Installation guide

Introduction

This document goes through the installation steps of required software listed in “Software requirements”. After finishing the installation of all items, follow “Configuration guide” to set up each component to work with Snow Owl Server.

Components

Operating system

Install Red Hat Enterprise Linux or CentOS using the minimal ISO image. As hardware configurations and the corresponding exact installation steps can be different from machine to machine, please refer to the installation guide on Red Hat’s site for details (covers both distributions).

NOTE	The text-based installer does not offer all options compared to the graphical one; you may have to connect a physical monitor, or use the built-in KVM management capabilities of the server (if supported) to perform the installation from the graphical environment. The installed system only needs an SSH connection for administration.

When creating the partition layout, keep in mind that Snow Owl Server requires at least 160 GB of disk space when branched terminology editing is used extensively.

After logging in to the installed system, update installed packages to the latest version and add EPEL as a package repository for dependencies. For non-CentOS installations, please see the the usage instructions on the EPEL wiki.

```
# yum update
# reboot
# yum install epel-release ①
```

① Works only if CentOS was installed

Create a non-login user for Snow Owl Server to run as:

```
# useradd -r -s /sbin/nologin snowowl
```

Database server software

An extensive installation guide for getting MySQL Community Edition from a yum repository is available at the MySQL Documentation Library. The required steps are summarized below.

After downloading the RPM package, install MySQL’s yum repository with the following command:

```
# yum install mysql-community-release-el6-5.noarch.rpm
```

The repository for MySQL 5.6 should be enabled by default. Confirm by opening `/etc/yum.repos.d/mysql-community.repo`:

```
[mysql56-community]
name=MySQL 5.6 Community Server
baseurl=http://repo.mysql.com/yum/mysql-5.6-community/el/5/$basearch/
enabled=1 ①
...
```

① Value should be 0 for other releases, 1 for the 5.6 server

Install MySQL Community Server using yum:

```
# yum install mysql-community-server
```

Start the service, wait for first-time initialization to complete:

```
# service mysqld start
Starting MySQL.                                            [  OK  ]
```

After a few minutes, check if the database service is still running and enabled at startup:

```
# service mysqld status
mysqld (pid  1757) is running...
```

```
# chkconfig mysqld on
# chkconfig --list mysqld
mysqld          0:off   1:off   2:on    3:on    4:on    5:on    6:off
```

Go through the secure installation, which removes example and public databases, and sets a new root password for the database:

```
# mysql_secure_installation
# reboot
```

NOTE The entered new root password will be used later for configuration and administrative purposes; do not forget this password.

Finally, check the log file `/var/log/mysqld.log` for any errors.

JDK

Download the “Linux X64” edition, and install it with yum:

```
# yum install jdk-7u79-linux-x64.rpm
```

LDAP

Download the 64-bit Linux RPM package, and install it with yum:

```
# yum install apacheds-2.0.0-M12-x86_64.rpm
```

Start the service, check if it is running at startup:

```
# service apacheds-2.0.0_M12-default start
Starting ApacheDS - default...

# service apacheds-2.0.0_M12-default status
ApacheDS - default is running (1947).

# chkconfig apacheds-2.0.0_M12-default on
# chkconfig --list apacheds-2.0.0_M12-default
apacheds-2.0.0_M12-default   0:off   1:off   2:on    3:on    4:on    5:on    6:off

# reboot
```

Check the log files in folder `/var/lib/apacheds-2.0.0_M12/default/log` for any errors. `wrapper.log` holds messages from the service wrapper running at startup and shutdown, while `apacheds.log` captures log output from the directory server itself.

Task tracking

As in the case of MySQL, only the steps required are included below, a more complete installation guide for Bugzilla can be found at https://www.bugzilla.org/docs/3.6/en/html/installing-bugzilla.html.

Install the Apache2 web server:

```
# yum install httpd

# service httpd start
Starting httpd:                                            [  OK  ]

# service httpd status
httpd (pid  1638) is running...

# chkconfig httpd on
# chkconfig --list httpd
httpd           0:off   1:off   2:on    3:on    4:on    5:on    6:off

# reboot
```

Add the following configuration section to `/etc/httpd/conf/httpd.conf`:

```
<Directory /var/www/html/bugzilla>
    AddHandler cgi-script .cgi
    Options +Indexes +ExecCGI
    DirectoryIndex index.cgi
    AllowOverride Limit
</Directory>
```

Reload the httpd service configuration to apply changes:

```
# service httpd reload
```

Extract the downloaded archive of Bugzilla and move contents into folder `/var/www/html`, adjust permissions and SELinux labels:

```
# tar xzvf bugzilla-3.6.13.tar.gz
# mv bugzilla-3.6.13 /var/www/html/bugzilla
# chown -Rv apache:apache /var/www/html/bugzilla
# restorecon -Rv /var/www/html/bugzilla
```

Check the availability of Perl modules required to get Bugzilla running:

```
# cd /var/www/html/bugzilla
# ./checksetup.pl --check-modules
```

Depending on the set of currently installed Perl modules, the check script will list a set of required modules, another set of optional modules and a database module to use for persisting Bugzilla issues. The preferred way of installing them is via yum, but the suggested `perl install-module.pl` commands can also be used for this. On a clean CentOS 6 system, the following set of packages need

to be added for a MySQL client, the required modules and modules XML-RPC and LDAP:

```
# yum install perl-DBD-MySQL
# yum install perl-Digest-SHA perl-DateTime perl-TimeDate perl-Template-Toolkit perl-
Email-Send perl-Email-MIME
perl-Email-MIME-Encodings perl-Email-MIME-Modifier perl-URI
# yum install perl-SOAP-Lite perl-LDAP
```

Finally, run `checksetup.pl` again, so Bugzilla can create its configuration file, `/var/www/html/bugzilla/localconfig`:

```
# ./checksetup.pl
```

Snow Owl Server

Unpack the distribution archive into `/opt`, installing `unzip` first if not already present; change permissions on the created folder:

```
# yum install unzip
# unzip snowowl-community-{version}-mysql.zip -d /opt
# chown -Rv snowowl:snowowl /opt/snowowl-community_{version}
```