

TUPA - The Ultimate PowerDNS Administration

Install / User guide

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Requirements

Server side

- ✓ A Linux machine
(TUPA does not work on windows anymore!)
- ✓ Functional PowerDNS installation
- ✓ Webserver (Apache)
- ✓ PHP \geq 4.1
- ✓ MySQL Database (from PDNS installation) \geq 3.23.58
- ✓ RRD Tool (for PDNS statistics)

Client side

- ✓ A supported browser:
 - ✓ Firefox
 - ✓ Mozilla / Seamonkey
 - ✓ MS InternetExplorer \geq 5.5

Installation

Download Package

Load the TUPA package from Sourceforge (http://sourceforge.net/project/showfiles.php?group_id=141714) onto you server and decompress it into your web root.

Copy default config file

If you install TUPA the **first time** you have to copy the distributed configuration file:

```
$ cp config/config_site-dist.inc.php config/config_site.php
```

and make it writable by apache user:

```
$ chown apache config/config_site.php  
$ chmod 640 config/config_site.php
```

Check/create database user

You already have an MySQL user for PowerDNS (if not install PowerDNS first). You can use the same user or create a new one for TUPA. This user needs these permissions:

- ✓ SELECT, INSERT, UPDATE, DELETE, CREATE, DROP, INDEX, ALTER

Start the installer

Point your browser to:

<http://your.server.com/<path>/installer/>

Login

The default password for the installer is "*tupainstall*".

Step 1 - About

Short descriptions of all the steps of the installer, and legend of the different headers.

Step 2 - Change password

For security reasons you should change the password (of course).

Because the installer password is **transferred in plain text**, you should also uncomment line 28 (die function) in "installer/index.php" after you finished the installation.

Step 3 - Check requirements

The installer checks all needed extensions, php settings, directories and files TUPA needs to work. All points of extensions, php.ini settings and files **have to be OK** (green hook).

The directories part is a little bit special:

skins/	Don't has to be writable in RC1 (used for integrated skin manager in later versions)
lang/	Don't has to be writable in RC1 (used for integrated language manager in later versions)
stats/	Has to be writable (Generated statistic graphs are stored there)
stats/db/	Has to be writable by the user which executes the crontab script (normally root because it also needs access to "pdns_control" to update RRD database)

Step 4 - Database settings

Insert your database settings and click "Set new config".
Choose the database from drop-down list and save again.
If there is an error check you settings

Step 5 - Update database

The needed changes are already preselected. To remove or drop fields (from other PDNS administration tools) you have to check the statements manually. Go to the bottom of the page and click "Write to database".

Important:

If you want to migrate you existing "PowerDNS Administration"- or "PowerAdmin"- installation, **don't** select the "remove" and "drop" checkboxes before you have migrated your installation!

Step 6 - Data import/migration (optional)

If you made a fresh PDNS installation without any domains you can skip this step.

At the moment you can import existing PDNS domains (assigned to admin user), or migrate all data (domains, users and templates) from an existing administration tool. Supported tools are:

- ✓ PowerAdmin (Tested version: 1.2.7)
- ✓ Power DNS Administration (Tested version: 0.4)

To migrate from Bind zone files you have to convert and import them into your pdns database first. There is a program called zone2sql which is part of the PDNS package to convert Bind zone files to SQL statements. (<http://downloads.powerdns.com/documentation/html/migration.html>)

After you imported the generated sql file into you database you can use the "Raw PowerDNS"-option in the select box to make them visible in TUPA.

After a successful migration you should update your database again (Step 5) and remove/drop all fields. After that you should only see a "Table and field definitions are OK."

Don't forget to uncomment the die function described in Step 2.

Step 7 - Create admin user

On a fresh installation you have to add an admin user to access the TUPA interface. If you have migrated from an existing installation it should be the same user as you used in your old tool (Admin always has id 1 in database table "users")

Step 8 - Logout (Installation finished)

If everything went fine you finished your base TUPA installation. Congratulations!

Update

Follow the steps in chapter "Installation". Start with sub-chapter "Start the installer" and skip steps 2, 4, 6 and 7.

Update from TUPA 0.1-beta

I changed most skin icons from gif to png because i have integrated a fix for IE PNG transparency and png's allows you to make nicer skins.

You can (should) delete all gif files in this directory after update:

- ✓ /skins/default/images/icons/

Additional stuff

Configure crontab

The crontab script (crontab/cron_120s.php) manages:

- ✓ PowerDNS statistic updates
- ✓ Backup task execution

To enable it add the following line to you crontab file:

```
*/2 * * * * root php /path/to/tupa/crontab/cron_120s.php > dev/null
```

Important:

This script **has to be executed every two minutes** (the */2 does that). This is important because the RRD statistic database is made for one value every two minutes.

Change TUPA default configuration

You can change values from the \$TUPA_CONF_VARS array you find in "lib/default_config.php" by add changes to "config/config_site.inc.php". DON'T change the default_config.php itself because it will be overwritten on updates. There will be an graphical interface in a later release.

What you should change in any way

Your primary nameserver:

```
$TUPA_CONF_VARS[ 'DNS' ][ 'defaultSoaPrimary' ]='your.nameserver.com' ;
```

Hostmasters eMail address (**very important!!**):

```
$TUPA_CONF_VARS[ 'DNS' ][ 'defaultSoaHostmaster' ]='your@email-address.com' ;
```

PowerDNS configuration name:

```
$TUPA_CONF_VARS[ 'CRON' ][ 'pdnsConfigName' ]=' ' ;
```

Set the config name if you need one (if you have f.ex. an init script called "pdns-something" and a config file called "pdns-something.conf" you have to set this to "something"). If it is called pdns (which is default as far i can remember, you can leave this blank.

