MetricStream

JBoss EAP 6.3 Application Server (Windows)

Installation and Configuration Guide

Version 1.0

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Documentation Conventions

The following table provides a list of the documentation conventions used in this guide and a short description of each convention.

Conventions	Description
Note	Key pointers, in the form of notes, to help you use this application effectively and efficiently are provided throughout this guide. You can recognize a note when you come across a new paragraph in italics with the word 'Note' at the beginning of the paragraph. Example: ☞ *Note: Do not provide the Client Administrator responsibility to regular users.*
Boldface	All software references appear in boldface. **For example, In the Name field…** **All acronyms appear in boldface**.
	References to other MetricStream documents to get more information on the topic. Example: *For more information on creating roles, refer to the <<GUIDE>>.*
	References to different topics within this guide. Example: *For more information, refer to the <<section>>.*
	The cautions or recommendations to be followed in performing the tasks.

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Did you understand the context of the procedures?

Did you find any errors in the information?

Does the structure of the information help you to complete your tasks?

Do you need different information or graphics? If so, where, and in what format?

Are the examples correct? Do you need more examples?

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Chapter 1. Downloading the JBoss Application Server

This chapter provides information on downloading the JBoss installer.

Downloading the Installer for JBoss 6.3 EAP Server

- Download the latest version of the installer software to the destination directory.
    - Contact MetricStream for downloading the installer.

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Chapter 2. Installing JBoss Application Server

This chapter provides information on installing JBoss EAP 6.3 server.

Installing JBoss EAP 6.3 Server

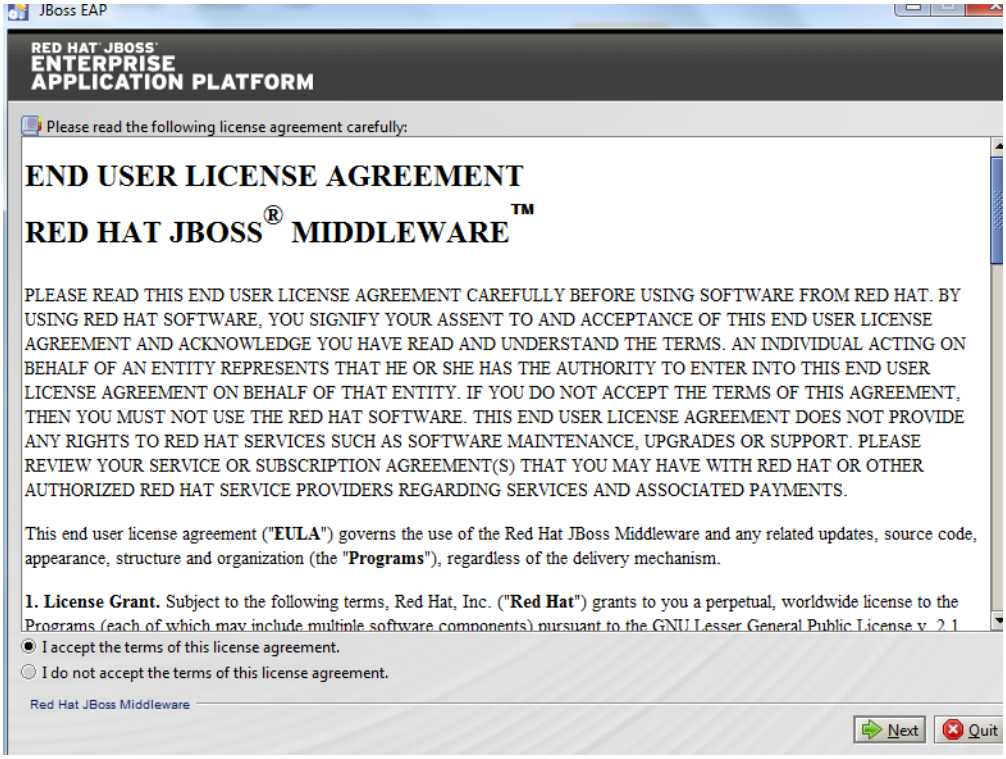
To install the JBoss 5.1.x EAP server:

1. Execute the following command in the directory that contains the downloaded installer JAR:

```
java -jar jboss-eap-6.3.0-installer.jar
```

2. In the window,
    a. Select the language for the installation instructions.
    b. To continue with the installation, click the **OK** button.

3. If you agree to the terms of the license agreement,
    a. Select the "*I accept the terms of this license agreement*" option.
    b. To continue with the installation, click the **Next** button.



☞ *Read the License Agreement carefully.*

4. In the window,

    a. Select the destination directory for JBoss server.

    b. Type in a complete path or browse for a destination directory.

    c. To continue with the installation, click the **Next** button.

