Web & App Servers

Linux Package Installation

RedHat, CentOS, Ubuntu, Debian etc

RedHat / CentOS

- rpm (RedHat Package Manager)
- yum

Ubuntu / Debian

- apt
- apt-get

To download packages

Syntax:

#wget <package name>

Ex : #wget http://downloads/jdk8.....tar.gz

Installation of tools

To install Java

For RedHat:

```
#yum install java –y
#java –version
```

For Ubuntu :

```
#apt-get install openjdk-7-jdk –y
#apt-get install openjdk-6-jdk –y
```

To Manage Services:

For RedHat7 / CentOS 7:

```
#systemctl start tomcat
#systemctl enable tomcat
#system stop tomcat
```

For Ubuntu / Debian

```
#service tomcat7 start
#service tomcat7 stop
#service tomcat7 restart
#service –status-all      -- to show all running status
```

Web Server and App Server

Web Server:

- To deploy static web pages (.html files)
- Ex: apache, ngnix
- Default port : 80
- Default deployment path : /var/www/html

App Server:

- To deploy static & dynamic web pages & app (.war, .jar & .ear)
- Ex: tomcat, weblogic, Jboss, Websphere
- Default port for tomcat : 8080
- Default deployment path for tomcat :
  - for RedHat : /var/lib/tomcat/webapps
  - for Ubuntu : /var/lib/tomcat7/webapps

To Install Web-Server

For RedHat7:

#yum install httpd –y

#systemctl start httpd

#yum install net-tools –y

#netstat –lntp -- to list all ports

For Ubuntu:

#apt-get install apache2 –y

#service apache2 start

#service apache2 stop (to stop service)

#service –status-all -- to list all services which are running

#service <service name> status – to know about particular service ---- ex : #service apache2 status

[ctrl + c]

#mv index.html index.html.bkp - rename

To Deploy Web-pages of Web server:

#cd /var/www/html/

#vi index.html

<h1> Hello from web server</h1>

[press ‘Esc’]

:wq! – write and quit

Open browser -- > http://<public ip address>

To install App Server (tomcat)

For RedHat7 :

```
#yum install tomcat –y
#systemctl start tomcat
#systemctl enable tomcat
#netstat –lntp   -- to list all ports
#ps –ef     -- to list all process
#ps –ef | grep ‘java’
```

For Ubuntu:

```
#apt-get install tomcat7 –y
#service tomcat7 start
#service tomcat7 restart
#ps –ef | grep ‘tomcat’
```

To deploy static web page in tomcat server

- #cd /var/lib/tomcat7/webapps/ROOT

  #mv index.html index.html.bkp

  #vi index.html

  <h1 align="center">App server</h1>

  [press Esc]

  :wq!

Open browser : <public ip>:8080

To deploy dynamic web-pages in tomcat

#cd /var/lib/tomcat7/webapps

#wget http://<location of war file>

#service tomcat7 restart

Open Browser <public ip>:8080/<app name>

To open Tomcat manager page

Stop tomcat if running --- #service tomcat7 stop

install tomcat admin

- #apt-get install tomcat7-admin
- #cd /etc/tomcat7
- #vi tomcat-users.xml

  add <user username="admin" password="tomcat" roles="manager-gui"/>
- #service tomcat7 start

To change port (default port) number

Stop tomcat server - #service tomcat7 stop

#cd /var/lib/tomcat7/conf

#vi server.xml

Change port 8080 to what ever you want

[press Esc] :wq!

#service tomcat8 start

Distribution Method of installation

- Download Packages
- Extract Packages
- Set path

Step-1: download packages:

Google – download jdk 8, tomcat 9

```
#cd /opt
#wget http://jdk1.8.....tar.gz
#wget http://apachetomcat9....tar.gz
```

Step-2: Extract packages:

```
#tar –xzf jdk1.8.....tar.gz
#mv jdk1.8..... jdk8
#tar –xzf apachetomcat9...tar.gz
#mv apachetomcat9..... tomcat9
```

Step-3: To set Path

#vi ~/.profile

export JAVA_HOME="/opt/jdk8"

export PATH=$JAVA_HOME/bin:$PATH

export CATALINA_HOME="/opt/tomcat9"

export PATH=$CATALINA_HOME/bin:$PATH

:wq!

Step-4: to update path

#source ~/.profile

#java –version

#startup.sh -- to start tomcat

#shutdown.sh – to stop tomcat