

Infrastructure - Task #4467

Story # 4466 (Closed): Base VM operating systems and software need to be upgraded

Deploy and Test Metacat on Ubuntu 12.04 with Java 7, Tomcat 7, PostgreSQL 9

2014-03-17 15:39 - Chris Jones

Status:	Closed	Start date:	2014-03-17
Priority:	Normal	Due date:	
Assignee:	Jing Tao	% Done:	100%
Category:	Metacat	Estimated time:	0.00 hour
Target version:	2014.26-Block.4.1	Story Points:	
Milestone:	CCI-1.2		
Product Version:	1.2.7		
Description			
We need to understand what issues we'll face with regard to Metacat installation and performance when we move to Ubuntu 12.04 with Java 7, Tomcat 7, and PostgreSQL 9. Any configuration changes that are needed in Metacat will need to also be added into the cn-buildout postinst scripts, and should be added as sub tasks to this story.			
Related issues:			
Related to Infrastructure - Task #4470: Test CN installation on Ubuntu 12.04 ...		Closed	2014-03-17
Related to Infrastructure - Task #4472: Test Hazelcast installation on Ubuntu...		Closed	2014-03-17

History

#1 - 2014-03-17 15:40 - Chris Jones

- Target version deleted (2014.12-Block.2.2)

#2 - 2014-03-21 03:07 - Chris Jones

- Description updated

- Subject changed from Deploy and Test Metacat on Ubuntu 14.04 with Java 7, Tomcat 7, PostgreSQL 9 to Deploy and Test Metacat on Ubuntu 12.04 with Java 7, Tomcat 7, PostgreSQL 9

#3 - 2014-04-02 17:37 - Jing Tao

1. In order to make java 1.7 client to connect the Metacat through https on Ubuntu 12.04 work, we need this line to the default-ssl on the apache configuration:

```
ServerName servername.mydomain.com
```

Otherwise, the client should set the system property to false:

```
System.setProperty("jsse.enableSNIExtension", "false");
```

```
java -Djsse.enableSNIExtension=false yourClass
```

2. In order to make morpho to connect Metacat work, we need add this attribute on the element of "context" in the context.xml file under tomcat7/conf directory:

```
useHttpOnly='false'
```

#4 - 2014-04-10 17:08 - Jing Tao

Upgrade Ubuntu from 10.04 to 12.04

1. Prepare

```
sudo apt-get update
sudo apt-get upgrade
sudo apt-get install update-manager-core
sudo vim /etc/update-manager/release-upgrades
(Verify that the line presents in the file: Prompt=Its)
```

2. Do upgrade

```
sudo do-release-upgrade
notes:
Choose Y for newer version packages.
GRUB should be installed in /dev/vda (use the space key to select it).
```

3. Install openjdk 7 and configure it

a. sudo apt-get install openjdk-7-jdk

b. choose openjdk-7 as default java, javac and javaws:

```
sudo update-alternatives --config java
sudo update-alternatives --config javac
sudo update-alternatives --config Javaws
sudo update-alternatives --config keytool
```

1. Install tomcat 7 :

```
sudo apt-get install tomcat7
```

2. Migrate the database data from Postgresql 8.4 to 9.1 (after the upgrade, the system has both 8.4 and 9.1 running):

a. stop both 8.4 and 9.1 server:

```
sudo /etc/init.d/postgresql stop
```

b. make some links as the root:

```
ln -s /etc/postgresql/9.1/main/postgresql.conf /var/lib/postgresql/9.1/main/
ln -s /etc/postgresql/8.4/main/postgresql.conf /var/lib/postgresql/8.4/main/
```

c. run the upgrade script with the `--check` option as user postgresql:

```
/usr/lib/postgresql/9.1/bin/pg_upgrade --check -b /usr/lib/postgresql/8.4/bin -B /usr/lib/postgresql/9.1/bin -d /var/lib/postgresql/8.4/main -D /var/lib/postgresql/9.1/main
```

d. do a real upgrade as user postgresql:

```
/usr/lib/postgresql/9.1/bin/pg_upgrade -b /usr/lib/postgresql/8.4/bin -B /usr/lib/postgresql/9.1/bin -d /var/lib/postgresql/8.4/main -D /var/lib/postgresql/9.1/main
```

e. remove 8.4:

```
sudo apt-get remove postgresql-8.4
```

f. edit the file `/etc/postgresql/9.1/main/postgresql.conf` as the user postgres:

change the port to 5432

g. start postgresql 9.1:

```
sudo /etc/init.d/postgresql start
```

h. vacuum db as the user postgres

```
/usr/lib/postgresql/9.1/bin/$ ./vacuumdb --all
```

3. Modify the configuration of Apache:

a. modify `/etc/apache2/site-enabled/knb-ssl`:

```
ServerName mn-demo-11.test.dataone.org (if this line doesn't exist, please add it)
DocumentRoot /var/lib/tomcat7/webapps/knb
ScriptAlias /knb/cgi-bin/ /var/lib/tomcat7/webapps/knb/cgi-bin/
```

b. modify `apache /etc/apache2/workers.properties`:

```
workers.tomcat_home=/var/lib/tomcat7
workers.java_home=/usr/lib/jvm/java-1.7.0-openjdk-amd64
```

c. restart apache

```
sudo /etc/init.d/apache2 restart
```

4. Modify the configuration of Tomcat and Metacat:

- a. stop tomcat
sudo /etc/init.d/tomcat stop
- b. Modify the file /var/lib/tomcat7/conf/context.xml:
add a new attribute useHttpOnly='false' for the "context" element
- c. change the ownership of /var/metacat to tomcat7:tomcat7 recursively
sudo chown -R tomcat7:tomcat7 /var/metacat
- d. start tomcat:
sudo /etc/init.d/tomcat start

5. Install the metacat on tomcat 7.

#5 - 2014-06-30 22:08 - Robert Waltz

- Target version set to 2014.26-Block.4.1

#6 - 2014-06-30 22:09 - Robert Waltz

- Product Version changed from * to 1.2.7

- Milestone changed from None to CCI-1.2

- Status changed from New to In Progress

#7 - 2014-06-30 22:09 - Robert Waltz

- Status changed from In Progress to Testing

#8 - 2014-07-18 03:23 - Robert Waltz

- Status changed from Testing to Closed

- translation missing: en.field_remaining_hours set to 0.0