Lab 01_01: Installing EAP

Performance Checklist

Lab Overview:

In this exercise, you will install EAP 6 using the EAP installer application.

Lab Resources/Configuration:

Lab Files Location:	*LABS*/**installs**
Application URL:	`http://localhost:8080`

Success Criteria: After completing this exercise, you should be able to start EAP.

Outcome: A working instance of EAP 6 in Standalone mode.

Lab Outline: Deploying JBoss EAP consists of the following tasks:

1. Start the GUI Installer
2. Complete the GUI Installer
3. Verify the Installation
4. Viewing the EAP Folders
5. Start EAP in Standalone Mode
6. Verify EAP is Running

Before you begin...

Throughout the remainder of this course manual, the following variables will be used. On RHEL:

- *STUDENT_HOME*=**/home/student/JB248**
- *LABS*=**/home/student/JB248/labs**
- *EAP_HOME*=**/home/student/JB248/opt/jboss-eap-6.0**

On Windows, these values are:

- *STUDENT_HOME*=**c:/JB248**
- *LABS*=**c:/JB248/labs**
- *EAP_HOME*=**c:/JB248/opt/jboss-eap-6.0**

☐ 1. Start the GUI Installer

☐ 1.1. Open a terminal window and change directories to your **LABS/installs** folder.

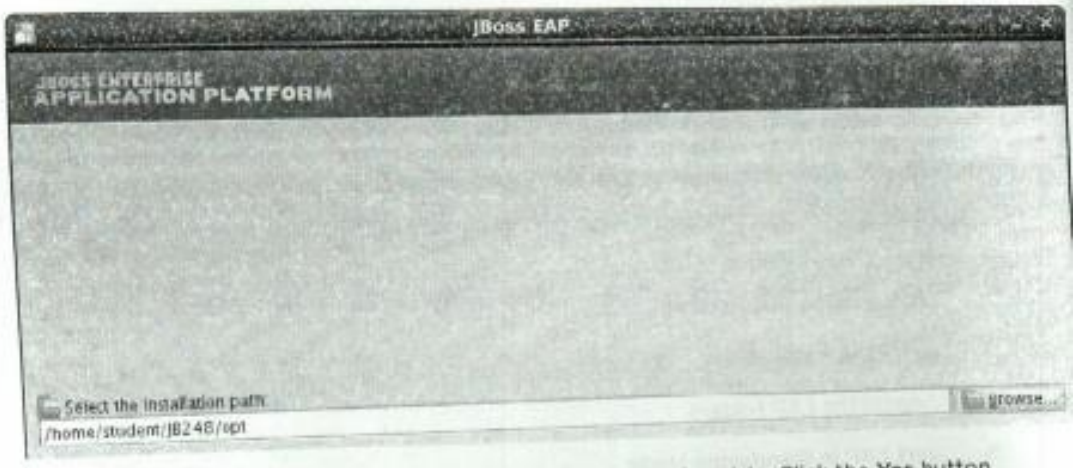
☐ 1.2. Enter the following command:

```
java -jar jboss-eap-installer-6.0.0.GA.jar
```

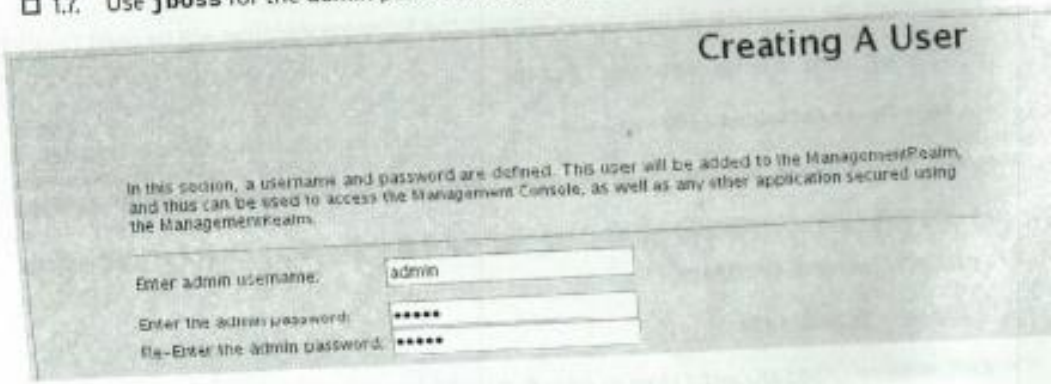
- [ ] 1.3. Select the language you want and click **OK**.
- [ ] 1.4. Accept the EULA and click **Next**.
- [ ] 1.5. For the installation path, use:

```
STUDENT_HOME/opt/
```

