Package DYNDNS - Dynamic Update For Domain Name Services (DNS)
Version 3.10.5

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1. Documentation Of Package DYNDNS

1.1. DYNDNS - Dynamic Update For Domain Name Services

This package is used to update a dynamic hostname at every dial-in process. The following services are supported:

Provider	FreeDNS (afraid.org)
DYNDNS_x_PROVIDER	AFRAID
Homepage	http://freedns.afraid.org

Important: *Provide the last part of the URL downloadable on Afraid.org's homepage (behind the question mark) as password (Login ⇒„Dynamic DNS" ⇒The URL behind the Link „Direct URL"). All other informations will be ignored.*

Provider	Companity
DYNDNS_x_PROVIDER	COMPANITY
Homepage	http://www.staticip.de/

Provider	DHS International
DYNDNS_x_PROVIDER	DHS
Homepage	http://www.dhs.org/

Provider	DNS2Go
DYNDNS_x_PROVIDER	DNS2GO
Homepage	http://dns2go.com/

Provider	DNS-O-Matic
DYNDNS_x_PROVIDER	DNSOMATIC
Homepage	http://www.dnsomatic.com

Provider	DtDNS
DYNDNS_x_PROVIDER	DTDNS
Homepage	http://www.dtdns.com/

Provider	DynAccess
DYNDNS_x_PROVIDER	DYNACCESS
Homepage	http://dynaccess.de/

Important: *DynAccess offers special charges for the subdomains *.dyn-fli4l.de, *.dyn-fli4l.info and *.dyn-eisfair.de because of a fli4l-DynAccess cooperation. Informations can be found here: http://www.dyn-fli4l.de/ or http://www.dyn-eisfair.de/.*

Provider	DynDNS.org
DYNDNS_x_PROVIDER	DYNDNS
Homepage	http://dyn.com/

Provider	DynDNS.org (custom)
DYNDNS_x_PROVIDER	DYNDNSC
Homepage	http://dyn.com/standard-dns/

Provider	DynDNS DK
DYNDNS_x_PROVIDER	DYNDNSDK
Homepage	http://dyndns.dk/

Provider	dyndns:free
DYNDNS_x_PROVIDER	DYNDNSFREE
Homepage	http://dyndnsfree.de/

Provider	eisfair.net
DYNDNS_x_PROVIDER	DYNEISFAIR
Homepage	http://www.intersales.de/it-infrastruktur/dyneisfair.html

Important: *By using this service you support the work of the fli4l- and eisfair-developers.*

Provider	DyNS
DYNDNS_x_PROVIDER	DYNSCX
Homepage	http://www.dyns.cx/

Provider	GnuDIP Dynamic DNS
DYNDNS_x_PROVIDER	GNUDIP
Homepage	http://gnudip2.sourceforge.net/

Provider	Provider Hurricane Electric
DYNDNS_x_PROVIDER	HE
Homepage	https://dns.he.net/

Provider	IN-Berlin e.V.
DYNDNS_x_PROVIDER	INBERLIN
Homepage	http://www.in-berlin.de

Provider	KONTENT
DYNDNS_x_PROVIDER	KONTENT
Homepage	http://www.kontent.de/

Provider	Nerdcamp.net
DYNDNS_x_PROVIDER	NERDCAMP
Homepage	http://nerdcamp.net/dynamic/dns.cgi

Provider	No-IP.com
DYNDNS_x_PROVIDER	NOIP
Homepage	http://www.no-ip.com/

Provider	noxaDynDNS
DYNDNS_x_PROVIDER	NOXA
Homepage	http://www.noxa.de/

Provider	OVH.DE
DYNDNS_x_PROVIDER	OVHDE
Homepage	http://www.ovh.de/

Provider	PHPDYN
DYNDNS_x_PROVIDER	PHPDYN
Homepage	http://www.webnmail.de/phpdyn/

Important: *you have to host this type for yourself*

Provider	Regfish.com
DYNDNS_x_PROVIDER	REGFISH
Homepage	http://www.regfish.de/

Provider	SelfHost.de
DYNDNS_x_PROVIDER	SELFHOST
Homepage	http://selfhost.de/cgi-bin/selfhost

Provider	Securepoint Dynamic DNS Service
DYNDNS_x_PROVIDER	SPDNS
Homepage	http://www.spdns.de/

Provider	Strato
DYNDNS_x_PROVIDER	STRATO
Homepage	http://www.strato.de/

Provider	T-Link.de
DYNDNS_x_PROVIDER	TLINK
Homepage	http://www.t-link.de/

Provider	twodns.de
DYNDNS_x_PROVIDER	TWODNS
Homepage	http://www.twodns.de/

Provider	ZoneEdit.com
DYNDNS_x_PROVIDER	ZONEEDIT
Homepage	http://zoneedit.com/

We try to keep this list up-to-date but do not rely too closely on it. There is no liability at all for the correctness of this data. You may report errors or changes detected by sending a mail to the fli4l team (email: team@fli4l.de).