Other values can be easily set in the same way (Have a look into "lib/default_config.php")

Important:

\$TUPA_CONF_VARS['RRD'] options should never been set in the "config/config_site.inc.php". These are options which should only be set in the configuration file of skins.

Install a PHP-Accelerator

PHPA gives you more performance on page generation and is very easy to install. Around 30% faster in my case.

Download the needed file for your PHP version on <http://www.php-accelerator.co.uk/> and decompress it into `"/usr/lib/apache/php/"` (or an other path you like)

Create a directory where cache files are stored (f.ex. `/home/phpa_cache`):

```
$ mkdir /home/phpa_cache
$ chown apache:apache /home/phpa_cache
$ chmod 700 /home/phpa_cache
```

Add the following code into your `php.ini` or into a new file in `"/etc/php.d/"`. These are values which works fine for me. Don't forget to change the paths.

```
; PHP Accelerator extension
zend_extension="/usr/lib/apache/php/php_accelerator_1.3.3r2.so"

; Config
phpa = on
phpa.tweaks = on
phpa.cache_dir = /path/to/cache/dir
phpa.file_perms = 400
phpa.cache_file_prune_period = 1h
phpa.cache_file_ttl = 1d
phpa.shm_size = 32
phpa.shm_key = 0xc0deb00
phpa.shm_perms = 666
phpa.shm_user = apache
phpa.shm_group = apache
phpa.shm_release_at_exit = on
phpa.shm_stats_check_period = 5m
phpa.shm_ttl = 12h
phpa.shm_max_processes = 512
phpa.shm_lock_threshold0 = 10
phpa.shm_lock_threshold1 = 10
```

Restart Apache and you PHP caching should run.

Secondary nameserver updates

I use MySQL replication to update my secondary nameserver because TUPA can handle only NATIVE records at the moment. Some people said PDNS replicates fine with NATIVE mode also. I don't really know that.

But anyway, MySQL replication seems to be the easiest way (for me) to do that because I have to enter the domain only on the primary and the secondary is replicated automatically.

You will find everything you need on the MySQL manual:

<http://dev.mysql.com/doc/mysql/en/replication-howto.html>

Translate TUPA

Want to have TUPA in you language too? You can do it now!

Here a step by step guide to do that:

- 1) Copy the directory "lang/en" to "lang/xx" ("xx" is you official language code like (fr, it, jp, de, de-at, ...)
- 2) Rename the file "en.inc.php" to "xx.inc.php" in the copied directory (has to be identical with the directory name!)
- 3) Copy the file "help.inc.php" into your directory (don't change the name)
- 4) Edit the "info.xml" file and change the values like described there.
Don't forget your eMail address!
- 5) Now the big part. Edit "xx.inc.php" and "help.inc.php", and translate all values on the right side only. The left ones are keys which must be always the same (only for non-PHP-programmers). "%something%" are placeholders for some data like user- or domain- names. They are separated that you can place it where you need to have it in you language.

Important:

Make sure you use an editor which can save it as UTF-8.

Don't forget to change "...['en']" to "...['xx']" in both files. (around line 41)

- 6) After your translation work you have to add your "xx" key to your config. At the moment "en", "el" and "de-ch" are the only available languages.

Add this to your "config/config_site.inc.php":

```
$TUPA_CONF_VARS[ 'SYS' ][ 'languages' ] = 'en|de-ch|el|yourkey' ;
```

- 7) You can test you language now in TUPA, and when everything works fine, open your mail program and send the (g)zipped directory to urs@tupa-dns.org . I will add your translation to the next release of TUPA.

Create new skin

Here only a small guide to create a new skin:

- 1) Copy the folder "skins/default" to "skins/your_skin_name". The "your_skin_name" is the key you need later to add it to your config.
- 2) Edit the "info.xml" file and change the values like described there.
Don't forget your eMail address!
- 3) Normally you don't need to change the html template files (This is a little bit complicate anyway). Almost all needed changes can be done with the css file ("styles.css"). So **delete** the "templates" folder. This makes updates easier for you later because you don't have to change the templates too.
- 4) You may want to add your new created skin to your config first to see the changes you make later.
Add this to your "config/config_site.inc.php":

```
$TUPA_CONF_VARS[ 'SKINS' ][ 'skins' ]= 'default|yourkey' ;
```
- 5) You should now be able to select the skin on your preferences page.
- 6) Edit the "styles.css" in your skin directory and change whatever you want.
- 7) You can (of course) also replace the images in "skins/your_skin/images".
The images can have a different size than the original. TUPA don't resizes the images, it only gets the image sizes for correct displaying.

Bugs / Support

Bugs

Please report bugs on the Sourceforge tracker:

http://sourceforge.net/tracker/?group_id=141714&atid=750279

Support forum

Use the forum on Sourcefore for questions:

http://sourceforge.net/forum/?group_id=141714

Special thanks

Special thanks goes to the following projects, companies and persons:

- ✓ Typo3 CMS <http://typo3.com/>
- ✓ ICRCOM AG <http://www.icrcom.com/>
- ✓ JPSPAN <http://jpspan.sourceforge.net/>
- ✓ fValidate
- ✓ phpSysinfo <http://phpsysinfo.sourceforge.net/>
- ✓ jsCalendar <http://www.dynarch.com/projects/calendar/>
- ✓ MRTG & RRDtool <http://people.ee.ethz.ch/~oetiker/webtools/mrtg/>
- ✓ All members of the TUPA community

More informations about them:

http://www.tupa-dns.org/Special_thanks.29.0.html