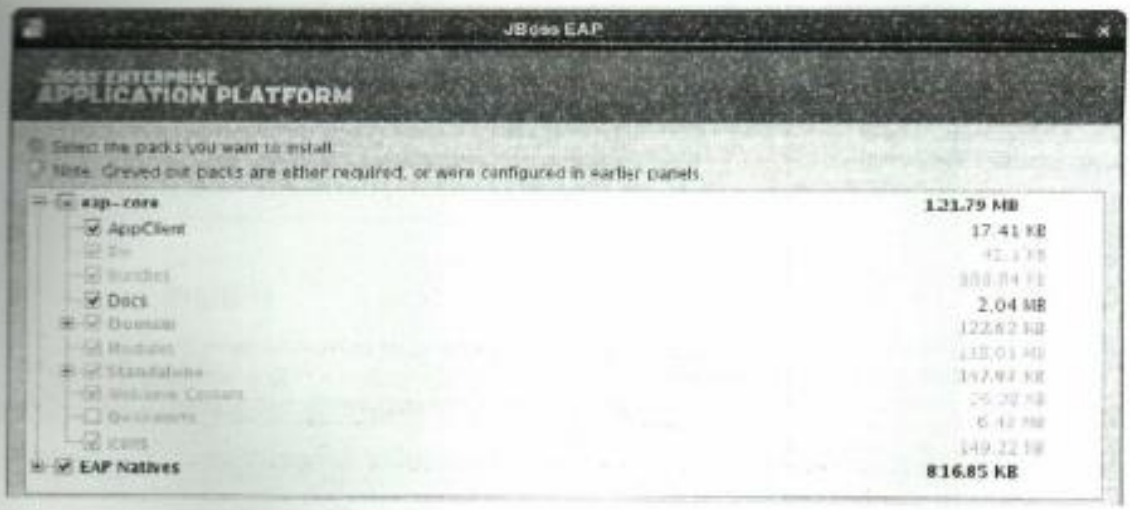
Be sure to replace *STUDENT_HOME* with the appropriate path, depending on your architecture.



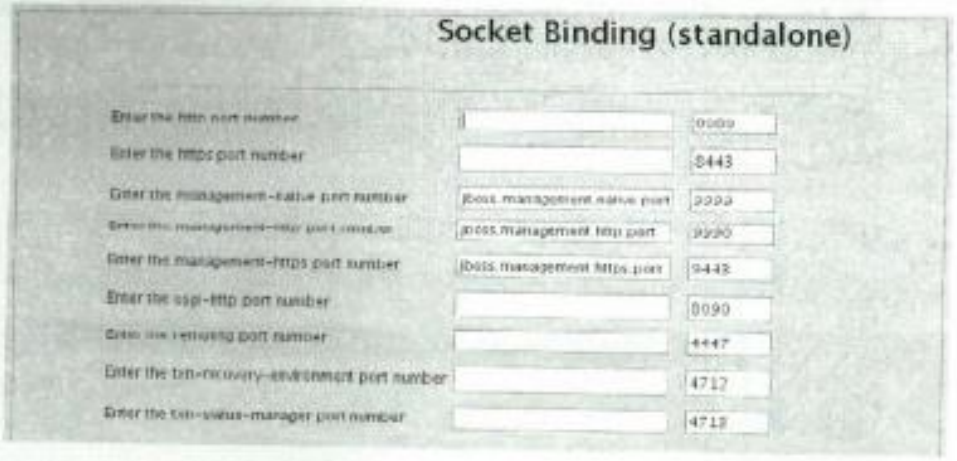
- [ ] 1.6. You will be shown a warning that the directory already exists. Click the **Yes** button to continue.
- [ ] 1.7. Use **jboss** for the **admin** password. (Leave the **username** as **admin**.)