☞ *In Windows-based installations, the default installation path is D:\Jboss.*

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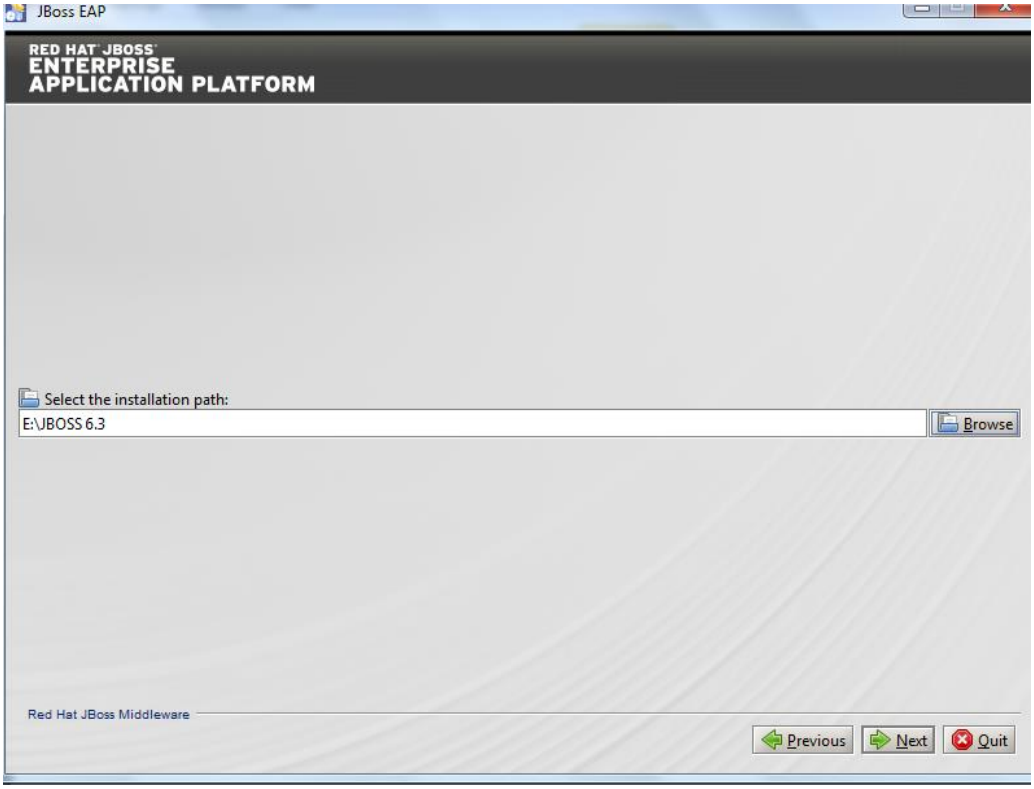
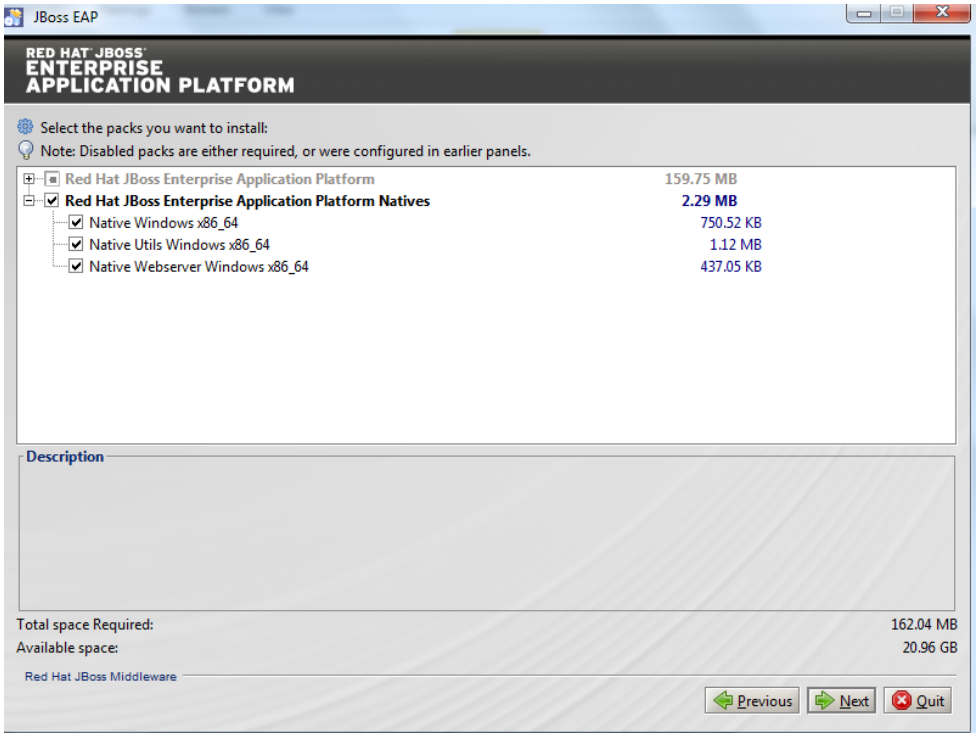


5. To select the package,

    a. Select the packs to install. Required packs are disabled for deselection.

    b. To continue with the installation, click the **Next** button.

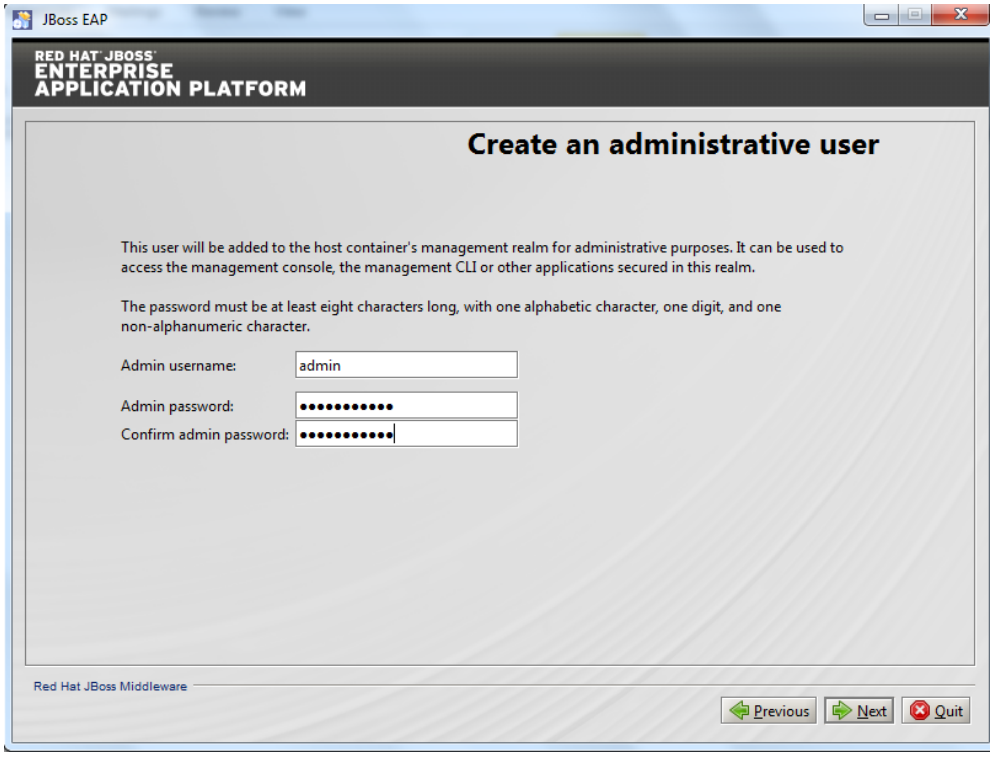


6. To create an administrative user and assign a password,

    a. Enter the *password* for the admin user.

    b. To continue with the installation, click the **Next** button.

