A large, abstract, light gray graphic on the left side of the page, consisting of overlapping curved shapes and a thin white line that curves from the top left towards the bottom right.

SUN MICROSYSTEMS

OracleFusion Series

Fusion11gR1 installation &
configuration on JeOS Linux Appliance
virtualbox image

Global Software Sales

Sun Project :	Oracle Fusion 11g Middleware
Version Number:	D-0.1
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1. Document Control

1.1. Revision History

Version	Author	Reason For Issue	Date
0.1	Patrice.goutin@sun.com	Initial draft	01/15/2010

1.2. Document Access Control

Section	Access Restrictions
All	Internal use only

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2. Introduction

This tutorial is the 1st part of the following serie :

- Part1 - JeOS Linux Appliance VirtualBox image setup
- Part2 – Oracle SOA Middleware Fusion 11gR1 installation & configuration on JeOS Linux Appliance VirtualBox image – this document
- Part3 – jDeveloper installation & configuration

2.1. The intention of the tutorial “Part2 - Fusion11gR1 installation & configuration on JeOS Linux Appliance virtualbox image”

The purpose of this lab is to introduce you with the setup and configuration of Oracle Fusion11gR1 on a Linux Virtual Box Appliance image and to make available this virtualbox image ready to use.

2.2. Which linux flavour ?

Redhat EL 4 (UL7+) and Redhat EL(UL3+) are the linux versions supported by Oracle (see oracle fusion middleware 11gR1 (11.1.1.x) certification matrix).

By the way, for the 1st draft of this tutorial, we have chosen jeos-ubuntu-08-04.3 as the Operating System for the virtualbox as we are not required to provide any license key or installation number during the installation process. There is no limitation or constraints with the distribution of this virtual image internally or externally at Sun Microsystems.

In the 2nd draft, we will use a JeOS Oracle Enterprise Linux 08-04.3 Appliance VirtualBox.

2.3. What is JeOS Ubuntu?

JeOS for Ubuntu 08-04.3 is a specialized installation of Ubuntu Server Edition with a tuned kernel that only contains the base elements needed to run within a virtualized environment.

A ready iso file is also available to be used to boot a virtualbox image or a system :
<http://www.ubuntu.com/products/whatisubuntu/serveredition/jeos>

The jeos-ubuntu-08-04.3 virtualbox is used as a Fusion11gR1 server.

2.4. What is JeOS Oracle Enterprise Linux?

JeOS Oracle Enterprise Linux is a specialised installation of **redHat 5.4 Server** with a tuned kernel that only contains the base elements needed to run within a virtualized environment.

There is no limitation to distribute the JeOS Oracle Enterprise Linux internally at Sun Microsystems according to the following statement from the Oracle website as far as you agree the Oracle Export restrictions :

“With Oracle Enterprise Linux JeOS, anyone can put their applications on top of a small footprint, enterprise operating system and build a full stack virtual machine or Oracle VM Template. The resulting Oracle VM Template is freely re-distributable, without trial license requirements, and is backed by enterprise-class support.”

source

- http://www.oracle.com/technology/software/products/virtualization/vm_jeos.htm
- http://www.oracle.com/technology/software/products/virtualization/vm_jeos.htm

2.5. Products installed in the JeOS Linux Appliance virtualbox image

In this jeos-ubuntu-08-04.3 virtualbox image we setup the following software in the order it is shown.

1. Database

If you don't already have an Oracle database installed, choose [Oracle Express Edition](#) for a small footprint database. (Oracle XE is suitable for development only. Ignore the warning during installation about the database

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version as that pertains to production installations.)

2. **WebLogic Server**
Download WebLogic Server from the [FMW download page](#), in the **Runtime Software** section.
3. **Repository Creation Utility**
Download RCU from the [FMW download page](#), in the **Required Additional Software** section.
4. **SOA Suite**
Download SOA Suite from the [FMW download page](#), in the **Runtime Software** section.

On a separate system or your laptop, we will setup :

5. **JDeveloper**
Download JDeveloper from the [FMW download page](#). Look for **JDeveloper and Application Development Framework** in the **Required Addition Software** section.
SOA Extension for JDeveloper
Install the SOA Extension using the JDeveloper Update Center. From the JDeveloper menu choose **Help > Check for Updates**. In the **Update Wizard**, select **Search Update Centers** and ensure **Oracle Fusion Middleware Products** is checked ([screenshot](#)). Then ensure that **Oracle SOA Composite Editor** is checked ([screenshot](#), your version may not match the screenshot exactly). The SOA Extension is approximately 200 MB.



2.6. Miscellaneous

The following information could be useful to understand the installtion/configuration steps and to gain access to the jeos-ubuntu-08-04.3 virtualbox image.

name / variables	values
Host system name	host-system
tcp-ip address for Host system	host-system-ip
Guest system name	jeos-ubuntu-08-04.3
tcp-ip address for Guest system	jeos-ubuntu-08-04.3-ip
Initial user created during ubuntu installation and sudo user	Username = fusion Pwd = password
Oracle user (also sudo user) to manage Oracle-XE database	Username = oracle Pwd = oracle
Soa user (also sudo user) to manage WebLogic Admin Server and SOA Managed Server	Username = soa Pwd = soa

3. Pre-Installing

3.1. Download

Download jeOS Ubuntu 08-04.3 : <http://www.ubuntu.com/products/whatisubuntu/serveredition/jeos>

Download Oracle Fusion11gR1 :
<http://www.oracle.com/technology/products/soa/soasuite/collateral/downloads.html>

Download JDK 1.6.0 : <http://java.sun.com/javase/downloads/index.jsp>

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3.2. jeos-ubuntu-08-04.3 virtualbox image

We assume the jeos-ubuntu-08-04.3 virtualbox image is already up & running on your system inside VirtualBox.

For more information, please have a look to the tutorial “Part1 - setup-jeos-ubuntu-0804.3-D-0.1.pdf” to proceed with the initial jeos-ubuntu-08-04.3 setup in VirtualBox.

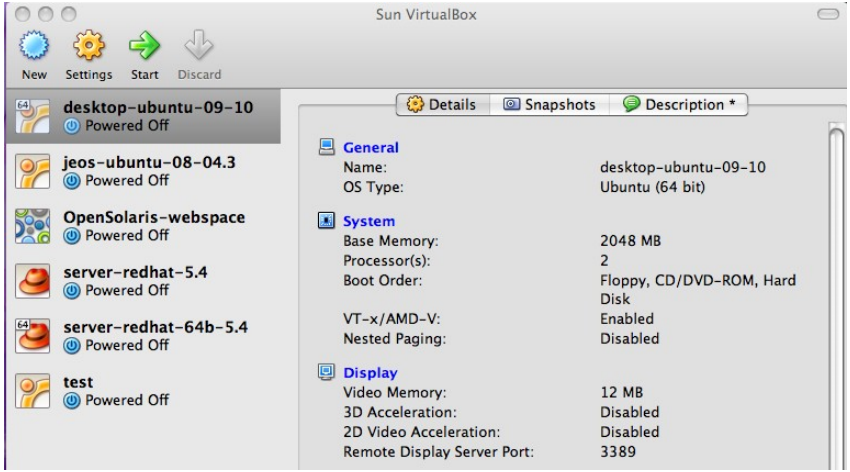
3.3. Configuration of jeos-ubuntu-08-04.3 virtualbox image

 In the following pages :

host-system>> : commands or actions to be performed on the host system; the system running the VirtualBox utility. This is the HOST system.

jeos-ubuntu-08-04.3 >> commands or actions to be performed from the virtualbox image. This is the GUEST system.