- [ ] 2. Complete the GUI installer
  - [ ] 2.1. Select **No** when asked to install the **QuickStarts**.
  - [ ] 2.2. The next step shows which packs are to be installed. The packs selected by default are fine, but expand the list to view the packs that are available. Leave the **EAP Natives** option selected as well, then click the **Next** button.



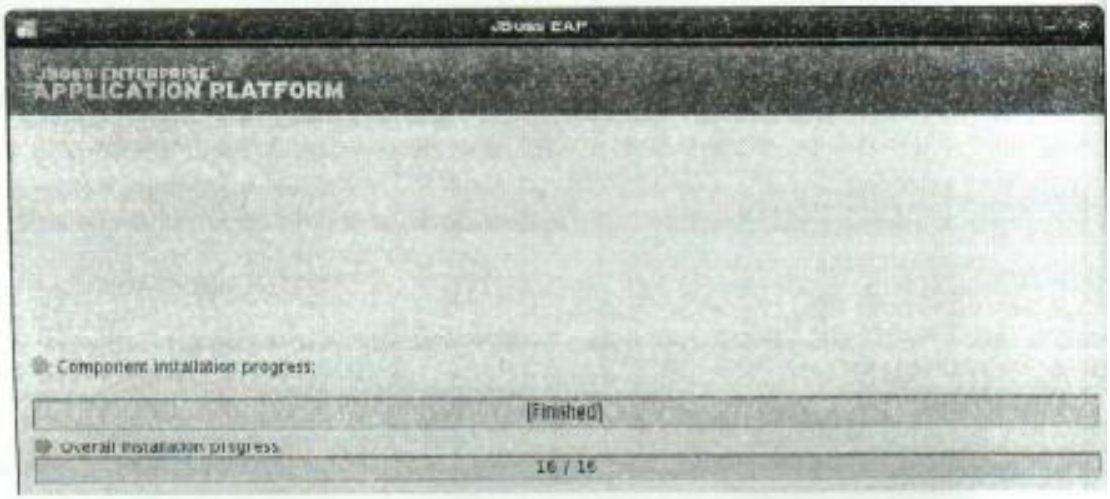
☐ 2.3. The next step allows you to specify ports. Select the **Custom** option, then click the **Next** button.



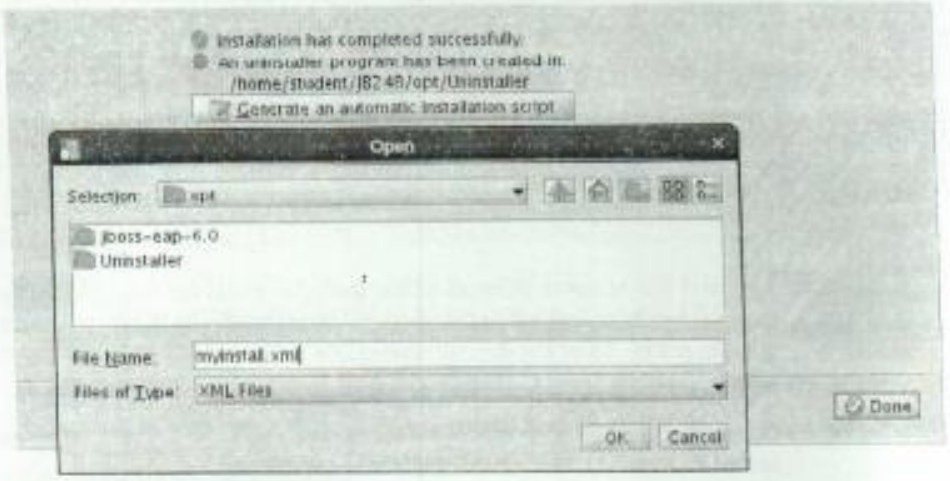
☐ 2.4. The next few screens show all of the available ports for both Standalone and Domain mode, along with their default values and a textfield so you can enter custom ports. All of the default values are fine for this particular installation, so simply click the **Next** button on the next five screens.

☐ 2.5. On the **Server Launch** screen, select **"Don't start the server"**. You will start the server manually after the installation is complete.