☞ *The password must be at least eight characters long, with one alphabetic character, one digit, and one non-alphanumeric character.*



7. If you do not wish to install quickstart examples,

    a. Choose the **No** option.

    b. To continue with the installation, click the **Next** button.

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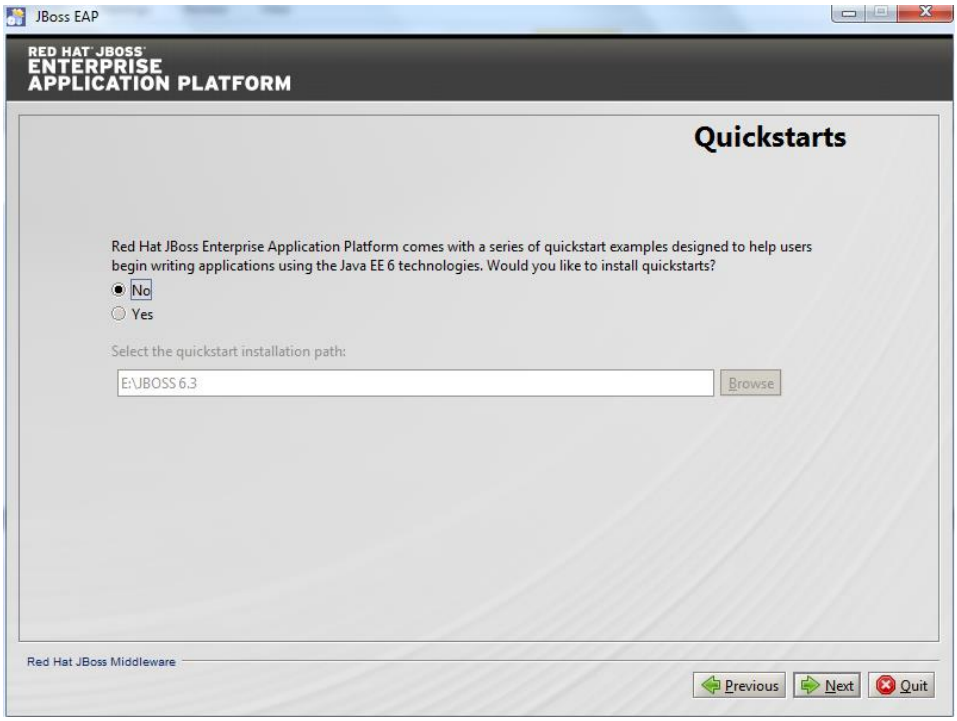
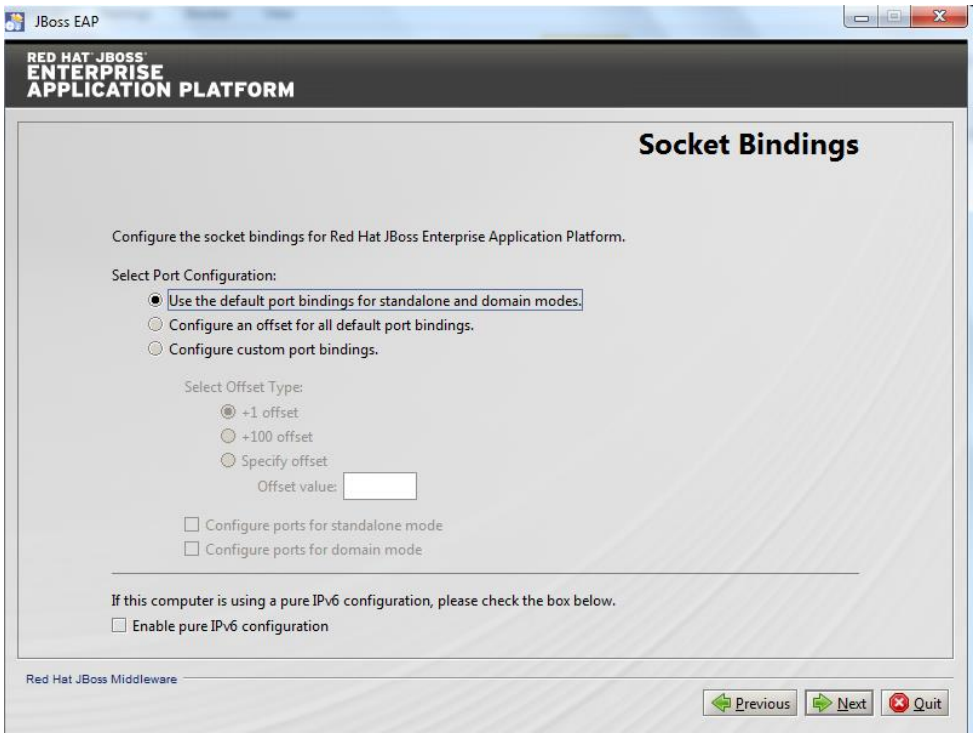


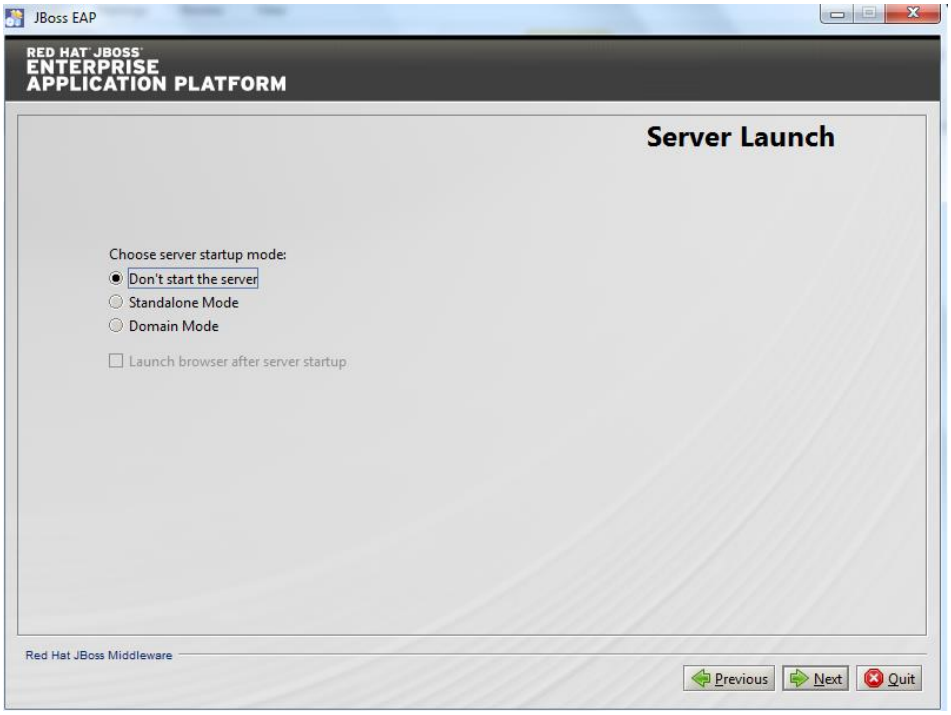
8. To configure the socket bindings for JBoss application platform,

    a. To select the port configuration, choose the **Use the default port bindings for standalone and domain modes** option.