3.3.1. Start the jeos-ubuntu-08-04.3

Step	Screenshot
Start VirtualBox – Gui Mode	<p>Double-check the Base Memory and Processor (s) allocated to the jeos-ubuntu-08-04.3 according to your system.</p> <p>Double-check the jeos-8.04.3-jeos-i386.iso has been removed from the IDE Secondary Master.</p> <p>Start the jeos-ubuntu-08-04.3 virtualbox in GUI mode : Select the virtualbox image and click the Start icon</p> 
Start VirtualBox – CLI Mode	<p>Start the jeos-ubuntu-08-04.3 virtualbox in Text mode (MAC OS X)</p> <pre>host-system >> cd /Applications/VirtualBox.app/Contents/MacOS host-system >> ./VBoxManage startvm jeos-ubuntu-08-04.3</pre>

3.3.2. Add some packages required

For setting up Oracle Fusion11gR1 it is required to complement the installation out-of-the-box :

- System ssh, ftp,ufw, xorg, unzip
- oracleXE :libaio, libaio1, bc

Step	Screenshot
Login as Fusion (the initial user created at installation time)	In the terminal window of host-system login as the initial user (fusion) username : fusion

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	password : password
System packages installation	install open-ssh jeos-ubuntu-08-04.3 >> sudo apt-get install ssh install xorg jeos-ubuntu-08-04.3 >> sudo apt-get install xorg
Logout from the terminal window of jeos-ubuntu-08-04.3.	
You are now able to connect to the jeos-ubuntu-08-04.3 virtualbox image with ssh and ssh -X from the host-system. Start a ssh session from the host system.	host-system>> ssh -X fusion@jeos-ubuntu-08-04.3-ip The installation/configuration will be managed through the ssh -X session.
System packages installation	install ftp jeos-ubuntu-08-04.3 >> sudo apt-get install ftp install ufw firewall jeos-ubuntu-08-04.3 >> sudo apt-get install ufw Enable the firewall jeos-ubuntu-08-04.3 >> sudo ufw enable jeos-ubuntu-08-04.3 >> sudo ufw allow 22 install unzip jeos-ubuntu-08-04.3 >> sudo apt-get install unzip install xorg (X11 lib) jeos-ubuntu-08-04.3 >> sudo apt-get install xorg
Oracle-XE packages installation	install libaio, libaio1, bc #sudo apt-get install libaio #sudo apt-get install libaio1 #sudo apt-get install bc

3.3.3. Create new users & groups

For setting up Oracle Fusion11gR1 it is strongly recommended to create specific users for Oracle-XE and the SOASuite.

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X fusion@jeos-ubuntu-08-04.3-ip
Create a "software" groupe	jeos-ubuntu-08-04.3 >> sudo addgroup software
Create 2 new users : oracle, soa	jeos-ubuntu-08-04.3 >> sudo adduser oracle jeos-ubuntu-08-04.3 >> sudo adduser soa
Add the users oracle, soa to the group software	jeos-ubuntu-08-04.3 >> sudo adduser oracle software jeos-ubuntu-08-04.3 >> sudo adduser soa software
Add users oracle, soa as sudousers	jeos-ubuntu-08-04.3 >> sudo visudo (to access and edit the list) Just under the line that looks like the following : <i>root ALL=(ALL) ALL</i> Add the following : <i>oracle ALL=(ALL) ALL</i> <i>soa ALL=(ALL) ALL</i>

3.3.4. Enlarge Swapfile for Oracle-XE

By default, the swapfile defined for jeos-ubuntu-08-04.3 is 400MB. Oracle-XE requires at least 1GB.

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3	host-system>> ssh -X fusion@jeos-ubuntu-08-04.3-ip

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if not already running	
Double-check the swap size	# free -g-b,-k,-m,-g show output in bytes, KB, MB, or GB
<p>Procedure to add a swap file of 512MB or 768MB (512 + 256)</p> <p>You need to use dd command to create swapfile. Next you need to use mkswap command to set up a Linux swap area on a device or in a file.</p>	<p>a) Login as fusion to the jeos-ubuntu-08-04.3 virtualbox b1) Type following command to create %!@MB swap file (1024 * 512MB = 524288 block size): # sudo dd if=/dev/zero of=/swapfile1 bs=1024 count= 524288 b2) Type following command to create 768MB swap file (1024 * 768MB = 786432 block size): # sudo dd if=/dev/zero of=/swapfile1 bs=1024 count=786432 c) Set up a Linux swap area: # sudo mkswap /swapfile1 d) Activate /swapfile1 swap space immediately: # sudo swapon /swapfile1 e) To activate /swapfile1 after Linux system reboot, add entry to /etc/fstab file. Open this file using text editor such as vi: # sudo vi /etc/fstab Append following line: /swapfile1 swap swap defaults 0 0 So next time Linux comes up after reboot, it enables the new swap file for you automatically. g) Double-check the new swap is activated : # free -m</p>
Reboot jeos-ubuntu-08-04.3 to double-check the swap file is enabled automatically.	# sudo poweroff
Restart jeos-ubuntu-08-04.3 virtualbox	<p>Start the jeos-ubuntu-08-04.3 virtualbox in Text mode (MAC OS X) # cd /Applications/VirtualBox.app/Contents/MacOS # ./VBoxManage startvm jeos-ubuntu-08-04.3</p>
Double-check the new swap is activated	# free -m

3.3.5. Ftp Oracle Soa Fusion11gR1 images

Import all the required images and zip files into jeos-ubuntu-08-04.3.

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X fusion@jeos-ubuntu-08-04.3-ip
We assume all the Oracle SOA Fusion11gR1 are available on the host-system under \$HOME/temp/linux-distrib Ftp to the host-system	<pre> jeos-ubuntu-08-04.3 >> sudo mkdir /export jeos-ubuntu-08-04.3 >> cd /export jeos-ubuntu-08-04.3 >> sudo mkdir linux-distrib jeos-ubuntu-08-04.3 >> cd linux-distrib jeos-ubuntu-08-04.3 >> sudo ftp host-system-ip ftp> binary ftp> cd temp/linux-distrib ftp> get oracle-xe-universal_10.2.0.1-1.0_i386.deb ftp> get jdk-6u18-linux-i586.bin ftp> get oepe111130_wls1032_linux32.bin ftp> get ofm_rcu_linux_11.1.1.2.0_disk1_1of1.zip tp> get ofm_soa_generic_11.1.1.2.0_disk1_1of1.zip ftp> quit </pre>

3.3.6. Misc

The following commands could be useful.


Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X fusion@jeos-ubuntu-08-04.3-ip
Change the keyboard layout	<p>change keyboard layout jeos-ubuntu-08-04.3 >> sudo dpkg-reconfigure console-setup</p>

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You are done with the post-configuration of jeos-ubuntu-08-04.3 virtualbox image.

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4. Setup & installation of Oracle Fusion11gR1 on jeos-ubuntu-08-04.3 virtualbox image

 This configuration has been made on MAC OS X 10.5, btw it is also applicable for Windows XP and Linux.