This is a complete list. Other providers are not supported without changes. How to expand the package to support new providers can be found in the appendix.

The dynamic hostname will be actualized with every internet dial-in. The package includes a lock that prevents repeated updates of the same IP as this is frowned with some DynDNS providers and in extreme cases can lead to account blocking.

Note: The changing of the dynamic hostname may take some minutes.

Before using the package you have to aquire an account with one of the providers named above. If you already have an account you are ready to start. If you have no account yet, you can be guided by the table above to find a host name which fulfills the requirements and meets the personal taste.

For the configuration you will need the following data:

- Name of the provider

- Username

- Password

- DynDNS-hostname

The Data my vary with the provider while we try to provide a consistent configuration. Sometimes the hostname equals to the username, in such cases we will try to use the Host-field and ignore the username.

OPT_DYNDNS Setting this to `'yes'` activates `OPT_DYNDNS`.

DYNDNS_SAVE_OUTPUT By activating this with `'yes'` the result of the DynDNS query will be saved to a file shown by the webserver [1]

DYNDNS_N Change this value if you have accounts with more DynDNS providers and therefore want to update several names with every dial-in.

DYNDNS_x_PROVIDER Specify the name of the provider (see table above and hints in the config file).

DYNDNS_x_USER Your username for the DynDNS provider. Mostly an email address, a name you choose for yourself when registering or the DynDNS hostname.

DYNDNS_x_PASSWORD Your passwort for the DynDNS account. Be aware to keep your secret!

DYNDNS_x_HOSTNAME The *complete* DynDNS hostname for the account. Examples:

- `cool.nerdcamp.net`
- `user.dyndns.org`
- `fli4luser.fli4l.net`

DYNDNS_x_UPDATEHOST For the provider PHPDYN specify here on which host the updater is installed. You need this because of PHPDYN not being a real provider but only a gpl'd script actualizing a PowerDNS Server with MySQL.

DYNDNS_x_CIRCUIT Set the circuits for which dialing in should update the hostname. Circuits are separated by spaces. It may be useful to update hostnames only when dialing in via DSL. Some examples:

```
DYNDNS_1_CIRCUIT='1 2 3'          # Only ISDN: Circuits 1 to 3
or
DYNDNS_1_CIRCUIT='pppoe'          # Only DSL: pppoe-Circuit
or
DYNDNS_1_CIRCUIT='dhcp'           # Update with DHCP providers
                                  # (opt_dhcp needed)
or
```

---

[1]OPT_HTTPD

```
DYNDNS_1_CIRCUIT='pppoe 1'          # DSL and ISDN

or
DYNDNS_1_CIRCUIT='static'           # fli4l i.e. behind a LTE Router
```

DYNDNS_x_RENEW Some providers expect an update every n days even without your IP having changed. This interval may be set here. If no value is given an update will be forced every 29 days.

It should be noted that an update is triggered only when dialing. This means: DSL or ISDN connections or a renewing of a lease of an interface configured via DHCP like in a cable modem. If no dialing occurs for a longer time period you have to trigger the update in other ways.

DYNDNS_x_EXT_IP This variable configures the method by which the external IP address is detected. By setting this to `'no'` no external service will be queried for the IP address and the IP address of the WAN interface will be used instead. This usually works only with WAN connections which terminate directly on the fli4l, such as PPPoE via DSL. If specifying `'dyndns'` the IP address used when updating is determined by using the external service of checkip.dyndns.org. When using `'stun'` the list of STUN servers is queried one by one until a valid response is returned. The use of an external service to determine the IP address is necessary if the router itself is not getting the external IP. It should be noted that the router will not note a change of the external IP in this case and thus can't update the dyndns name entry immedeately.

DYNDNS_x_LOGIN Some providers require the user to log in to their Web page regularly by using her/his user account to prevent the service from being deactivated. If this variable is set to `'yes'`, the FLI4L will do that for you. However, this only works if the dyndns package is prepared for this provider. Such a regular registration is currently only necessary and possible for the provider "DYNDNS". Please remember also that the use of this function requires `OPT_EASYCRON='yes'` in package easycron.