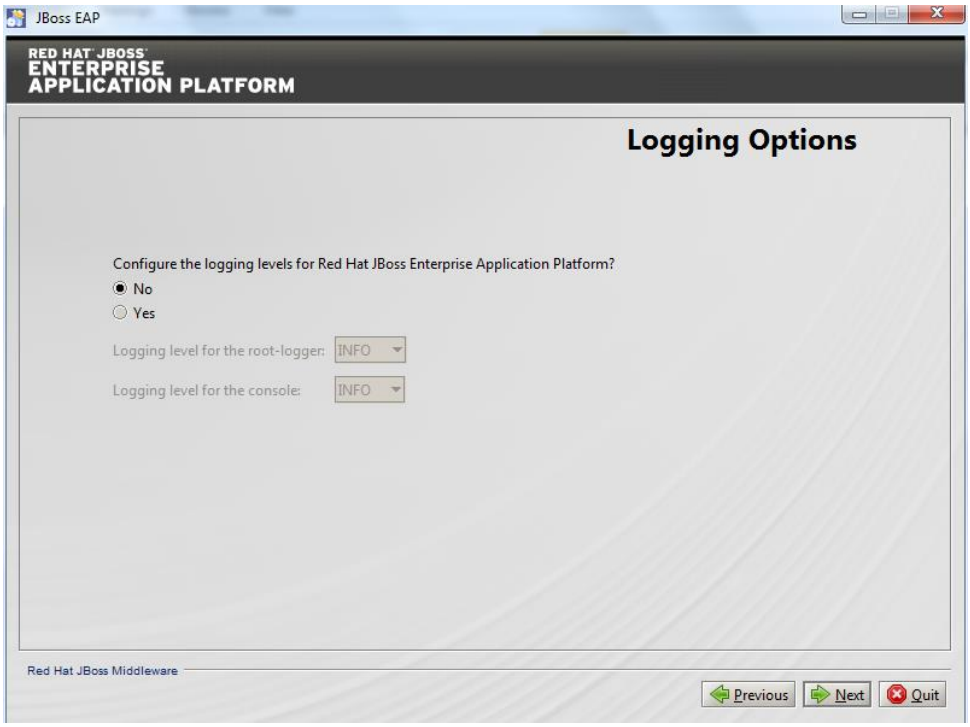
    b. To continue with the installation, click the **Next** button.



9. To select the startup option required on completion of the installation process,
    a. Choose the **Don't start the server** option.
    b. To continue with the installation, click the **Next** button.



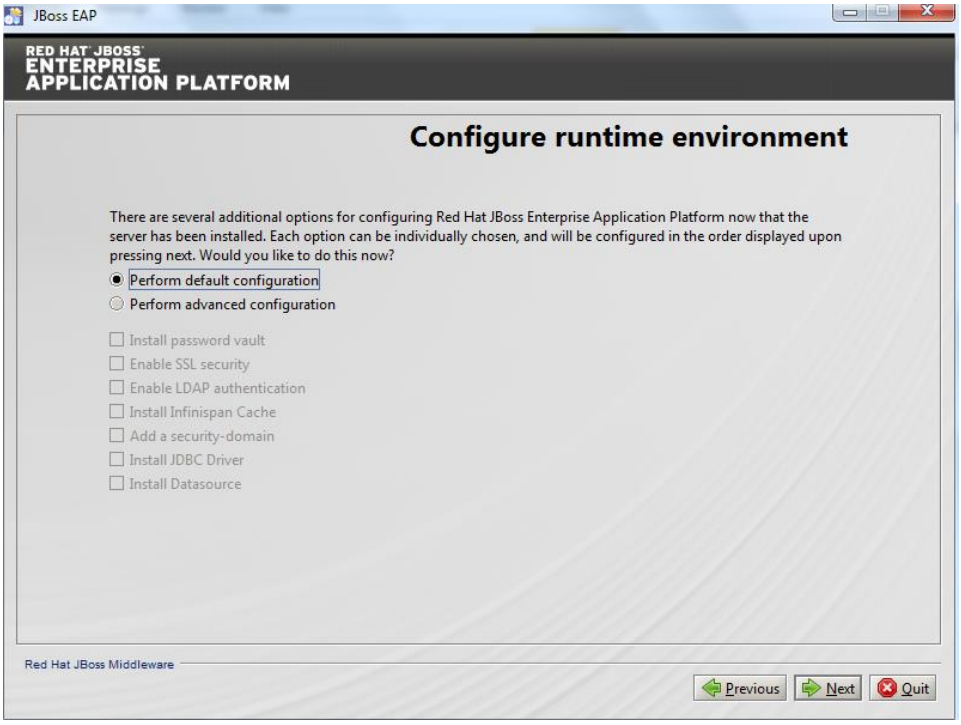
10. To configure logging levels,
    a. To skip this configuration, choose the **No** option.
    b. To continue with the installation, click the **Next** button.



