
- Nils Jeppe (mirror Hamburg, Germany), Bryan Fullerton (mirror Toronto, Canada), Eberhard Mönkeberg (mirror Göttingen, Germany), Timo Dreger (mirror Düsseldorf, Germany) and Netmonic (mirror Vienna, Austria), who are mirroring our FTP server. Thanks a lot, with your help it is always possible to download OTRS quickly!
- Anja Schneider, who is helping with the translation of this manual and with the correction and revision of the German texts. Many thanks for your help and patience, Anja!
- We receive many ideas via the OTRS mailing lists for system improvements, patches or bugfixes. Great support for all users is always available there. Thanks a lot to all people on the mailing lists for your active assistance!

Also we want to give a big thank you to the following persons:

- Martin Scherbaum
- Carsten Gross
- Harald Müller
- Stefan Schmidt
- Milisav Radmanic
- Uli Hecht
- Norman Walsh
- Heiko Baumann
- Atif Ghaffar
- Pablo Ruiz Garcia
- Dan Rau
- Christoph Kaulich
- Mark Jackson
- Diane Shieh
- Bernard Choppy

- Carl Bailey
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- Edwin D. Vinas
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- Sébastien Guilbaud
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- Arnold Ligtvoet
- Antti Kämäräinen
- Nicolas Goralski
- Gilberto Cezar de Almeida
- Jorge Becerra
- Eddie Urenda
- Stella Power
- Andreas Haase
- Reiner Keller
- Covert Jake
- Moshe Leibovitch
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- Remo Catelotti
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Version 1.1, March 2000

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