**Software Installation**

*Note: This includes installing tomcat, the tomcat package will work but this step is included for completeness.*

1. Assure that software on the system is current and patched.
   1. sudo yum update
2. Install
   1. sudo yum install apr
   2. sudo yum install apr-util
   3. sudo yum install apr-devel
   4. sudo yum install apr-util-devel
   5. sudo yum install gcc
   6. sudo yum install ant
   7. sudo yum install git
   8. sudo yum install openssl-devel
3. Create a location for the source code and go into directory
   1. mkdir Software
   2. cd Software
4. Download source code
   1. wget <http://mirror.olnevhost.net/pub/apache//httpd/httpd-2.2.27.tar.gz>
   2. wget <http://mirror.olnevhost.net/pub/apache/tomcat/tomcat-7/v7.0.54/bin/apache-tomcat-7.0.54.tar.gz>
5. Prepare the code
   1. tar –xzvf httpd-2.2.27.tar.gz
   2. tar –xzvf apache-tomcat-7.0.54.tar.gz
6. Prepare installation
   1. sudo mkdir /apps
   2. Tomcat
      1. sudo mv apache-tomcat-7.0.54 /apps
      2. cd /apps
      3. ln –s apache-tomcat-7.0.54 tomcat
      4. Now you can run TOMCAT alone to test
         1. cd /apps/tomcat/bin/
         2. ./startup.sh
         3. ./shutdown.sh
   3. Apache
      1. cd /home/ec2-user/Software/httpd-2.2.27
      2. configuration

./configure --prefix=/apps/apache-2.2.27 \

--enable-cgi \

--enable-rewrite=shared \

--enable-so \

--enable-ssl \

--with-ssl \

--enable-setenv \

--enable-proxy \

--enable-proxy-html \

--enable-proxy-balancer \

--enable-cache \

--enable-headers \

--enable-speling=shared \

--enable-unique-id

* + 1. make
    2. sudo make install
    3. sudo ln -s apache-2.2.27 apache
    4. cd /apps/apache
    5. sudo useradd webuser
    6. cd /apps/apache/conf
    7. sudo vi http.conf
       1. change user and group to webuser (lines 68 and 69)
    8. now you can run APACHE alone to test
       1. cd /apps/apache/bin
       2. sudo ./apachectl start
       3. sudo ./apachectl stop

1. Existdb
   1. For the build to work correctly you need the sun java
      1. Type java –version if you see openjdk you need to get the sun java
      2. Obtaining Sun java
         1. Download <http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html> the most recent (in this case 8)
         2. Sftp the file to /home/ec2-user/Software
         3. Install rpm
            1. rpm -iv jdk-8u5-linux-x64.rpm
         4. set it up as an alternative
            1. /usr/bin/alternatives --install /usr/bin/java java /usr/java/jdk1.8.0\_05/bin/java 20000

Note: name (jdk1.8) will be different depending on the version needed.

* + - * 1. Alternatives –config java

Select the option just added

* 1. cd /apps
  2. git clone https://github.com/exist-db/exist exist
  3. cd exist
  4. sudo ./build.sh
     1. existdb can now be run from this directory on port 8080
        1. ./bin/startup.sh
        2. CTRL C to stop
  5. sudo ./build.sh dist-war
  6. cd dist
  7. sudo cp exist-2.1-rev.war /apps/tomcat/webapps/exist.war cp exist-2.1-rev.war /apps/tomcat/webapps/exist.war

1. Now all of the pieces work, put them together
   1. First be sure exist, tomcat, and apache is not running
      1. netstat –na |grep 80
   2. cd /apps/apache/conf
   3. sudo vi httpd.conf

##Tomcat Proxy

ProxyRequests off

ProxyPreserveHost on

ProxyPass /exist/ http://localhost:8080/exist/

ProxyPassReverse /exist/ http://localhost:8080/exist/

ProxyPass /db/ http://localhost:8080/db/

ProxyPassReverse /db/ <http://localhost:8080/db/>

1. Start the system
   1. cd /apps/apache/bin
   2. sudo ./apachectl start
   3. cd /apps/tomcat/bin
   4. ./startup.sh
      1. Tomcat startup can be monitored from /apps/tomcat/logs/catalina.out
         1. tail -f /apps/tomcat/logs/catalina.out