☐ 2.6. Hit **Next** at the confirmation screen and EAP will begin installing. After the installation is complete, you should see the following screen:



- ☐ 2.7. Click **Next** and some post-install tasks will execute. When those are finished, click the **Next** button.
- ☐ 2.8. The default values for creating shortcuts are fine, so click **Next** on that step of the wizard.
- ☐ 2.9. On the final step of the wizard, click the button labeled **"Generate an automatic installation script"**. Name the file **`myinstall.xml`** and save it in your **`opt`** folder (which it defaults to).



- ☐ 2.10. Click the **Done** button to end the installer.

☐ 3. Verify the Installation

- ☐ 3.1. Verify that you now have a folder named **`jboss-eap-6.0`** in your ***`STUDENT_HOME`*`/opt`** folder. This folder will now be referred to as ***`EAP_HOME`***.

- ☐ 3.2. Open the file **opt/InstallSummary.html** using a web browser. Notice that all the options you selected from the installer appear in this file, which is for informational purposes only.
- ☐ 3.3. Open the file ***EAP_HOME*/myinstall.xml**. This is the file created when you clicked the **"Generate an automatic installation script"** button at the last step of the installer wizard. You can use this file to install another EAP instance with the same settings.

Insight

To install EAP using the installer and an autoinstall XML file, you specify the name of the XML file as a command line argument when starting the installer. The command looks like:

```
java -jar jboss-eap-6.0.0.GA-installer.jar myinstall.xml
```

You would replace **myinstall.xml** with the appropriate name of your autoinstall XML file. This command does not require any human input, allowing you to install a custom EAP 6 instance using scripting.

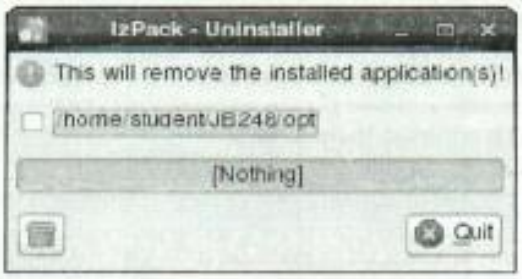
- ☐ 3.4. You should see a folder in **opt** named **Uninstaller**, which contains a single executable JAR file named **uninstaller.jar**.

Note

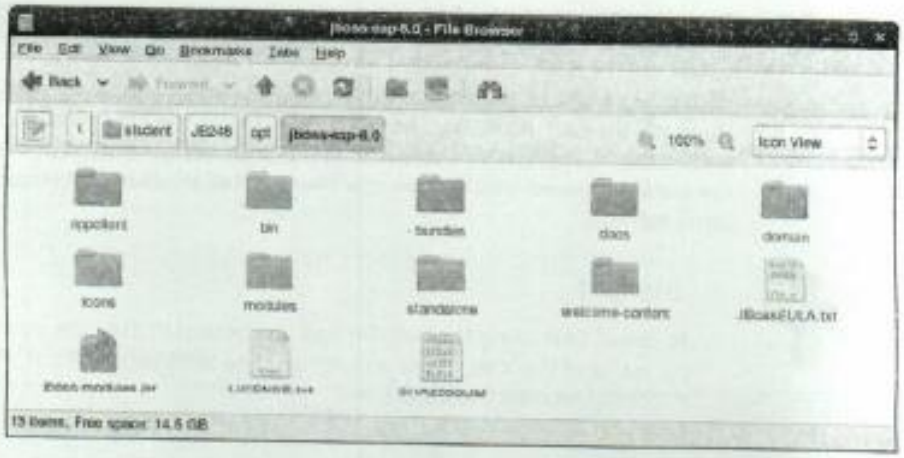
To run the GUI uninstaller, you would enter the command:

```
java -jar uninstaller.jar
```

If you installed EAP by simply unzipping it, then an **Uninstaller** folder will not be created. You are not going to uninstall it now, so do not enter this command! The command opens a popup window that looks like the following:



- ☐ 4. Viewing the EAP Folders
  - ☐ 4.1. Navigate to the your *EAP_HOME* folder. You should see nine subfolders:



Note

If you installed EAP by simply unzipping it, then you will not have an **icons** folder.

