Command Utilities

This section details the various command utilities that are available with OpenDNSSEC.

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ods-control

Is a wrapper around the commands below.

```
usage: ods-control ksm|hsm|signer|start|stop
```

- The first three options pipe commands to ods-ksmutil, ods-hsmutil, and ods-signer.
- The last two options start and stop the two daemons of OpenDNSSEC, ods-enforcerd and ods-signerd.

ods-ksmutil

You need a way to interact to the KASP Enforcer, for example to add and remove zones that are handled by OpenDNSSEC. The ods-ksmutil utility provides a number of commands to make this easier, all commands are invoked on the unix command line.

• You must run the setup option before you ever run any sub-system in OpenDNSSEC. This reads the configuration kasp.xml and imports these settings into the KASP Enforcer database.

The setup command deletes the current content of the database! (Including information on keys; such that existing keys will become unusable and new keys will need to be generated.)

- If you make any changes to kasp.xml these changes must be imported into the database. Use the update command to do this without losing
 any other data.
- To add a zone to be handled by OpenDNSSEC, use the zone add command. This command needs a parameter to specify the zone, and
 optional parameters for which policy to use and which paths to use for input and output. An example of use:

```
ods-ksmutil zone add -z example.com -p default -i /var/example.com -o /var/example.com.signed
```

• The command zone delete is simpler and needs no further parameters but the name of the zone.

A complete list of commands can be found by running:

```
ods-ksmutil -h
```

or they are shown in detail here: ods-ksmutil commands

ods-signer

The ods-signer provides a Command Line Interface to the ods-signerd. There are a number of commands you give to ods-signer. If you start the CLI without any command line parameters you enter a shell where you can issue commands:

```
ods-signer
cmd> help
Commands:
zones
                                Show the currently known zones
sign <zone> [--serial <nr>] Read zone and schedule zone for immediate (re-)signing.
                                If a serial is given, that serial is used in the output zone.
                               Read all zones and schedule all for immediate (re-)signing.
sign --all
clear <zone>
                              Delete the internal storage of this zone.
                              All signatures will be regenerated on the next re-sign.
                              Show the current task queue.
queue
flush Execute all scheduled tasks immediately.

update <zone> Update this zone signer configurations.

update [--all] Update zone list and all signer configurations.

start Start the engine.
                              Check if the engine is running.
running
reload
                              Reload the engine.
                              Stop the engine.
stop
verbosity <nr>
                               Set verbosity.
```

Notes:

- When a using a 'File' input adaptor and the zone file is manually updated the user must manually issue the command for the signer to re-sign the zone 'ods-signer sign <zone>'
- The verbosity level controls the level of logging, 0 will disable logging and 3 (default level) will provide informational log messages. You can set it higher to get debug log messages.

The same commands can be passed as command line arguments in your unix shell.

ods-hsmutil

The ods-hsmutil utility is designed to interact directly with your HSM and can be used to manually list, create or delete keys. It can also be used to perform a set of basics HSM tests.

Be careful before create or deleting keys using ods-hsmutil, as the changes are not synced with the KASP Enforcer.

ods-hsmspeed

The tool ods-hsmspeed does performance testing on your HSM. This is also useful to find out at what speed you can get from SoftHSM on your CPU.

ods-getconf

The tool ods-getconf can be used to retrieve a configuration option value given an expression. Introduced in 1.4.6.

ods-kaspcheck

This tool is provided to check that the configuration files (conf.xml and kasp.xml) are semantically sane and contain no inconsistencies.

It is advisable to use this tool to check your configuration before starting to use OpenDNSSEC.

hsmbully

The hsmbully tool may be used to test your HSM for compliance with PKCS#11. This tool is not part of OpenDNSSEC, but can be found in the GitHub repository:

```
git clone https://github.com/opendnssec/hsmbully.git
```

Daemons

You can also run the two OpenDNSSEC daemons ods-signerd and ods-enforcerd from the command line, they are installed into the sbin directory.

ods-signerd

This is the component that performs all of the signing. It first reads zonelist.xml and then goes through all zones to sign them if needed. Start the daemon by running:

```
ods-signer start
```

or if you want to use specific command line options:

```
ods-signerd -h
Usage: ods-signerd [OPTIONS]
Start the OpenDNSSEC signer engine daemon.
Supported options:
-c | --config <cfgfile> Read configuration from file.
-d \mid --no-daemon Do not daemonize the signer engine.
                        Run once, then exit.
-1 | --single-run
-h | --help
                        Show this help and exit. Print configuration and exit.
-i | --info
                    Increase verbosity.
-v | --verbose
-V | --version
                        Show version and exit.
BSD licensed, see LICENSE in source package for details.
Version 1.4.0. Report bugs to <a href="http://bugs.opendnssec.org/">http://bugs.opendnssec.org/>.
```

ods-enforcerd

The Enforcer daemon creates keys if needed (and configured to); it also maintains the states of the keys according to the appropriate policy. As the states of keys change, it communicates these changes to the signer via the configuration files that the signer uses when signing the zones. To run, call:

```
ods-enforcerd
```

or if you want to use specific command line options:

Note that the -p <policy> option is available in 1.4.3