4.1. OracleXE installation and configuration

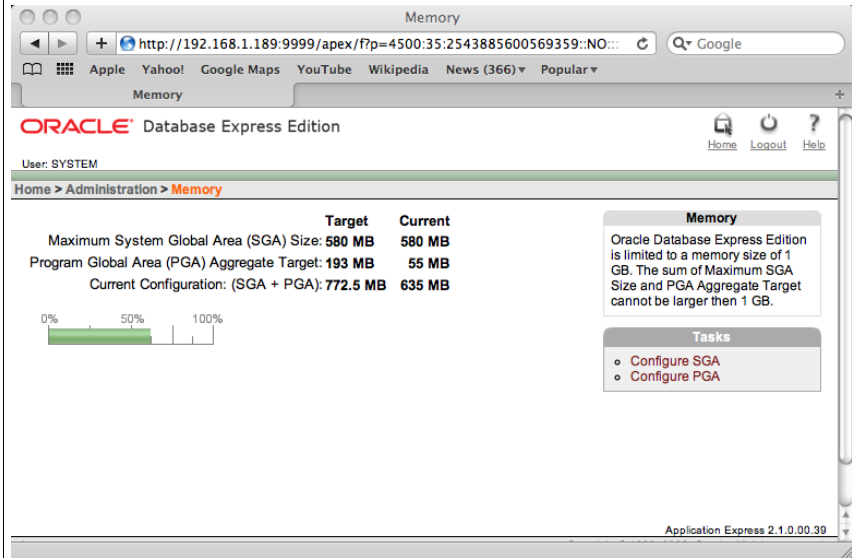
 TBD

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X soa@ jeos-ubuntu-08-04.3-ip
Install Oracle-XE	jeos-ubuntu-08-04.3 >> cd /export/linux-distrib jeos-ubuntu-08-04.3 >> sudo dpkg -i oracle-xe-universal_10.2.0.1-1.0_i386.deb
Initial-configuration Oracle-XE	jeos-ubuntu-08-04.3 >> sudo /etc/init.d/oracle-xe configure Specify the HTTP port that will be used for Oracle Application Express [8080]: 9999 Specify a port that will be used for the database listener [1521]: Specify a password to be used for database accounts. Note that the same password will be used for SYS and SYSTEM. Oracle recommends the use of different passwords for each database account. This can be done after initial configuration: sysmanager Confirm the password: sysmanager Do you want Oracle Database 10g Express Edition to be started on boot (y/n) [Y]:
Post-configuration Oracle-XE : firewall	jeos-ubuntu-08-04.3 >> sudo ufw allow 9999 jeos-ubuntu-08-04.3 >> sudo ufw allow 1521 jeos-ubuntu-08-04.3 >> sudo ufw status
Post-configuration Oracle-XE : system env. variables	jeos-ubuntu-08-04.3 >> sudo vi \$HOME/.profile append the following lines at the end ORACLE_HOME=/usr/lib/oracle/xe/app/oracle/product/10.2.0/server export ORACLE_HOME PATH=\$ORACLE_HOME/bin:\$PATH export PATH
Post-configuration Oracle-XE : allow Oracle-XE DataBase Home Page remote access	jeos-ubuntu-08-04.3 >> sqlplus sys/sysmanager@XE as sysdba SQL > EXEC DBMS_XDB.SetListenerLocalAccess(l_access => FALSE); SQL > commit; SQL > exit;
Test Oracle-XE DataBase Home Page locally	Not possible. We don't have a Desktop ubuntu version but only a jeos ubuntu with xorg packages ONLY.

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Test Oracle-XE DataBase Home Page remotely

On a remote system, the host-system, launch a web browser on the following url :
<http://jeos-ubuntu-08-04.3-ip:9999/apex>
 You should get the following after the login window :



You are done with the installation and configuration of Oracle-XE for jeos-ubuntu-08-04.3.

4.2. Java JDK installation and configuration



Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X soa@ jeos-ubuntu-08-04.3-ip
Install Java JDK 1.6.0	<pre> jeos-ubuntu-08-04.3 >> cd /export/linux-distrib jeos-ubuntu-08-04.3 >> sudo chmod +x jdk-6u18-linux-i586.bin jeos-ubuntu-08-04.3 >> ./jdk-6u18-linux-i586.bin jeos-ubuntu-08-04.3 >> sudo mkdir /usr/local/jdk jeos-ubuntu-08-04.3 >> sudo mv jdk1.6.0_18/ /usr/local/jdk/ jeos-ubuntu-08-04.3 >> JAVA_HOME=/usr/local/jdk/jdk1.6.0_18 jeos-ubuntu-08-04.3 >> export JAVA_HOME jeos-ubuntu-08-04.3 >> PATH=\$JAVA_HOME/bin:\$PATH jeos-ubuntu-08-04.3 >> export PATH jeos-ubuntu-08-04.3 >> java -version </pre>

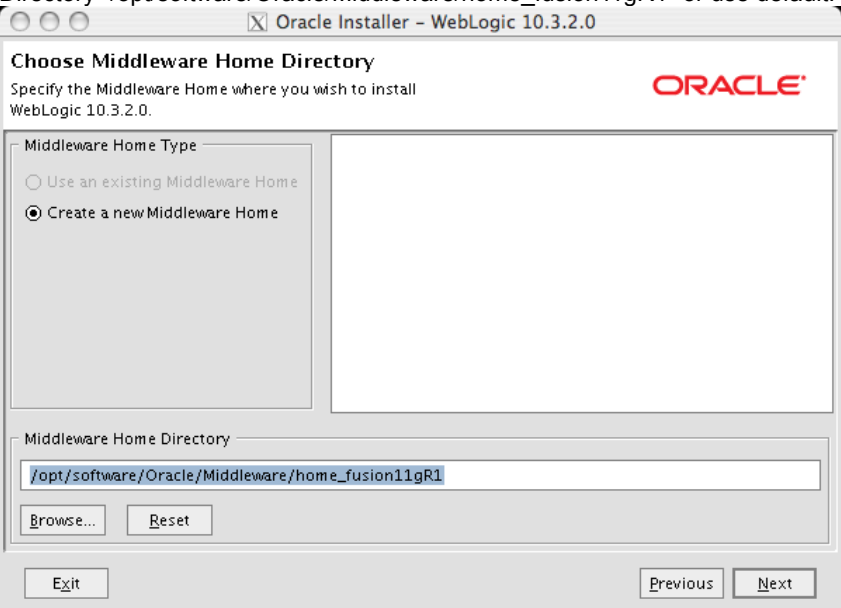
You are done with the installation and configuration of Java JDKr for jeos-ubuntu-08-04.3.