☐ 4.2. View the contents of the **bin** folder, which contains various scripts, including the scripts used for starting EAP in Domain mode and Standalone mode. You will see how to use the startup scripts later in the Lab. Notice the **bin/init.d** folder contains a control script named **jboss-as-standalone.sh** and a **jboss-as.conf** file for configuring and running EAP as a service in Standalone mode.

Insight

These files will not appear if you are running on Windows.

☐ 4.3. View the contents of **docs/examples/configs**. The files in this folder are sample configurations for various scenarios for running EAP in Standalone mode. For example, there is a sample config file for running a Standalone controller that uses JTS; and a sample config file for running a minimally-configured Standalone server.

☐ 4.4. Notice the ***EAP_HOME*/modules** folder contains lots of subfolders. These modules represent the Java libraries that EAP is comprised of. There are over 250 modules in these folders!

Insight

EAP 6 uses the new *JBoss Modules* project for class loading, making it much simpler to develop and deploy Java applications. Modules remove issues that arise from a traditional Java classloader, which loads hundreds of different JAR files, potentially leading to version conflicts. Modules do not have this issue because they each have their own classloader, and you specifically define the module's dependencies.

- ☐ 4.5. The ***EAP_HOME*/welcome-content** folder contains the home page that is displayed be default at `http://localhost:8080`. You will see what this page looks like when you start EAP in the next step.

Important

In a production environment, you will either modify the contents of **welcome-content** to suit your specific needs, or disable the welcome content and deploy your own application at the context root, which you learn how to do in Unit 12, *The Web Subsystem*.

- ☐ 4.6. There are two very important folders in *EAP_HOME*: **domain** and **standalone**. The **domain** folder contains your configuration files for running EAP in Domain mode, and the **standalone** folder contains the configuration files for running EAP in Standalone mode. You will become very familiar with the contents of these folders throughout the remainder of this course. For now, notice that **domain** and **standalone** have similar subfolders, except that **standalone** has an extra subfolder named **deployments** for deploying applications onto the Standalone instance. Domain mode does not use a **deployments** folder: applications are deployed onto Server Groups, as you will learn in Unit 4.

☐ 5. Start EAP in Standalone Mode

- ☐ 5.1. Open a terminal window and navigate to ***EAP_HOME*/bin**. On RHEL:

```
cd /home/student/JB248/opt/jboss-eap-6.0/bin
```

On Windows:

```
cd c:\JB248\opt\jboss-eap-6.0\bin
```

- ☐ 5.2. Enter the following command to start EAP in Standalone mode.

On RHEL:

```
./standalone.sh
```

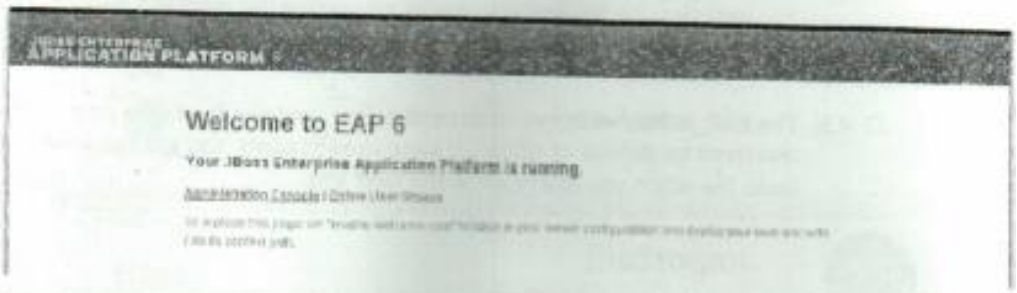
On Windows:

```
standalone.bat
```

- ☐ 5.3. EAP 6 starts up very quickly. It should be up and running within 5-10 seconds!

☐ 6. Verify EAP is Running

- ☐ 6.1. Point your web browser to `http://localhost:8080`. You should see the following welcome page:



Insight

The page you are viewing is the **`index.html`** page found in ***`EAP_HOME/welcome-content`***.

☐ 7. STOP!

You have reached the end of this lab. You should now have EAP installed and running on your local machine in Standalone mode. The next few sections discuss some of the management options for EAP and also looks at the structure of the underlying XML configuration files.