11. To install the default configuration,

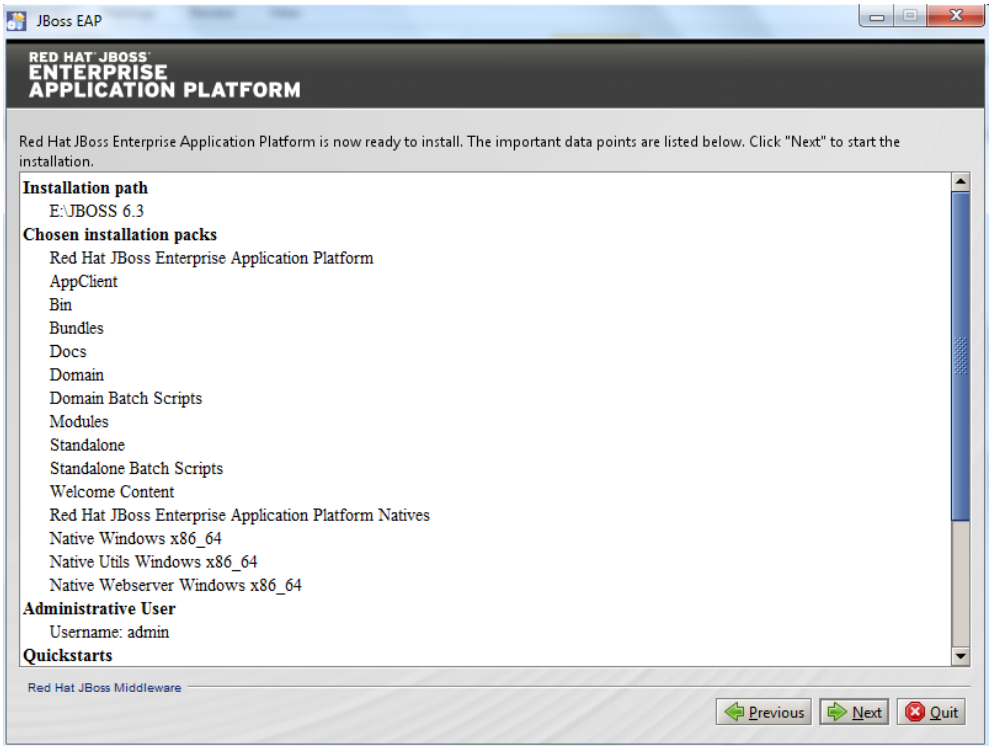
    a. Choose the **Perform default configuration** option.

    b. To continue with the installation, click the **Next** button.

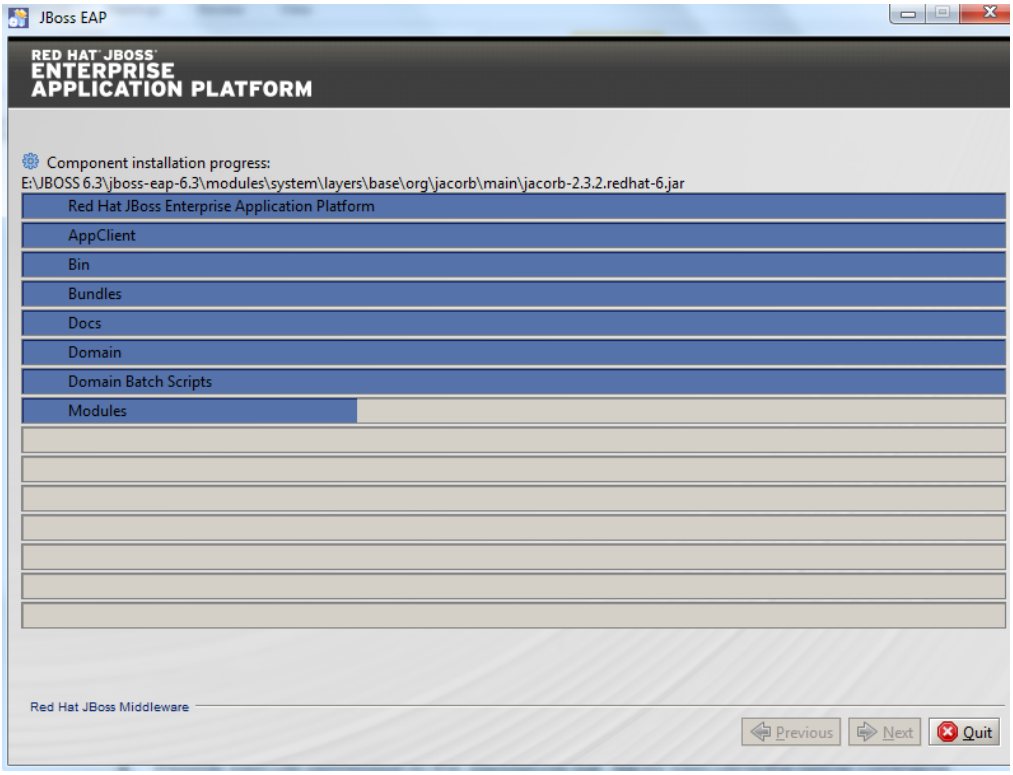


12. Check the installation and chosen installation path,

    a. To continue with the installation, click the **Next** button.



The installation of the JBoss enterprise application platform starts as shown below.