4.3. Weblogic Server installation and configuration

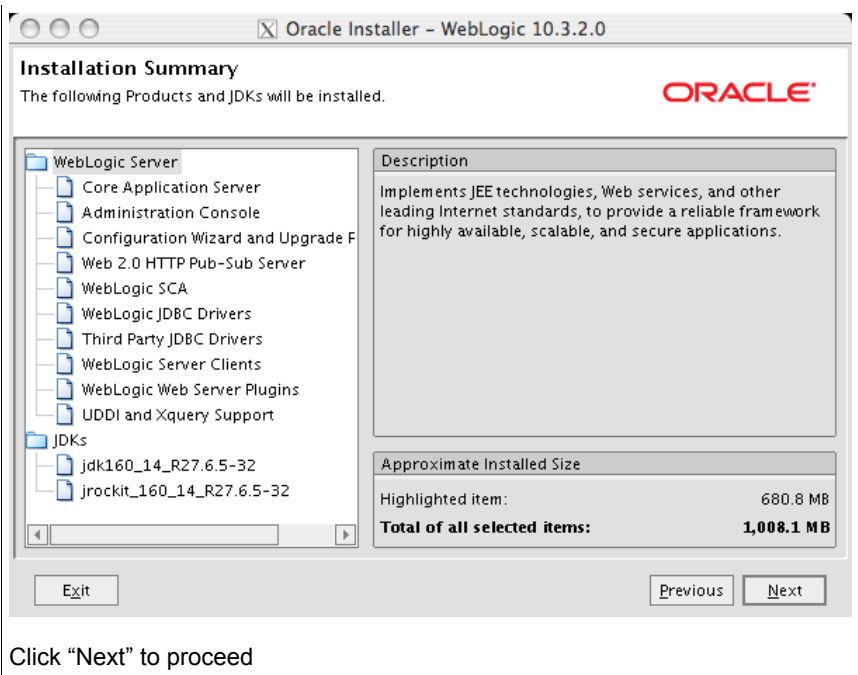


Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X soa@ jeos-ubuntu-08-04.3-ip

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<p>Start ssh session on jeos-ubuntu-08-04.3</p>	<pre>jeos-ubuntu-08-04.3 >> cd /export/linux-distrib jeos-ubuntu-08-04.3 >> sudo chmod +x oepe111130_wls1032_linux32.bin jeos-ubuntu-08-04.3 >> sudo ./oepe111130_wls1032_linux32.bin</pre>
<p>Welcome screen</p>	<p>When the Welcome screen for the install wizard comes up, click Next to proceed</p>
<p>Middleware Home Directory screen</p>	<p>Select "Create a new Middleware Home" and enter a new Middleware Home Directory "/opt/software/Oracle/Middleware/home_fusion11gR1" or use default.</p>  <p>and then click Next to proceed</p>
<p>Register for Security Updates screen</p>	<p>Uncheck the box "I wish to receive security updates via My Oracle Support" and then click Next to proceed</p>
<p>Install Type screen</p>	<p>Choose option 2 "Custom" and then click Next to proceed In the next screen "Choose Products and Components" uncheck the box "Oracle Enterprise Pack for Eclipse" and then click Next to proceed</p>
<p>JDK Selection screen</p>	<p>Click Next to proceed</p>
<p>Product Installation Directories screen</p>	<p>Enter a new Product Installation Directory for "WebLogic Server" or use default "/opt/software/Oracle/Middleware/home_fusion11gR1/wlserver_10.3" Click Next to proceed</p>
<p>Installation Summary screen</p>	<p>Double-check your configuration</p>

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	 <p>Click "Next" to proceed</p>
Installation Complete screen	Click "Done" to exit the installer.

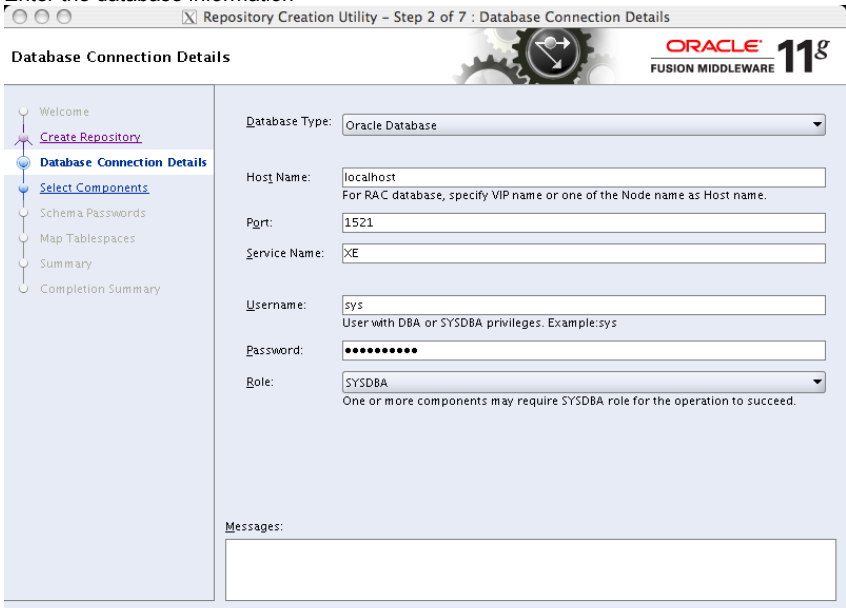
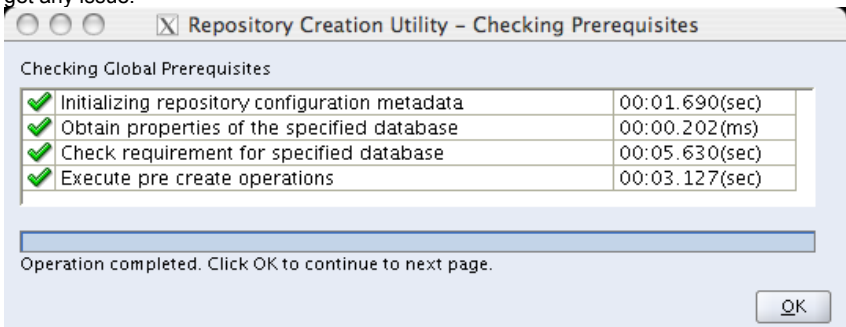
You are done with the installation and configuration of Weblogic Server for jeos-ubuntu-08-04.3.

4.4. Repository Creation Utility installation and configuration



Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X oracle@jeos-ubuntu-08-04.3-ip
	<pre>jeos-ubuntu-08-04.3 >> sqlplus sys/sysmanager@XE as sysdba SQL> show parameter processes //processes should be 40 – must be 200 SQL> alter system set processes = 200 scope=spfile; SQL> show parameter session SQL> alter system reset sessions scope=spfile sid='*'; SQL> shutdown immediate SQL> startup //doesn't work ORA-12514: TNS:listener does not currently know of service requested in connect descriptor SQL> exit jeos-ubuntu-08-04.3 >> sudo /etc/init.d/oracle-xe start</pre>
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X oracle@jeos-ubuntu-08-04.3-ip
To create the Repository via cli Start a ssh session on jeos-ubuntu-08-04.3	<pre>jeos-ubuntu-08-04.3 >> cd /export/linux-distrib jeos-ubuntu-08-04.3 >> sudo unzip ofm_rcu_linux_11.1.1.2.0_disk1_1of1.zip jeos-ubuntu-08-04.3 >> sudo mv rcuHome /opt/software/Oracle/Middleware/ jeos-ubuntu-08-04.3 >> cd /opt/software/Oracle/Middleware/rcuHome/bin</pre>
Comment	<pre>./rcu -silent -createRepository -connectString localhost:1521:XE -dbUser sys -dbRole sysdba – component ??? Please enter the database password:sysmanager [ERROR :: No idea of the component syntax – no info in the Oracle Doc] workaround : Doit remotely from an other paltform already setup with RCU.</pre>

