Hedgehog Upgrade Guide: 2.0.0 to 2.1.0rc1 (install from source)

This document describes how to upgrade a server from release 2.0.0 to release 2.1.0rc1 of Hedgehog where 2.1 is installed from a tarball of the source code.

> 2.0.0rc2 and 2.0.0 do not differ and therefore this guide can also be used to upgrade from 2.0.0rc2 to 2.1.0rc1

> Installation from packages is supported from 2.1 onwards. Support for installation directly from source is likely to be discontinued in a future version. It is recommended that users migrate to installing from packages from 2.1 where possible (see the Upgrade Guide).

Back up the old installation

If desired, back up the existing installation (the directory structure in the User Guide is a useful reference) and database.

1. Pre-installation

1.1 Install new dependancies

```
# common dependencies
sudo add-apt-repository ppa:ondrej/pkg-nlnetlabs
sudo apt-get update
sudo apt-get install postgresql-9.3-ip4r postgresql-plpython-9.3
libgetdns1 \
                    python-getdns help2man
# data manager dependencies
sudo apt-get install python-ipy python-dev python-yaml python-dnspython
\
                    python-psycopg2
# web front-end dependencies
sudo apt-get install libjs-jquery libjs-jquery-ui unifont r-cran-rjson
```

```
sudo R
install.packages("plyr")
q()
```

1.2 Download, configure and make new release

Download the 2.1.0rc1 release from github: https://github.com/dns-stats/hedgehog/archive/2.1.0rc1.tar.gz

(If you downloaded the above URL with wget the tarball will be called 2.1.0rc1.tar.gz)

```
tar -xzf hedgehog-2.1.0rc1.tar.gz
cd hedgehog-2.1.0rc1
./autogen.sh
mkdir build
cd build
../configure [--prefix=] [--disable-web] [--disable-data-manager]
make
```

1.3 Cron jobs

Stop refile and grok cron job running:

```
sudo -u hedgegho crontab -e
# Import XML data every 15 mins
00,15,30,45 * * * * <prefix>/bin/refile_and_grok.sh -c >>
/var/log/hedgehog/refile_and_grok_xml_to_db.sh.log 2>&1
```

Comment out any other jobs that are about to run. If the dsc-extractor process is running wait for it to finish before continuing.

1.4 Disable web front end

It is recommended to disable the web front end during upgrade e.g by enabling a holding page.

2. Installation

2.1 Install new release

```
cd hedgehog-2.1.0rc1/build
sudo make install
```

2.1 Update the database

2.1.2 Update config

Run as super user of hedgehog database (e.g. postgres)

```
psql hedgehog -c "CREATE EXTENSION ip4r SCHEMA dsc;"
psql hedgehog -c "CREATE EXTENSION plpythonu SCHEMA pg_catalog;"
```

Update the database configuration fire /etc/postgresql/9.3/main/postgresql.conf by commenting and setting:

```
extra_float_digits = 1
```

Restart postgres

```
sudo service postgresql restart
```

2.1.2 Run DDL files and new database scripts

Run this either as super user of hedgehog database (e.g. postgres) if using peer authentication or if not by additionally specifying a password on the command line

```
<prefix>/libexec/hedgehog/DDL_updates/000010_ddl_python -U <super-user>
```

Run the following 5 commands as the DB write user (e.g. hedgehog). The geoip update can take a while:

```
<prefix>/libexec/hedgehog/DDL_updates/000011_ddl_new_graphs
<prefix>/libexec/hedgehog/DDL_updates/000012_ddl_lower_key_index
<prefix>/bin/hedgehogctl database_update_geoip
<prefix>/bin/hedgehogctl database_update_tlds
<prefix>/bin/hedgehogctl database_update_tlds_from_zone 2>/dev/null
```

Run the manage partitions script for the current month:

```
sudo -u <DB_OWNER> <prefix>/bin/hedgehogctl database_manage_partitions
-m <YYYY-MM>
```

2.2 Migrate configuration files

Use the sample files provided to create updated versions of the following files for compatibility with 2.1:

* *hedgehog_gui.yaml* (*default_node_grouping* and *support_url added* parameters added)
* *nodes.csv* (format extended)

> The format of the *nodes.csv* file has been extended in 2.1 to support several additional fields to for additional grouping options for nodes and also IP addresses to be used when collecting zone related RSSAC statistics.

3. Post-install

3.1 Test web front end

Re-enable and test the web front end. Make sure to restart apache.

```
sudo service apache2 reload
```

3.2 Re-enable cron jobs

Note that 2 new optional cron jobs are suggested for 2.1 for updating the TLD and geoIP databases. Refer to the Installation Guide for a full list of suggested cron jobs.

> Remember to use the new script names and syntax when re-enabling the cron jobs

Restart refile and grok cron job running:

```
sudo -u hedgehog crontab -e
# Import XML data every 15 mins
00,15,30,45 * * * * <prefix>/bin/refile_and_grok -c >>
/var/log/hedgehog/refile_and_grok_xml_to_db.log 2>&1
```

Re-enable any other jobs that were disabled for the upgrade.

3.3 Configure rssacd

Refer to section 8.3 of the Installation from Source Guide for how to configure the *rssacd* demon to collect RSSAC zone-size and load-time statistics.