

## Network setup

As the root make sure you can ssh to the remote server and that server is FQDN entry in the /etc/hosts of the Ambari server

```
[root@AmbariServer]## ssh RemoteServer
Last login: Sun Nov 29 22:30:54 2014 from AmbariServer
[root@ RemoteServer ~]# exit
logout
Connection to RemoteServer closed.
```

## Set up MySQL for Ambari on the remote server

Create a user for Ambari and grant it permissions. Here I assume you have the root password for the remote MySQL DB

Make sure the MySQL database admin utility exits without error like below

```
[root@RemoteServer]# mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 6
Server version: 5.1.73 Source distribution
Copyright (c) 2000, 2013, Oracle and/or its affiliates. All rights reserved.
Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may
be trademarks of their respective owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> select user();
+-----+
| user()          |
+-----+
| root@localhost |
+-----+
1 row in set (0.01 sec)
mysql> CREATE USER 'ambari'@'%' IDENTIFIED BY 'yourMySQLpwd';
Query OK, 0 rows affected (0.00 sec)
mysql> GRANT ALL PRIVILEGES ON *.* TO 'ambari'@'%';
Query OK, 0 rows affected (0.00 sec)
mysql> CREATE USER 'ambari'@'localhost' IDENTIFIED BY 'yourMySQLpwd';
Query OK, 0 rows affected (0.00 sec)
mysql> GRANT ALL PRIVILEGES ON *.* TO 'ambari'@'localhost';
Query OK, 0 rows affected (0.00 sec)
mysql> CREATE USER 'ambari'@'RemoteServer' IDENTIFIED BY 'yourMySQLpwd';
Query OK, 0 rows affected (0.00 sec)
mysql> GRANT ALL PRIVILEGES ON *.* TO 'ambari'@'RemoteServer';
Query OK, 0 rows affected (0.00 sec)
mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)
```

In the above example the ambari is the Ambari user name, yourMySQLpwd is the Ambari user password and Remote Server is the Fully Qualified Domain Name of the Ambari Server host.

## Install the Ambari Server 2.1.0-1470 on the local server

```
[root@AmbariServer]# yum install ambari-server
Loaded plugins: aliases, changelog, downloadonly, fastestmirror, presto, security, tmprepo,
verify, versionlock
Setting up Install Process
Loading mirror speeds from cached hostfile
* base: mirror.switch.ch
* centosplus: mirror.switch.ch
* contrib: mirror.switch.ch
* epel: mirror.fraunhofer.de
* extras: mirror.switch.ch
* updates: mirror.switch.ch
.....
Dependencies Resolved
=====
Package Arch Version
Repository Size
=====
Installing:
ambari-server x86_64 2.1.0-1470
Updates-ambari-2.1.0 326 M
Installing for dependencies:
postgresql x86_64 8.4.20-4.el6_7
updates
postgresql-server x86_64 8.4.20-4.el6_7
updates
Updating for dependencies:
postgresql-libs x86_64 8.4.20-4.el6_7
updates
Transaction Summary
=====
Install 3 Package(s)
Upgrade 1 Package(s)
Total download size: 333 M
Is this ok [y/N]: y
Downloading Packages:
Setting up and reading Presto delta metadata
updates/prestodelta
Processing delta metadata
Download delta size: 31 k
postgresql-libs-8.4.20-1.el6_5_8.4.20-4.el6_7.x86_64.drpm
Finishing rebuild of rpms, from deltarpm
<delta rebuild>
Presto reduced the update size by 85% (from 202 k to 31 k).
Package(s) data still to download: 333 M
```

```

(1/3): ambari-server-2.1.0-1470.x86_64.rpm          (15%) 16% [=====]
(1/3): ambari-server-2.1.0-1470.x86_64.rpm          (16%) 16% [=====]
(1/3): ambari-server-2.1.0-1470.x86_64.rpm          (16%) 16% [=====]
(1/3): ambari-server-2.1.0-1470.x86_64.rpm          | 326 MB   01:13
(2/3): postgresql-8.4.20-4.el6_7.x86_64.rpm        | 2.6 MB   00:00
(3/3): postgresql-server-8.4.20-4.el6_7.x86_64.rpm  | 3.4 MB   00:00
-----
Total                                               4.4 MB/s | 333 MB
01:15
warning: rpmts_HdrFromFdno: Header V4 RSA/SHA1 Signature, key ID 07513cad: NOKEY
Retrieving key from http://public-repo-1.hortonworks.com/ambari/centos6/RPM-GPG-
KEY/RPM-GPG-KEY-Jenkins
Importing GPG key 0x07513CAD:
  Userid: "Jenkins (HDP Builds) <jenkin@hortonworks.com>"
  From   : http://public-repo-1.hortonworks.com/ambari/centos6/RPM-GPG-KEY/RPM-GPG-
KEY-Jenkins
Is this ok [y/N]: y
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Updating   : postgresql-libs-8.4.20-4.el6_7.x86_64
1/5 Installing : postgresql-8.4.20-4.el6_7.x86_64
...
****
5/5 Verifying : postgresql-libs-8.4.20-1.el6_5.x86_64
Installed:
ambari-server.x86_64 0:2.1.0-1470
Dependency Installed:
postgresql.x86_64 0:8.4.20-4.el6_7
postgresql-server.x86_64 0:8.4.20-4.el6_7
Dependency Updated:
postgresql-libs.x86_64 0:8.4.20-4.el6_7