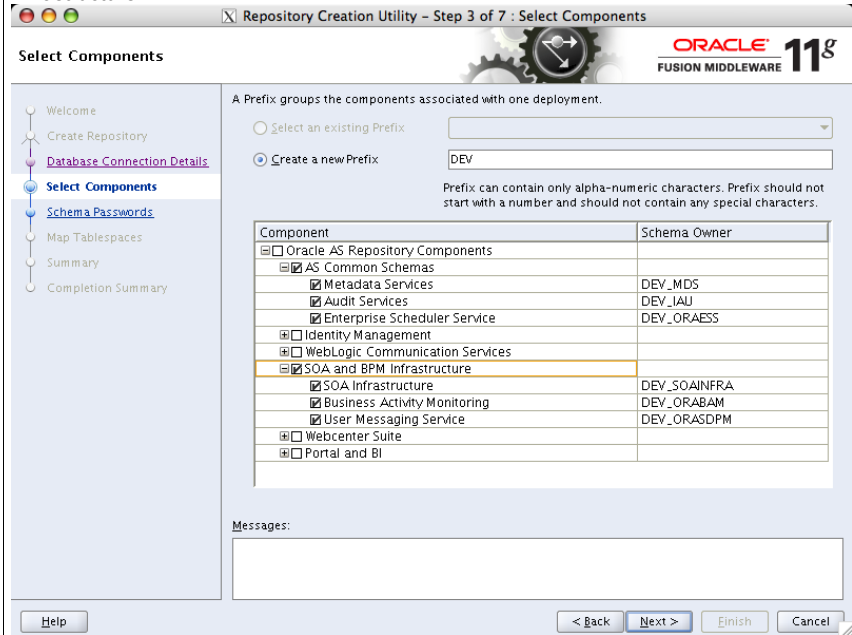
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<p>Create the Repository with the rcu installer</p>	<pre>jeos-ubuntu-08-04.3 >> sudo ./rcu</pre>
<p>Welcome screen</p>	<p>Click Next to proceed</p>
<p>Create Repository screen</p>	<p>Select Create and click Next to proceed</p>
<p>Database Connection details enter the following parameters :</p> <p>host : jeos-ubuntu-08-04.3-ip or localhost port : 1521 Service Name : XE User : sys Password : sysmanager</p>	<p>Enter the database information</p>  <p>and click Next to proceed</p>
<p>RCU – Checking Prerequisites</p>	<p>The rcu installer performs some checking. Just follow the process to be sure you don't get any issue.</p>  <p>Click OK to proceed</p>

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Select Components screen

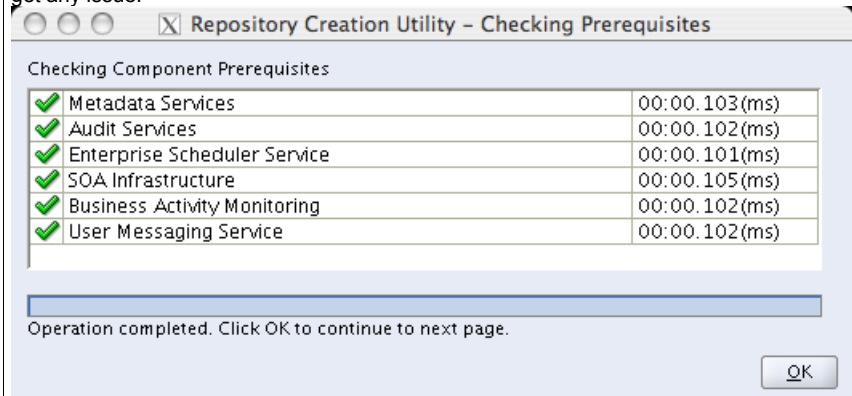
Select the components to be installed : AS Common Schemas + SOA and BPM Infrastructure



Click OK to proceed

RCU – Checking Prerequisites

The rcu installer performs some checking. Just follow the process to be sure you don't get any issue.



Click Suivant to proceed

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Schemas Passwords screen

Enter the password for all the schemas as sysmanager

Repository Creation Utility - Step 4 of 7 : Schema Passwords

ORACLE 11g
FUSION MIDDLEWARE

Schema Passwords

Welcome
Create Repository
Database Connection Details
Select Components
Schema Passwords
Map Tablespaces
Summary
Completion Summary

Please enter the passwords for the main and additional (auxiliary) schema users. Password can contain alphabets, numbers and the following special characters: \$, #, _ . Password should not start with a number or a special character.

Use same passwords for all schemas

Password:

Confirm Password:

Use main schema passwords for auxiliary schemas

Specify different passwords for all schemas

Component	Schema Owner	Schema Password	Confirm Password
Metadata Services	DEV_MDS		
Audit Services	DEV_IAU		
Auxiliary Schema	DEV_IAU_Append		
Auxiliary Schema	DEV_IAU_Viewer		
Enterprise Scheduler Service	DEV_ORAESS		
SOA Infrastructure	DEV_SOAINFRA		
Business Activity Monitoring	DEV_ORABAM		
User Messaging Service	DEV_ORASDPM		

Messages:

Help < Back Next > Finish Cancel

Click OK to proceed

Map Tablespaces screen

Choose the tablespaces for the selected components

Repository Creation Utility - Step 5 of 7 : Map Tablespaces

ORACLE 11g
FUSION MIDDLEWARE

Map Tablespaces

Welcome
Create Repository
Database Connection Details
Select Components
Schema Passwords
Map Tablespaces
Summary
Completion Summary

Choose tablespaces for the selected components. The default and temporary tablespaces are specified in the table below.
To create new tablespaces or modify existing tablespaces click the 'Manage Tablespaces' button.

Component	Schema Owner	Default Tablespace	Temp Tablespace
Metadata Services	DEV_MDS	*DEV_MDS	*DEV_IAS_TEMP
Audit Services	DEV_IAU	*DEV_IAS_IAU	*DEV_IAS_TEMP
Enterprise Scheduler ...	DEV_ORAESS	*DEV_ORAESS	*DEV_IAS_TEMP
SOA Infrastructure	DEV_SOAINFRA	*DEV_SOAINFRA	*DEV_IAS_TEMP
Business Activity Mon...	DEV_ORABAM	*DEV_ORABAM	*DEV_IAS_TEMP
User Messaging Service	DEV_ORASDPM	*DEV_IAS_ORASDPM	*DEV_IAS_TEMP

* Default tablespaces (specified in the configuration files) are to be created upon confirmation.

