Controller 2.4.6 Linux installation cookbook

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Version: 0.2 alpha
Target audience: Anyone wishing to get SDN VAN controller running on Ubuntu-linux-14.04 as target platform for LAB environment.

**WARNING #1**: This guide is not to be used in the current form for production purposes for complete lack of security awareness or consideration used for this example installation.

**WARNING #2**: This is not in any way official support document of HP for HP SDN controller deployment, use this at your own risk. Official installation guide should be downloaded here: [http://h20564.www2.hp.com/portal/site/hpsc/public/kb/docDisplay/?docId=c04495134](http://h20564.www2.hp.com/portal/site/hpsc/public/kb/docDisplay/?docId=c04495134)

ASSUMPTION is that all the licensing steps you are already a paying customer of HP or that you have a developers license via HP SDN Dev Center (or alternatively you are HP internal employee)

**DOWNLOAD locations:**
Controller:

NetProtector app (optional):

**#STEP 1 Install base system**

// For this guide, a Ubuntu-64bit-desktop 14.04 LTS was used of x64 system. This guide should be compatible with other debian-like systems (e.g. Ubuntu-server, but not yet tested).

// I have used image “ubuntu-14.04.1-desktop-amd64.iso”

ROOT password: “toor”
Additional user: “labuser” with password “labuser”

**#STEP 2 Preparation**

a) Install Java packaging system to convert Oracle packages to debian packages
//install some basic components needed
apt-get update & apt-get upgrade
apt-get install joe screen aptitude curl ntp openssh-server

//also update java with:
apt-get install openjdk-7-jre-headless postgresql postgresql-client iptables unzip curl
//make sure Java 7 is default java version with
update-java-alternatives -l

#STEP 3 Install KeyStone server from Ubuntu cloud repository
# install Keystone by adding repository and do normal update and install of “keystone” package
apt-get install python-software-properties ubuntu-cloud-keyring
add-apt-repository "deb http://ubuntu-cloud.archive.canonical.com/ubuntu precise updates icehouse main"
apt-get update & & apt-get install keystone

# add this line to /etc/sysctl.conf
net.ipv4.ip_local_reserved_ports = 35357

# for immediate effect (avoid reboot) command for that:
sysctl -p

#STEP 4 Configure basic user for keystone using the HPN provided script:
// This script was provided by HPN to install initial user “sdn” with password “skyline”, if you want,
edit the script to change username/password. (note made intentionally small to not break end of lines in word). PS: This is script is from the official install guide, not my work ;)

// because we installed icehouse version of Keystone that by default uses PKI tokens,
// we must configure Keystone to use UUID for compatibility to SDN VAN controller
// Edit /etc/keystone/keystone.conf and add this line in the [token] section:
#STEP 5 First time controller installation

```bash
//install using package system
dpkg --unpack hp-sdn-ctl_2.4.x.yyyy_amd64.deb
apt-get install -f
```

### Verification

```bash
# dpkg -l hp-sdn-ctl
```

```
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</table>
```

```bash
# service sdnc status
```

sdnc start/running, process 7302

```bash
# service sdn status
```

sdnc start/running, process 7304

#STEP 7 Login to the WEB GUI

The WebGUI is using the following URL: [https://<controller IP>:8443/sdn/ui/](https://<controller IP>:8443/sdn/ui/)

Default credentials are: sdn/skyline

API: [https://<controller IP>:8443/api/](https://<controller IP>:8443/api/)

#STEP 8 licenses

Go to license acquisition portal

[https://hpn-app.houston.hp.com/LicenseAcquisition/Default.aspx](https://hpn-app.houston.hp.com/LicenseAcquisition/Default.aspx)

→ Generate registration ID and search for developer “dev-HP” license for **J9863AAE**

Then take the registration ID and go to My HP networking


Go to “My licenses” enter the registration ID

Also from the controller take the INSTALL ID via GUI:
Enter the INSTALL ID to the new registration ID to get a license CODE.

Then enter the license key to the controller via Licenses tab and “add” button. Example of such key:

Invalid key example: AEFD2KZADJACI-XXXXXXXXX-XXXXXXXXXXX-RCUEMXAJHNDQ
#step 9, install NetProtector:

Then follow the same process to license the NetProtector via license acquisition portal with JL004AAE

LOGIN:

https://<controller IP>:8443/networkprotector/ui/

install check : # service sentunneld status

IF SERVICE unavailable” HP Network Protector Service Unavailable“, check Cassandra database error:

/opt/sdn/cassandra/bin/caServer.sh status

And worst case restart

/opt/sdn/cassandra/bin/caServer.sh restart

Optional, if you want a license for Repundation database product ID is JL005AAE, but this is a commercial license.