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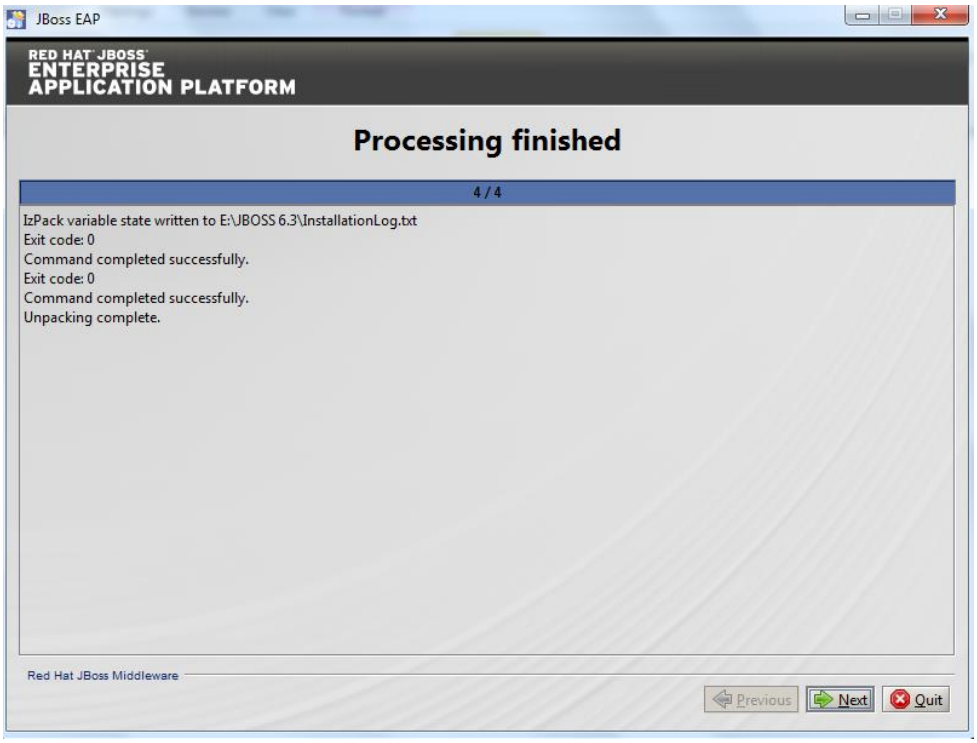
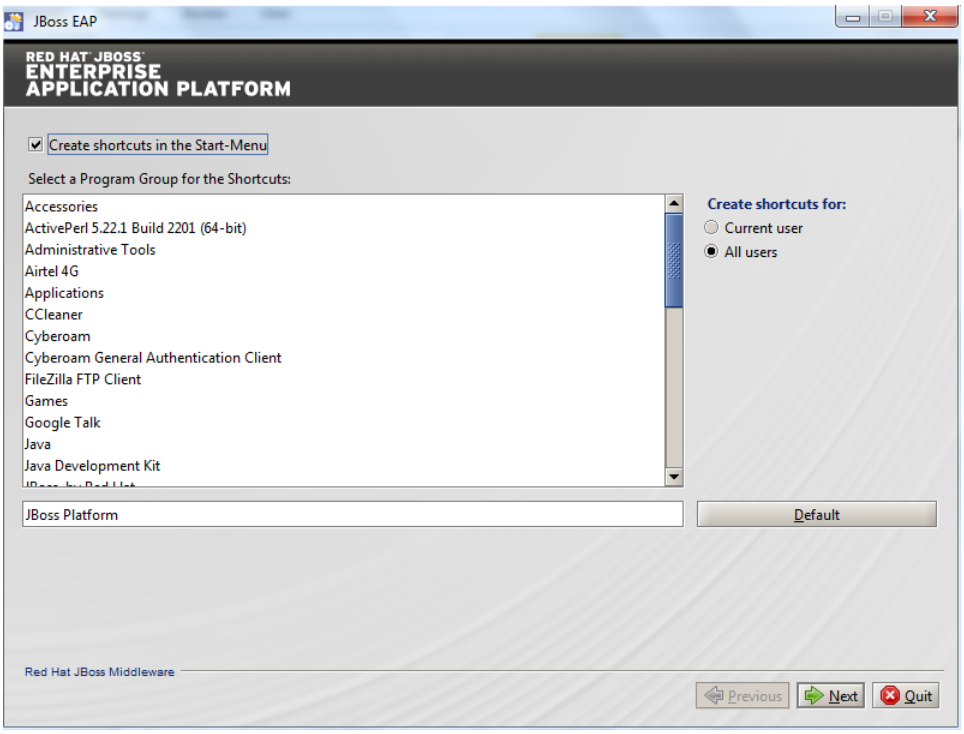
13. After installing the packs, click the **Next** button.



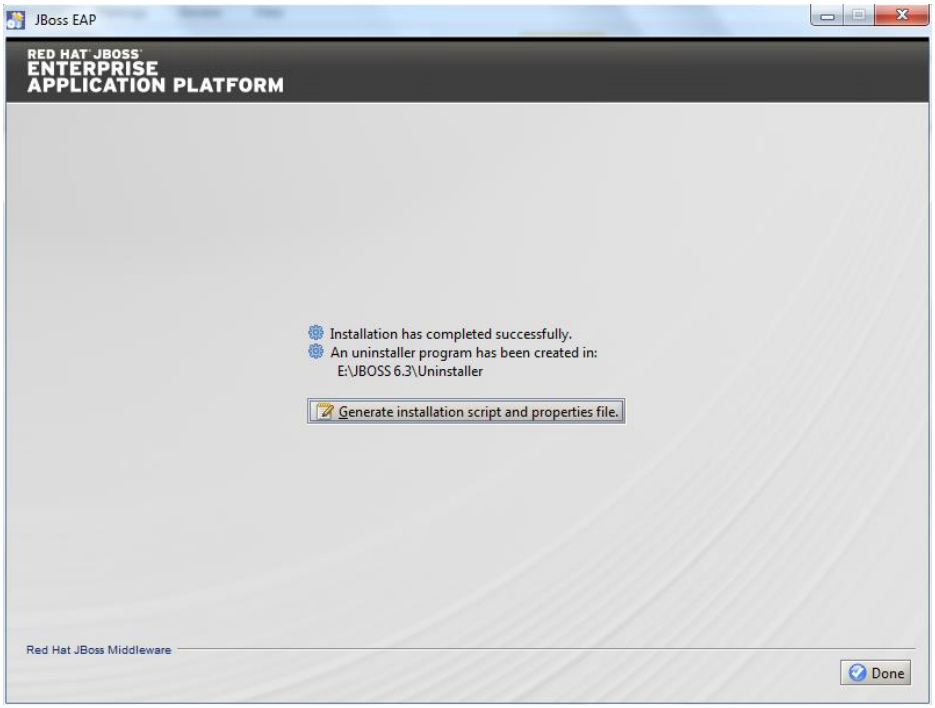
14. To create shortcuts in the start menu, click the **Next** button.



☞ *Ensure the **Create shortcuts in the Start-Menu** option is enabled.*

15. To complete the installation of JBoss enterprise application platform,

a. In the window, click the **Done** Button.



16. Go to the JBOSS_HOME/bin directory (For example, C:\JBOSS 6.3\jboss-eap-6.3\bin)
17. Provide execute permission to the standalone.bat file by executing the below command.
18. You can also use MobaXterm to provide permissions from command prompt or right click on standalone.bat and provide permission.

```
chmod 755 standalone.bat
```

```
Go to JBoss bin folder

standalone.bat -b 0.0.0.0
```

The JBoss Application server 6.3 is started.

19. To verify the JBoss server, in a web browser type the URL http://host_name:<CONSOLE_PORT>/. For example, http://msi-vmpl3ap6:8080.
20. To stop the sever,

Use CTRL+C key. Or,

Use the below command in duplicate session from C:\JBOSS 6.3\jboss-eap-6.3\bin

```
jboss-cli.bat --connect --command=:shutdown
```

The JBoss installation is successfully complete.