Manage Tablespaces

Messages:

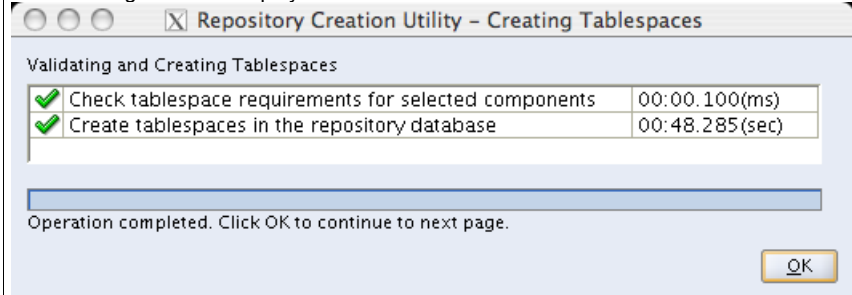
Help < Back Next > Finish Cancel

Click on Next to proceed

Sun Glasfish WebSpace 10 Server Hands On Exercises

TableSpace creation screen

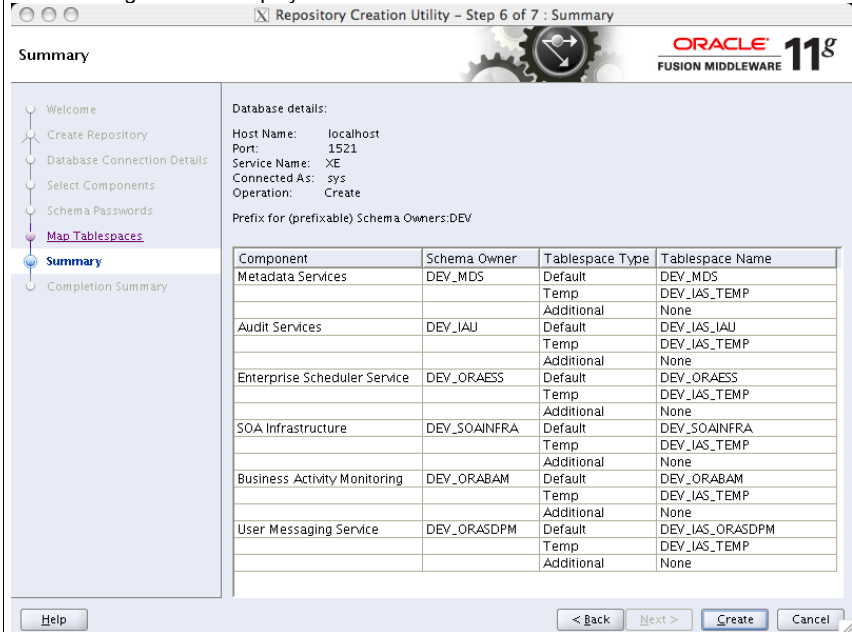
The following screen is displayed



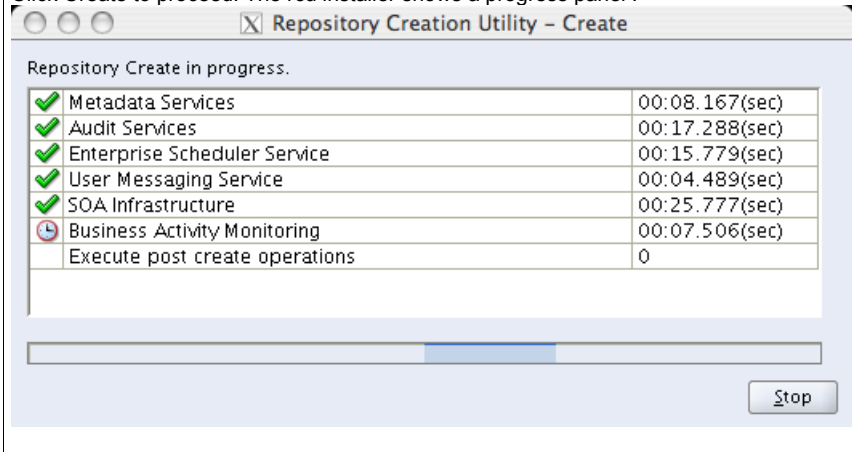
Click OK to proceed

Summary screen

The following screen is displayed



Click Create to proceed. The rcu installer shows a progress panel :



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Completion Summary screen
When the tablespaces and schemas for components are created, the following summary is displayed.

Double-check the result

Completion Summary

Database details:

Host Name: localhost
Port: 1521
Service Name: XE
Connected As: sys
Operation: Create
RCU Logfile: /opt/software/Oracle/Middleware/rcuHome/rcu/log/logdir.2010-01-19_17-28/rcu.log
Component Log Directory: /opt/software/Oracle/Middleware/rcuHome/rcu/log/logdir.2010-01-19_17-28
Execution Time: 2 minutes 37 seconds
Prefix for (prefixable) Schema Owners:DEV

Component	Status	Logfile	Time
Metadata Services	Success	mds.log	00:08.044(sec)
Audit Services	Success	lau.log	00:17.173(sec)
Enterprise Scheduler Service	Success	oraess.log	00:15.713(sec)
SOA Infrastructure	Success	soainfra.log	00:25.667(sec)
Business Activity Monitoring	Success	bam.log	00:31.725(sec)
User Messaging Service	Success	orasdpn.log	00:04.384(sec)

Buttons: Help, < Back, Next >, Create, Close

Click on Close to finish this installation.

You are done with the installation and configuration of RCU for jeos-ubuntu-08-04.3.

4.5. SOA Suite installation and configuration

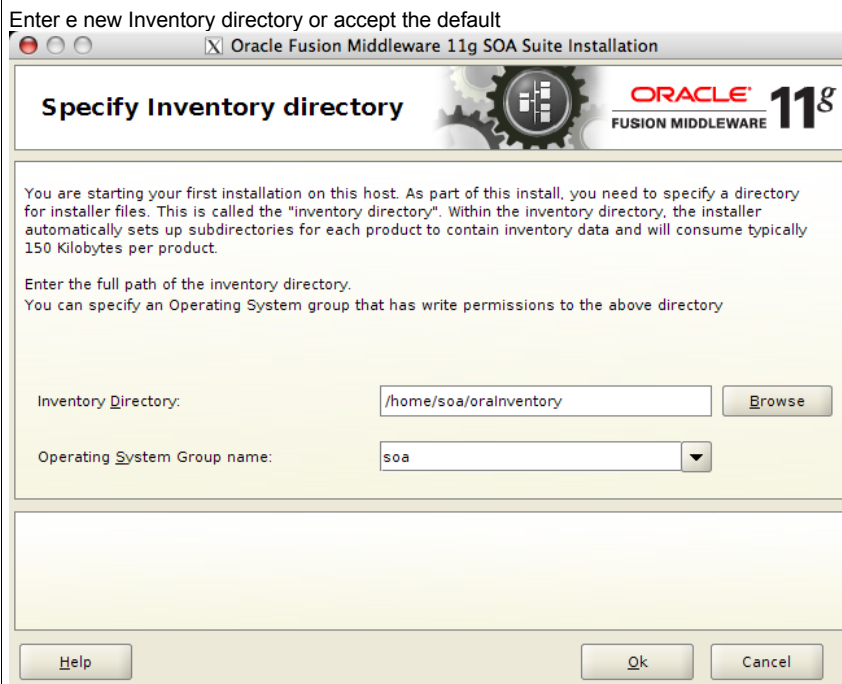


4.5.1. SOA Suite Installation

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X soa@jeos-ubuntu-08-04.3-ip
Start the installer	<pre>jeos-ubuntu-08-04.3 >> cd /export/linux-distrib jeos-ubuntu-08-04.3 >> sudo unzip ofm_soa_generic_11.1.1.2.0_disk1_1of1.zip jeos-ubuntu-08-04.3 >> cd /export/linux-distrib/Disk1 jeos-ubuntu-08-04.3 >> ./runInstaller -jreLoc /usr/local/jdk/jdk1.6.0_18</pre> <p>Comment : to run this installation it is required NOT to be a root user.</p> <p>A graphical window is displayed to complete the SOA Suite installation</p>

