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- **hosts**: ansibleslaves

**tasks**:

- **name**: Installs Java

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=default-jdk state=installed update\_cache=true

- **name**: Installs libaprutil1-dev Apache Dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=libaprutil1-dev state=installed update\_cache=true

- **name**: Installs libapr1-dev Apache Dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=libapr1-dev state=installed update\_cache=true

- **name**: Installs gcc Apache dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

apt: pkg=gcc state=installed update\_cache=true apt: pkg=gcc state=installed update\_cache=true

- **name**: Installs g++ Apache dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=g++ state=installed update\_cache=true

- **name**: Installs libpcre3 Apache Dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=libpcre3 state=installed update\_cache=true

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- **hosts**: ansibleslaves

**tasks**:

- **name**: Installs Java

**remote\_user**: ubuntu

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**apt**: pkg=default-jdk state=installed update\_cache=true

- **name**: Installs libaprutil1-dev Apache Dependency

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**apt**: pkg=libaprutil1-dev state=installed update\_cache=true

- **name**: Installs libapr1-dev Apache Dependency

**remote\_user**: ubuntu

**become**: true

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**apt**: pkg=libapr1-dev state=installed update\_cache=true

- **name**: Installs gcc Apache dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=gcc state=installed update\_cache=true

- **name**: Installs g++ Apache dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=g++ state=installed update\_cache=true

- **name**: Installs libpcre3 Apache Dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=libpcre3 state=installed update\_cache=true

- **name**: Installs libpcre3-dev Apache Dependency

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=libpcre3-dev state=installed update\_cache=true

- **name**: Installs make

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**apt**: pkg=make state=installed update\_cache=true

- **name**: installs First tomcat instance

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**shell**: |

groupadd tomcat

useradd -s /bin/false -g tomcat -d /opt/tomcat tomcat

wget http://www-eu.apache.org/dist/tomcat/tomcat-8/v8.5.23/bin/apache-tomcat-8.5.23.tar.gz

tar -xzvf apache-tomcat-8.5.23.tar.gz

mv apache-tomcat-8.5.23 tomcat

mv tomcat /opt

chgrp -R tomcat /opt/tomcat

chown -R tomcat /opt/tomcat

chmod -R 755 /opt/tomcat

touch /etc/systemd/system/tomcat.service

echo "[Unit]" >> /etc/systemd/system/tomcat.service

echo "Description=Apache Tomcat Web Server" >> /etc/systemd/system/tomcat.service

echo "After=network.target" >> /etc/systemd/system/tomcat.service

echo " " >> /etc/systemd/system/tomcat.service

echo "[Service]" >> /etc/systemd/system/tomcat.service

echo "Type=forking" >> /etc/systemd/system/tomcat.service

echo " " >> /etc/systemd/system/tomcat.servic

echo "Environment=JAVA\_HOME=/usr/lib/jvm/java-8-openjdk-amd64/jre" >> /etc/systemd/system/tomcat.service

echo "Environment=CATALINA\_PID=/opt/tomcat/temp/tomcat.pid" >> /etc/systemd/system/tomcat.service

echo "Environment=CATALINA\_HOME=/opt/tomcat" >> /etc/systemd/system/tomcat.service

echo "Environment=CATALINA\_BASE=/opt/tomcat" >> /etc/systemd/system/tomcat.service

echo "Environment='CATALINA\_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC'" >> /etc/systemd/system/tomcat.service

echo "Environment='JAVA\_OPTS=-Djava.awt.headless=true" >> /etc/systemd/system/tomcat.service

echo "-Djava.security.egd=file:/dev/./urandom'" >> /etc/systemd/system/tomcat.service

echo " " >> /etc/systemd/system/tomcat.service

echo "ExecStart=/opt/tomcat/bin/startup.sh" >> /etc/systemd/system/tomcat.service

echo "ExecStop=/opt/tomcat/bin/shutdown.sh" >> /etc/systemd/system/tomcat.service

echo "User=tomcat" >> /etc/systemd/system/tomcat.service

echo "Group=tomcat" >> /etc/systemd/system/tomcat.service

echo "UMask=0007" >> /etc/systemd/system/tomcat.service

echo "RestartSec=15" >> /etc/systemd/system/tomcat.service

echo "Restart=always" >> /etc/systemd/system/tomcat.service

echo " " >> /etc/systemd/system/tomcat.service

echo "[Install]" >> /etc/systemd/system/tomcat.service

echo "WantedBy=multi-user.target" >> /etc/systemd/system/tomcat.service

sed -i '$i'"$(echo './/opt/tomcat/bin/startup.sh')" /etc/rc.local

systemctl daemon-reload

systemctl start tomcat

systemctl status tomcat

systemctl enable tomcat

ufw allow 8080

cp -r /dspace/webapps/\* /opt/tomcat/webapps

- **name**: installs Apache httpd

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**shell**: |

wget http://www.gtlib.gatech.edu/pub/apache//httpd/httpd-2.4.29.tar.gz

tar -xzvf httpd-2.4.29.tar.gz

cd httpd-2.4.29

./configure --prefix=/usr/local/apache --enable-rewrite=shared --enable-proxy=shared

make

make install

/usr/local/apache/bin/apachectl

- **name**: installs Mod\_Jk connector and Second tomcat Instance

**remote\_user**: ubuntu

**become**: true

**become\_user**: root

**shell**: |

wget http://mirrors.ibiblio.org/apache/tomcat/tomcat-connectors/jk/tomcat-connectors-1.2.42-src.tar.gz