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☞ *If you get any error while opening the JBoss server, check the error in C:\JBOSS6.3\jboss-eap-6.3\standalone\log directory in the server.log file.*

Chapter 3. Configuring JBoss Application Server

This chapter provides information on the JBoss configuration procedure.

Configuring JBoss

To configure JBoss,

1. Go to the <*JBOSS_HOME*>*/bin* directory.
2. Make changes in the *standalone.bat* file as per the following steps. And above the line “set DEBUG_MODE=false”, add the below arguments.

```
set JAVA_OPTS="$JAVA_OPTS -Xms2048m -Xmx2048m -
XX:PermSize=256m -Xss128k -XX:NewSize=128m -
XX:MaxPermSize=128m -XX:+UseParNewGC -
XX:+CMSParallelRemarkEnabled -
Dsun.rmi.dgc.client.gcInterval=3600000 -
Dsun.rmi.dgc.server.gcInterval=3600000 -
Dcom.sun.xml.namespace.QName.useCompatibleSerialVersionUID=1.0
-
Dorg.omg.CORBA.ORBSingletonClass=com.sun.corba.se.internal.cor
ba.ORBSingleton -
Dorg.omg.CORBA.ORBClass=com.sun.corba.se.internal.Interceptors
.PIORB -DMETRICSTREAM.HOME=C:\MetricStream\SYSTEMi\Systemi -
DMETRICSTREAM.CONFIG=C:\MetricStream\SYSTEMi\Systemi\Config\co
nfig.client.xml"
```

Configure JNDI in JBoss 6.3.0

These are the changes required to be added for the JNDI configuration in **standalone-full.xml**. This complete section needs to be added and not present by default in the **standalone-full.xml.**

The file is under “C:\JBOSS6.3\jboss-eap-6.3\standalone\configuration\” as for example.

```
<datasources>
                <datasource jta="true" jndi-
name="java:/jdbc/oracle/msi" pool-name="msi" enabled="true">
                    <connection-url>jdbc:oracle:thin:@msi-
vmcordwgd01.metricstream.com:1521:DBMSIL</connection-url>
                    <driver>oracle</driver>
                    <new-connection-sql>select * from
dual</new-connection-sql>
                    <transaction-
isolation>TRANSACTION READ COMMITTED</transaction-isolation>
                    <pool>
                        <min-pool-size>50</min-pool-size>
                        <max-pool-size>1000</max-pool-size>
                    </pool>
                    <security>
```

```
                        <user-name>P7</user-name>
                        <password>P7</password>
                    </security>
                    <validation>
                        <check-valid-connection-sql>select *
from dual</check-valid-connection-sql>
                        <validate-on-match>false</validate-on-
match>
                        <background-validation-
millis>5000</background-validation-millis>
                    </validation>
                    <timeout>
                        <blocking-timeout-
millis>600000</blocking-timeout-millis>
                        <idle-timeout-minutes>15</idle-
timeout-minutes>
                        <query-timeout>0</query-timeout>
                    </timeout>
                    <statement>
                        <track-statements>nowarn</track-
statements>
                        <prepared-statement-cache-
size>0</prepared-statement-cache-size>
                        <share-prepared-
statements>false</share-prepared-statements>
                    </statement>
                </datasource>
```

1. Create folder structure oracle \ main under C:\JBOSS 6.3\jboss-eap-6.3\modules\system\layers\base\com\ (Example).
2. Copy the ojdbc jar file from SYSTEMI\Systemi\webapp\WEB-INF\lib to newly created C:\JBOSS 6.3\jboss-eap-6.3\modules\system\layers\base\com\oracle\main (Example).
3. Create a file modile.xml using below content (check actual ojdbc6.jar name under SYSTEMI\Systemi\webapp\WEB-INF\lib.)

```
<module xmlns="urn:jboss:module:1.1" name="com.oracle">

    <properties>
        <property name="jboss.api" value="unsupported"/>
    </properties>

    <resources>
        <resource-root path="ojdbc6-11.2.0.2.0.jar"/>
        <!-- Insert resources here -->
    </resources>
    <dependencies>
        <module name="javax.api"/>
        <module name="javax.transaction.api"/>
        <module name="javax.servlet.api" optional="true"/>
    </dependencies>
</module>
```

☞ *Change the path variable according to your actual ojdbc jar file name* ***module.xml*** .

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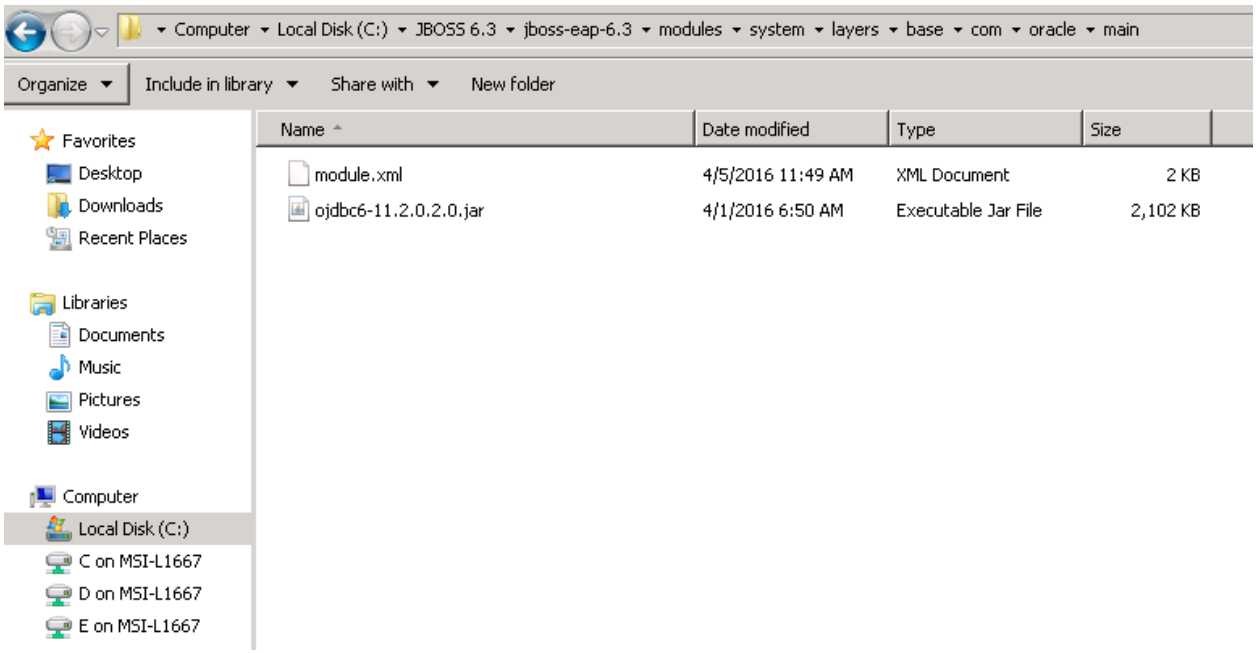
☞ *Make sure you change the <connection-url> parameters accordingly in* ***standalone-full.xml.***