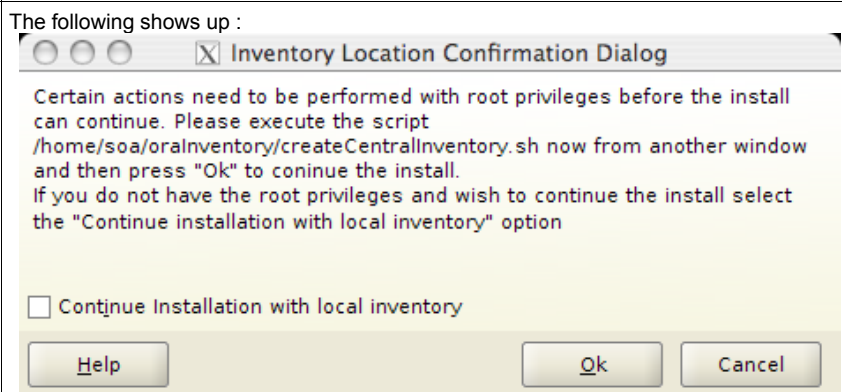
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Specify Inventory directory screen



Click OK to proceed

Inventory Location Confirmation screen



```

Launch a new ssh session
ssh -X soa@jeos-ubuntu-08-04.3-ip
jeos-ubuntu-08-04.3 >> cd /home/soa/orainventory
jeos-ubuntu-08-04.3 >> sudo sudo ./createCentralInventory.sh
jeos-ubuntu-08-04.3 >> logout
    
```

Sun Glasfish WebSpace 10 Server Hands On Exercises

Welcome screen

The installer starts

Click Next to proceed

Prerequisites checks screen

The installer performs the following tests

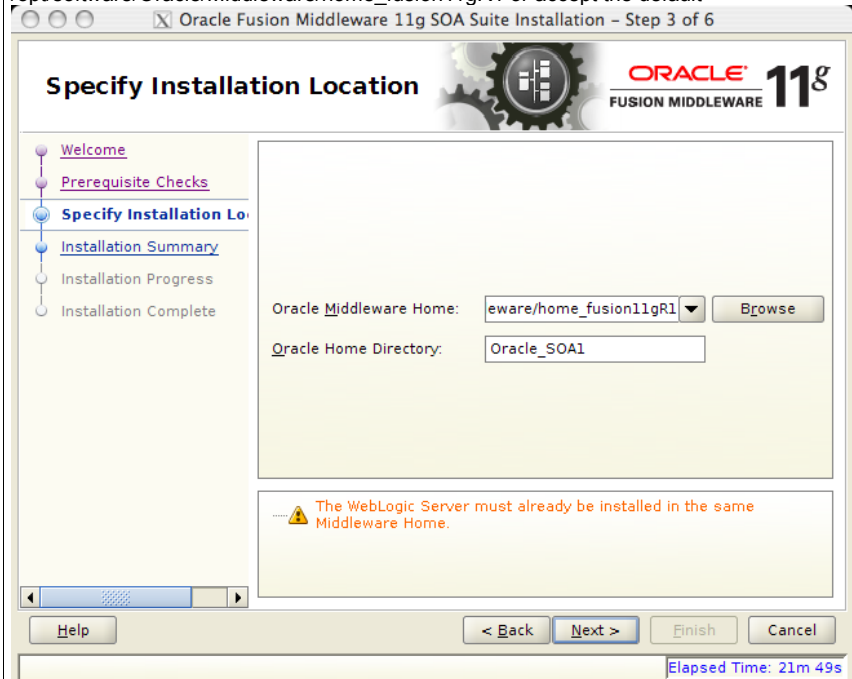
Select...	Check	Progress	Status
<input checked="" type="checkbox"/>	Checking operating system cert...	100%	⚠
<input checked="" type="checkbox"/>	Checking recommended operati...	100%	✖
<input checked="" type="checkbox"/>	Checking kernel parameters	100%	✖
<input checked="" type="checkbox"/>	Checking Recommended glibc v...	100%	⚠
<input checked="" type="checkbox"/>	Checking physical memory	100%	✔

Keep going. Click Continue to proceed.

Sun Glasfish WebSpace 10 Server Hands On Exercises

Installation Location screen

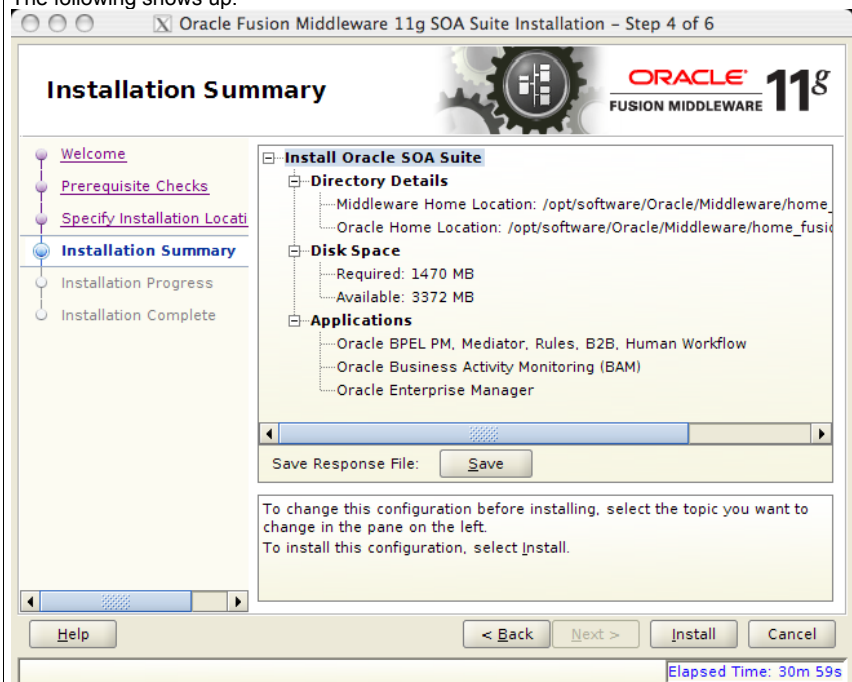
```
sudo chown -R soa:software home_fusion11gR1
Enter a new OracleMiddleware Home directory
/opt/software/Oracle/Middleware/home_fusion11gR1 or accept the default
```



click Next to proceed

Installation Summary screen

The following shows up.



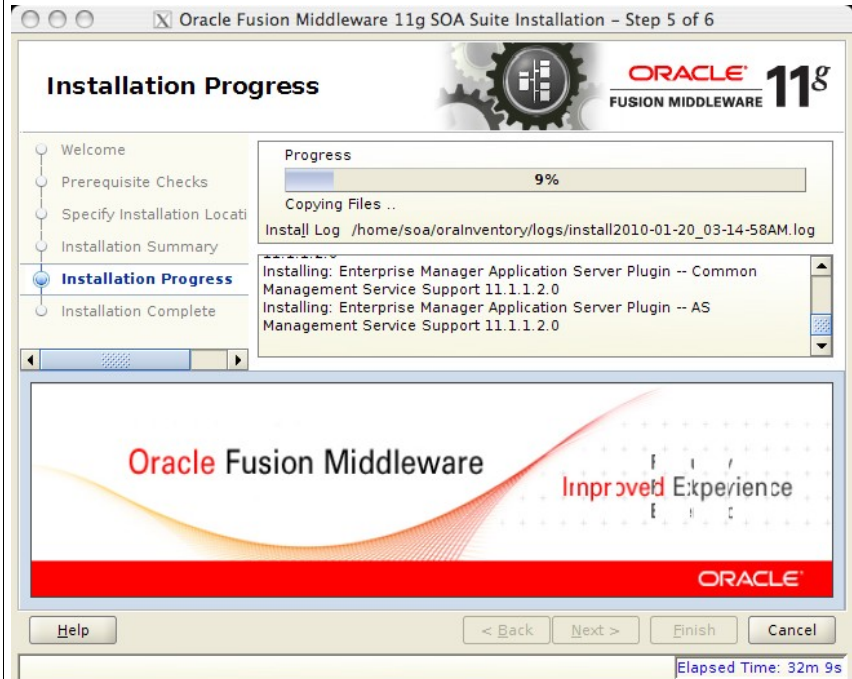
Click Install to proceed

Sun Glasfish WebSpace 10 Server Hands On Exercises

Installation Progress screenshot

The installation starts.