tar -xzvf tomcat-connectors-1.2.42-src.tar.gz

cd tomcat-connectors-1.2.42-src

cd native

./configure --with-apxs=/usr/local/apache/bin/apxs

make

make install

touch /usr/local/apache/conf/workers.properties

echo "worker.tomcat.type=ajp13" >> /usr/local/apache/conf/workers.properties

echo "worker.tomcat.host=localhost" >> /usr/local/apache/conf/workers.properties

echo "worker.tomcat.port=8009" >> /usr/local/apache/conf/workers.properties

echo "worker.tomcat1.type=ajp13" >> /usr/local/apache/conf/workers.properties

echo "worker.tomcat1.host=localhost" >> /usr/local/apache/conf/workers.properties

echo "worker.tomcat1.port=8109" >> /usr/local/apache/conf/workers.properties

cd /opt

mkdir tomcat1

cp -a /opt/tomcat/conf tomcat1

cp -a /opt/tomcat/logs tomcat1

cp -a /opt/tomcat/webapps tomcat1

cp -a /opt/tomcat/work tomcat1

cp -a /opt/tomcat/temp tomcat1

rm /opt/tomcat1/temp/tomcat.pid

cd /opt/tomcat1/conf

sed -i 's/Server port="8005"/Server port="8105"/g' server.xml

sed -i 's/Connector port="8080"/Connector port="8181"/g' server.xml

sed -i 's/Connector port="8009"/Connector port="8109"/g' server.xml

cd /opt

touch startup1.sh

touch shutdown1.sh

echo "#!/bin/bash" >> startup1.sh

echo "export CATALINA\_BASE=/opt/tomcat1" >> startup1.sh

echo "cd /opt/tomcat/bin" >> startup1.sh

echo "./startup.sh" >> startup1.sh

echo "#!/bin/bash" >> shutdown1.sh

echo "export CATALINA\_BASE=/opt/tomcat1" >> shutdown1.sh

echo "cd /opt/tomcat/bin" >> shutdown1.sh

echo "./shutdown.sh" >> shutdown1.sh

chmod 777 startup1.sh

chmod 777 shutdown1.sh

chown -R tomcat /opt/tomcat1

chmod -R 755 /opt/tomcat1

touch /etc/systemd/system/tomcat1.service

echo "[Unit]" >> /etc/systemd/system/tomcat1.service

echo "Description=Apache Tomcat Web Server" >> /etc/systemd/system/tomcat1.service

echo "After=network.target" >> /etc/systemd/system/tomcat1.service

echo " " >> /etc/systemd/system/tomcat1.service

echo "[Service]" >> /etc/systemd/system/tomcat1.service

echo "Type=forking" >> /etc/systemd/system/tomcat1.service

echo " " >> /etc/systemd/system/tomcat1.service

echo "Environment=JAVA\_HOME=/usr/lib/jvm/java-8-openjdk-amd64/jre" >> /etc/systemd/system/tomcat1.service

echo "Environment=CATALINA\_PID=/opt/tomcat1/temp/tomcat.pid" >> /etc/systemd/system/tomcat1.service

echo "Environment=CATALINA\_HOME=/opt/tomcat" >> /etc/systemd/system/tomcat1.service

echo "Environment=CATALINA\_BASE=/opt/tomcat1" >> /etc/systemd/system/tomcat1.service

echo "Environment='CATALINA\_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC'" >> /etc/systemd/system/tomcat1.service

echo "Environment='JAVA\_OPTS=-Djava.awt.headless=true" >> /etc/systemd/system/tomcat1.service

echo "-Djava.security.egd=file:/dev/./urandom'" >> /etc/systemd/system/tomcat1.service

echo " " >> /etc/systemd/system/tomcat1.service

echo "ExecStart=/opt/startup1.sh" >> /etc/systemd/system/tomcat1.service

echo "ExecStop=/opt/shutdown1.sh" >> /etc/systemd/system/tomcat1.service

echo "User=tomcat" >> /etc/systemd/system/tomcat1.service

echo "Group=tomcat" >> /etc/systemd/system/tomcat1.service

echo "UMask=0007" >> /etc/systemd/system/tomcat1.service

echo "RestartSec=15" >> /etc/systemd/system/tomcat1.service

echo "Restart=always" >> /etc/systemd/system/tomcat1.service

echo " " >> /etc/systemd/system/tomcat1.service

echo "[Install]" >> /etc/systemd/system/tomcat1.service

echo "WantedBy=multi-user.target" >> /etc/systemd/system/tomcat1.service

sed -i '$i'"$(echo './/opt/startup1.sh')" /etc/rc.local

systemctl daemon-reload

systemctl start tomcat1

systemctl enable tomcat1

ufw allow 8181

echo "LoadModule jk\_module modules/mod\_jk.so" >> /usr/local/apache/conf/httpd.conf

echo "JkWorkersFile conf/workers.properties" >> /usr/local/apache/conf/httpd.conf

echo "JkLogFile logs/mod\_jk.log" >> /usr/local/apache/conf/httpd.conf

echo "JkLogLevel emerg" >> /usr/local/apache/conf/httpd.conf

echo "JkLogStampFormat '[%a %b %d %H:%M:%S %Y]'" >> /usr/local/apache/conf/httpd.conf

echo "JkOptions +ForwardKeySize +ForwardURICompat -ForwardDirectories" >> /usr/local/apache/conf/httpd.conf

echo "JkRequestLogFormat '%w %V %T'" >> /usr/local/apache/conf/httpd.conf

echo "JkMount /department1 tomcat" >> /usr/local/apache/conf/httpd.conf

echo "JkMount /department2 tomcat2" >> /usr/local/apache/conf/httpd.conf