☞ *Module.xml and ojdbc.jar should be placed under C:\JBOSS 6.3\jboss-eap-6.3\modules\system\layers\base\com\oracle\main for example.*



Scripts to Start JBoss

1. Open command prompt as admin.
2. To change the location, execute the cd command to the <JBOSS_HOME>/bin directory (For example, C:\JBOSS 6.3\jboss-eap-6.3\bin).
3. Run the JBoss server executing the below command from cmd prompt as admin.

```
If local host is the bind address then IP is 0.0.0.0

standalone.bat -b 0.0.0.0 --server-config=standalone-full.xml
```

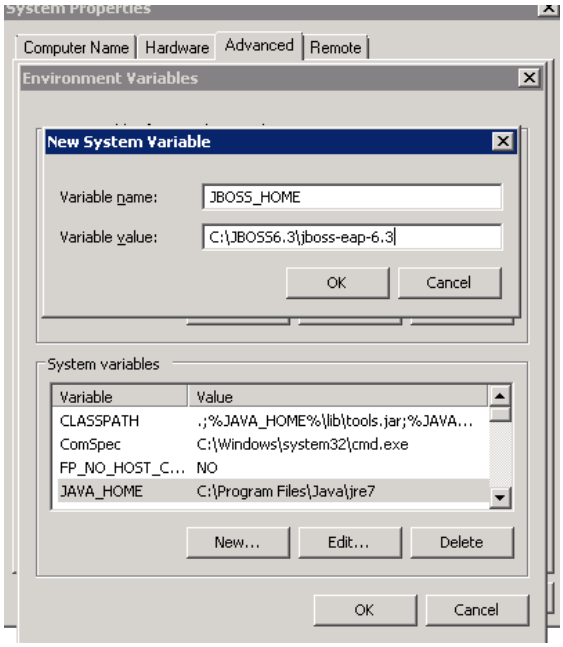
```
If GRC URL has to be used outside the VM network

standalone.bat -b <VM_IP or VM_FQDN> --server-config=standalone-full.xml
```

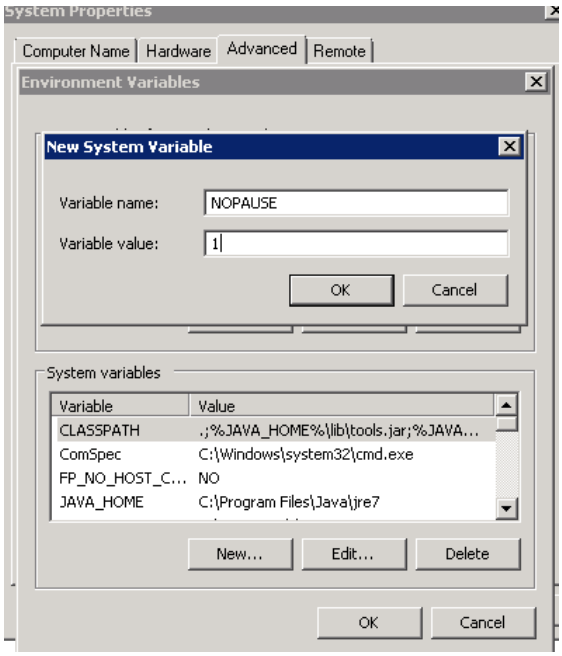
4. To verify the EGRCP application running on JBoss, open a web browser and type the below URL.

http://Host_Name:<PORT>/metricstream/systemi/Userlogin

To Create JBoss Windows Service

1. Create two environment variables
    a. JBOSS_HOME = Your JBoss Home
    b. NOPAUSE = 1





2. Go to C:\JBOSS6.3\jboss-eap-6.3\modules\system\layers\base\native\sbin
3. Edit service.bat

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```
set STARTPARAM="/c \"set NOPAUSE=Y ^^^&^^^& standalone.bat
-b msi-vmsupjnjiaap.metricstream.com --server-
config=standalone-full.xml\""
```

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Chapter 4. Troubleshooting

Forms are Not Opening

1. Under the location *C:\JBOSS6.3\jboss-eap-6.3\modules\system\layers\base\sun\jdk\main*, copy the *rowset.jar* file to the JBoss folder.
2. Under the location, *C:\JBOSS6.3\jboss-eap-6.3\modules\system\layers\base\sun\jdk\main*, edit the *module.xml* file.
3. In the JBoss folder, search for <paths> and add below lines.

```
<path name="com/sun/rowset"/>
<path name="com/sun/rowset/internal"/>
<path name="com/sun/rowset/providers"/>
```

AppStudio Data Upload Issue

1. Under the location *C:\JBOSS6.3\jboss-eap-6.3\modules\system\layers\base\org\apache\commons*, copy all commons jars (except commons.logging) to the JBoss server in their respective folders.

   ☞ *You will find individual folders with jar names.*

2. Edit the *module.xml* file in each folder with jar name uploaded next to

   <resource-root path="<Uploaded_jar_name>".

   For Example, *<resource-root path="commons-beanutils-1.8.0.jar"/>.*

3. Under the location *C:\JBOSS6.3\jboss-eap-6.3\modules\system\layers\base\org\apache\xalan\main*, from the *metricstream.ear* file, copy the below *jar* files to the JBoss folder.

   In the *module.xml* files, edit the *jar* names.

   - ✓ *xalan.jar*
   - ✓ *xalan-serializer.jar*

PN: Directory paths may vary as per specific client setup.