**Install OpenIMS on Ubuntu 14.04**

The following steps are based on reference [1], mainly modified on the Java installation step. The installation is done on Ubuntu 14.04 running as a vmware virtual machine. All commands are assumed done by privileged user, hence no ‘sudo’ displayed.

1. **Download the OpenIMS core**

The OpenIMS will be installed in directory /opt/OpenIMS. To download the source code, we will use Subversion.

Create the base installation directory, including directories for CSCFs and FHoSS:

*mkdir /opt/OpenIMSCore/*

*mkdir /opt/OpenIMSCore/ser\_ims*

*mkdir /opt/OpenIMSCore/FHoSS*

*chown –R <username> /opt/OpenIMSCore/*

Install Subversion

*apt-get install subversion*

Download the latest version of the core source code by the link from reference [2]. For example, we use the link from section ‘Anonymous SVN Access via SVN’. Direct the downloaded file toward its respective directory.

*svn checkout svn://svn.code.sf.net/p/openimscore/code/ser\_ims/trunk ser\_ims*

*svn checkout svn://svn.code.sf.net/p/openimscore/code/FHoSS/trunk FHoSS*

1. **Install the required packages.**

*apt-get install mysql-server libmysqlclient15-dev libxml2 libxml2-dev bind9 ant flex bison*

During mysql installation, password for user root will be asked.

1. **Install Java SDK 6.**

Here, we will use the package maintained webupd8.org. The complete explanation can be seen in reference [3].

*add-apt-repository ppa:webupd8team/java*

*apt-get update*

*apt-get install oracle-java6-installer*

During the installation, some confirmation will be asked. Just follow the instruction.

After finished, add new environment variable ‘JAVA\_HOME’ which refers to Java installation directory.

*export JAVA\_HOME=/usr/lib/jvm/java-6-oracle*

1. **Configure the database using the sql file provided from the source code.**

*mysql -uroot -p < ser\_ims/cfg/icscf.sql*

*mysql -uroot -p < FHoSS/scripts/hss\_db.sql*

*mysql -uroot -p < FHoSS/scripts/userdata.sql*

1. **Compile** **the CSCFs.**

*cd /opt/OpenIMSCore/ser\_ims*

*make install-libs all*

1. **Compile the FHoSS**

*cd /opt/OpenIMSCore/FHoSS*

*ant compile deploy*

1. **Configure** **the DNS settings**

The idea behind this is that OpenIMS will run server application in localhost address. We will use an experimental domain name (open-ims.test) which runs in localhost only, referring to the server application. Hence, we need DNS server (in this case, Bind9) running in our Ubuntu machine. By default, Ubuntu uses automatic DHCP mode. Assuming this is true:

*Edit file ‘/etc/dhcp/dhclient.conf’ and uncomment the line ‘prepend domain\_name\_servers 127.0.0.1’. It will instruct Ubuntu to append ‘nameserver 127.0.0.1’ in resolv.conf. We cannot manually edit the file, since it will be updated automatically by Ubuntu.*

Copy the open-ims DNS zone file to the bind directory

*cp /opt/OpenIMSCore/ser\_ims/cfg/open-ims.dnszone /etc/bind/*

Add the following to /etc/bind/named.conf.local

*Zone “open-ims.test” { type master; file “/etc/bind/open-ims.dszone”; };*

Restart bind to take effect

*Service bind9 restart*

Test the domain translation by pinging ‘pcscf.open-ims.test’. it should point to localhost address. If it doesn’t (name is note resolved), then there is problem with DNS configuration in the system.

1. **Copy OpenIMS configuration files to the base installation directory**

*cp /opt/OpenIMSCore/ser\_ims/cfg/\* /opt/OpenIMSCore/*

1. **Run the application.**

We need to do it in 3 separate processes. You might open 2 additional terminals, or better, use screen[4].

*(window 1)*

*./pcscf.sh*

*(window 2)*

*./icscf.sh*

*(window 3)*

*./scscf.sh*

Run the FHoSS in another terminal

*cd /opt/OpenIMSCore/FHoSS/deploy/*

*./startup*

1. **Done**.

References:

[1] <http://geekforum.wordpress.com/2013/02/20/install-open-ims-on-ubuntu-system/>

[2] <http://www.openimscore.org/?q=download#svn>

[3] <http://ubuntuhandbook.org/index.php/2014/02/install-oracle-java-6-7-or-8-ubuntu-14-04/>

[4] <http://www.rackaid.com/blog/linux-screen-tutorial-and-how-to>