```

## Install MySQL connector on the Ambari server

The Ambari Server host needs the MySQL driver installed to be able to communicate with the database, so I installed the CentOS MySQL connector

```

[root@AmbariServer]# yum install mysql-connector-java
Loaded plugins: fastestmirror, security
Setting up Install Process
Loading mirror speeds from cached hostfile
 * base: mirror.switch.ch
 * epel: mirror.de.leaseweb.net
 * extras: mirror.switch.ch
 * updates: mirror.switch.ch
Resolving Dependencies
--> Running transaction check
---> Package mysql-connector-java.noarch 1:5.1.17-6.el6 will be installed
--> Finished Dependency Resolution
Dependencies Resolved

```

```
=====  
Package           Arch           Version  
Repository        Size  
=====  
Installing: mysql-connector-java  noarch        1:5.1.17-6.el6  
base             1.4 M  
Transaction Summary  
=====  
Install      1 Package(s)  
Total download size: 1.4 M  
Installed size: 2.8 M  
Is this ok [y/N]: y  
Downloading Packages:  
mysql-connector-java-5.1.17-6.el6.noarch.rpm  
| 1.4 MB   00:00  
Running rpm_check_debug  
Running Transaction Test  
Transaction Test Succeeded  
Running Transaction  
Warning: RPMDDB altered outside of yum.  
Installing: 1:mysql-connector-java-5.1.17-6.el6.noarch           1/1  
Verifying   : 1:mysql-connector-java-5.1.17-6.el6.noarch           1/1  
Installed:  
mysql-connector-java.noarch 1:5.1.17-6.el6  
Complete!
```

### Confirm the connector

Confirm that .jar is in the Java share directory. Make sure the .jar file has the appropriate permissions - 644.

```
[root@AmbariServer ~]# ls -al /usr/share/java/mysql-connector-java.jar  
mysql-connector-java-5.1.17.jar  
mysql-connector-java.jar -> mysql-connector-java-5.1.17.jar
```

I would advise you to copy create the same directory structure on RemoteServer And copy the mysql-connector-java.jar into it

```
[root@ RemoteServer ~]# mkdir -p /usr/share/java/
```

### Set up the Ambari server

When setting up the Ambari Server, the setup will initially check for SELinux and JDK versions be sure to select the correct options, then chose the **Advanced Database Configuration** I selected **Option [3] MySQL** as I didn't want to use the default postgres DB and enter the credentials you defined in on the remote server MySQL Server earlier by giving the DB credentials user name, password and database name.

```
[root@yourAmbariServer]# ambari-server setup
```

```
Using python /usr/bin/python2.6
Setup ambari-server
Checking SELinux...
SELinux status is 'disabled'
Customize user account for ambari-server daemon [y/n] (n)? y
Enter user account for ambari-server daemon (root):hdp
Adjusting ambari-server permissions and ownership...
Checking firewall status...
Checking JDK...
[1] Oracle JDK 1.8 + Java Cryptography Extension (JCE) Policy Files 8
[2] Oracle JDK 1.7 + Java Cryptography Extension (JCE) Policy Files 7
[3] Custom JDK
=====
Enter choice (3):
To download the Oracle JDK and the Java Cryptography Extension (JCE) Policy Files you
must accept the license terms found at
http://www.oracle.com/technetwork/java/javase/terms/license/index.html and not accepting
will cancel the Ambari Server setup and you must install the JDK and JCE files manually.
Do you accept the Oracle Binary Code License Agreement [y/n] (y)? y
Downloading JDK from http://public-repo-1.hortonworks.com/ARTIFACTS/jdk-8u40-linux-
x64.tar.gz to /var/lib/ambari-server/resources/jdk-8u40-linux-x64.tar.gz
jdk-8u40-linux-x64.tar.gz... 100% (165.2 MB of 165.2 MB)
Successfully downloaded JDK distribution to /var/lib/ambari-server/resources/jdk-8u40-linux-
x64.tar.gz
Installing JDK to /usr/jdk64/
Successfully installed JDK to /usr/jdk64/
Downloading JCE Policy archive from http://public-repo-
1.hortonworks.com/ARTIFACTS/jce_policy-8.zip to /var/lib/ambari-
server/resources/jce_policy-8.zip
Successfully downloaded JCE Policy archive to /var/lib/ambari-server/resources/jce_policy-
8.zip
Installing JCE policy...
Completing setup...
Configuring database...
Enter advanced database configuration [y/n] (n)? y
Configuring database...
=====
Choose one of the following options:
[1] - PostgreSQL (Embedded)
[2] - Oracle
[3] - MySQL
[4] - PostgreSQL
[5] - Microsoft SQL Server (Tech Preview)
=====
Enter choice (1): 3
Hostname : HostNameOfMySQLserver
Port (3306):
Database name (ambari): ambari
Username (ambari): ambari
Enter Database Password (bigdata): yourMySQLpwd
Re-enter password:
Configuring ambari database...
```

```
Copying JDBC drivers to server resources...
Configuring remote database connection properties...
WARNING: Before starting Ambari Server, you must run the following DDL against the
database to create the schema: /var/lib/ambari-server/resources/Ambari-DDL-MySQL-
CREATE.sql
Proceed with configuring remote database connection properties [y/n] (y)? y
Extracting system views...
...ambari-admin-2.1.0.1470.jar
...
Adjusting ambari-server permissions and ownership...
Ambari Server 'setup' completed successfully.
```

## Start the Ambari Server

After the above setup is successful then you can now start the Ambari server

```
[root@yourAmbariServer]# ambari-server start
Using python /usr/bin/python2.6
Starting ambari-server
Ambari Server running with administrator privileges.
Organizing resource files at /var/lib/ambari-server/resources...
Server PID at: /var/run/ambari-server/ambari-server.pid
Server out at: /var/log/ambari-server/ambari-server.out
Server log at: /var/log/ambari-server/ambari-server.log
Waiting for server start.....
Ambari Server 'start' completed successfully.
```

Access the Ambari from your Server