DYNDNS_LOGINTIME If you use a provider FLI4L should log into regularly to prevent deactivation of the service (see above), you can use this variable to configure at what time this login process is intended to take place. A time value in Cron format is required here, for details please read the Documentation of package easycron. The default setting is `0 8 * * *`, meaning a daily login at eight o'clock in the morning.

DYNDNS_ALLOW_SSL Setting this variable to `'yes'` will update over an encrypted SSL connection if possible.

DYNDNS_LOOKUP_NAMES The IP should only be updated if it really changed. Many fli4l routers don't have a permanent data storage like a harddisk where this information could be saved to be present at boot time. To prevent unnecessary updates flil4 may query name servers (only in this case) for its actually registered IP. The information will be saved and used for further updates.

Note that after a reboot a new update interval will start if fli4l uses a name server to detect its IP.

DYNDNS_DEBUG_PROVIDER Setting this variable to `'yes'` will record a trace of the update process for debugging purposes. Default: `DYNDNS_DEBUG_PROVIDER='no'`

A. Documentation Appendix for Package DYNDNS

A.1. DYNDNS

A.1.1. Adding Of New Providers

Adding new providers is easy because update-scripts are separated from provider data completely. For a new provider adapt the following files:

opt/etc/dyndns/provider.NAME

This file defines how an update is working with this provider. It mostly consists only of a list of variables but is a normal shell script that even allows complex operations to be done. This should not be necessary in most cases. These variables can be used in the file:

$ip The IP of the interface that should get the dynamic hostname.

$host The complete hostname the user specified in his configuration.

$subdom All components of the hostname ending with the dot next to last (**name**.provider.dom)

$domain the both last components of the hostname (name.**provider.dom**)

$provider The symbolic name of the provider the user specified in his configuration file.

$user The username for this service.

$pass The password.

These variables can be put in curly brackets to be cleary distinguishable from normal text, `$ip` i.e. becomes `${ip}`. If using quotation marks it should be noted that within single quotes the variables mentioned above are *not* expanded while this works with double quotes. As a rule of thumb: Always use single quotes but when using variables double quotes are needed.

The following variables must be defined in this file in order to get an update working with the provider:

provider_update_type This determines the type of query sent to the provider's server. These types are supported at the moment:

> **http** A predefined website of the provider will be loaded to update the DynDNS-entry.
>
> **netcat** A predefined text will be sent to the provider's server triggering an update.
>
> **gnudip** An update process relatively easy and secure done by two HTTP-queries.

provider_host The provider's hostname that is to be contacted during an update.

provider_port The port to be contacted on the provider's host. Standard-port for HTTP is 80.

Depending on the update type further variables have to be specified:

HTTP provider_url The relative URL (without the hostname, but with an / at the beginning) for the provider script. For examples please have a look at the files for other providers.

> **provider_auth** (optional) If the provider needs a login via basic authentication provide the information needed here. The format is `"USER:PASSWORD"`.

Netcat provider_data The text to be sent to the provider's server. See `provider.DYNEISFAIR` as an example.

GNUDip provider_script The path tot he GNUDip-script on the server, mostly something like `'/cgi-bin/gdipupdt.cgi'`.

opt/dyndns.txt

One or more lines for the new provider have to be inserted here. Usually a line like that is enough:

```
dyndns_%_provider    NAME    etc/dyndns/provider.NAME
```

If HTTP and Basic Authentication are used by the provider you will need the base64 executable:

```
dyndns_%_provider    NAME    files/usr/local/bin/base64
```

If other tools are needed sent an email so we can validate if this is suitable for OPT_DYNDNS.

check/dyndns.exp

In this file the provider name has to be added at the end of the long line starting with `DYNPROVIDER =` , seperated by a '|'.

doc/<Language>/tex/dyndns/dyndns_main.tex

Add a new paragraph to the documentation. The providers have to be sorted alphabetically by the short name given by the user in the config file. The prov-macro is documented at the beginning of the file, enough examples should be present.

A.1.2. Note Of Thanks

At first I wish to thank Thomas Müller (email: opt_dyndns@s2h.cx) who originally developed this package and maintained it for a long time. He has done exceptional work here, without him this packages would not have been possible.

I would like to thank as well Marcel Döring (email: m@rcel.to), who maintained the package for quite some time.

A lot of people have been helping and providing ideas at the development of the package. Many thanks also to all those hard-working people.

Further thanks got to all the people contributing to the package by providing tips, new providers, bug reports and so on:

Last but not least my thanks go to Frank Meyer and the rest of the fli4l team for their tireless work to tinker with the best router in the world (;-) Please do not take this too serious).

A.1.3. Licence

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