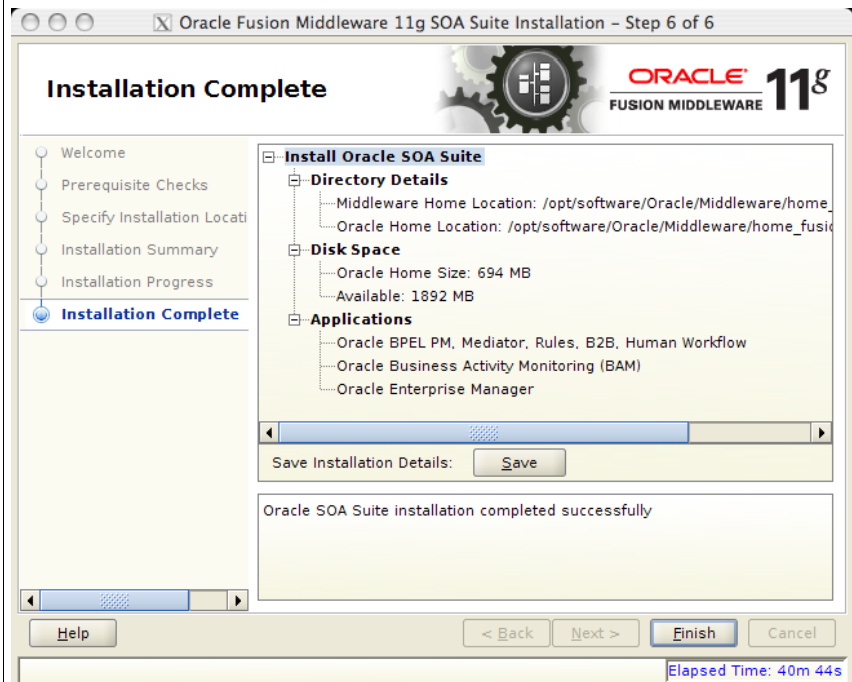
It is a good practice to monitor the installation in tailing the installation log file
start a new ssh session
tail -f /home/soa/orainventory/logs/install2010-01-20_03-14-58AM.log



When the Installation Process finishes, click Next.

Installation Complete screen

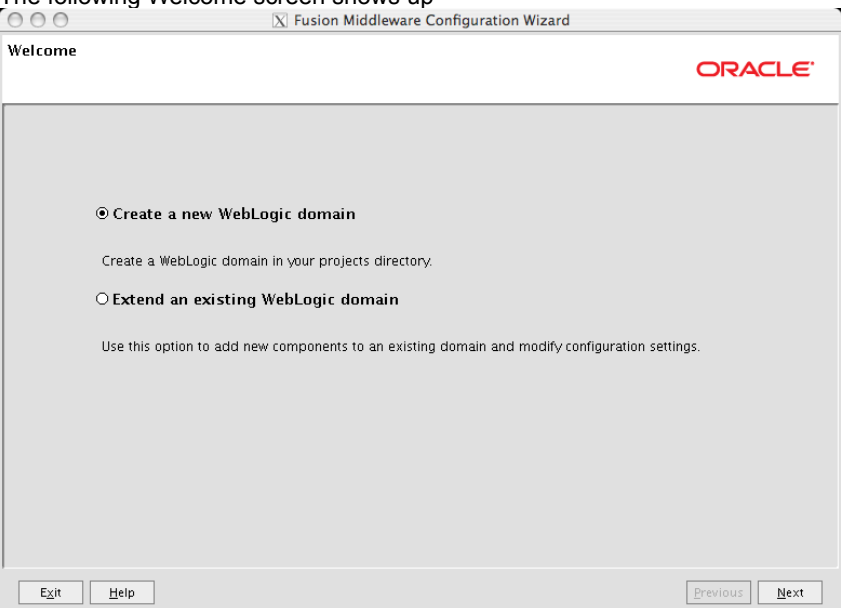
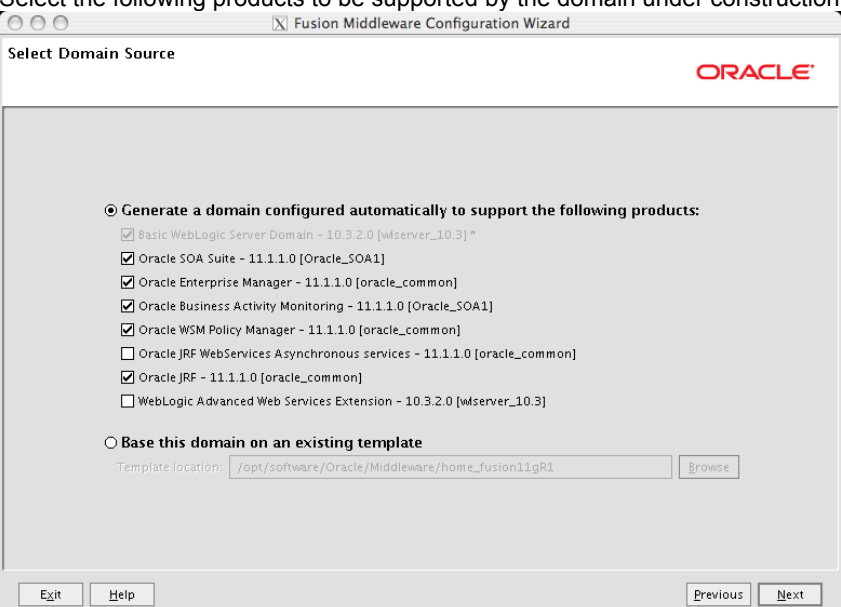
The following shows up



click Finish to exit from the installer.

Sun Glasfish WebSpace 10 Server Hands On Exercises

4.5.2. Creating a SOA Domain

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X soa@jeos-ubuntu-08-04.3-ip
Start the CreateDomain utility	jeos-ubuntu-08-04.3 >> cd /opt/software/Oracle/Middleware/home_fusion11gR1/Oracle_SOA1/common/bin jeos-ubuntu-08-04.3 >> ./config.sh
Welcome screen	<p>The following Welcome screen shows up</p>  <p>Select Create a new Weblogic domain Click Next to proceed</p>
Select Domain Source screen	<p>Select the following products to be supported by the domain under construction</p>  <p>Click Next to proceed</p>

Sun Glasfish WebSpace 10 Server Hands On Exercises

Specify DomainName and Location screen

Enter a new Domain Name (SOA_domain) or accept the default

Click on Next to proceed

Configure Administrator User Name and Password screen

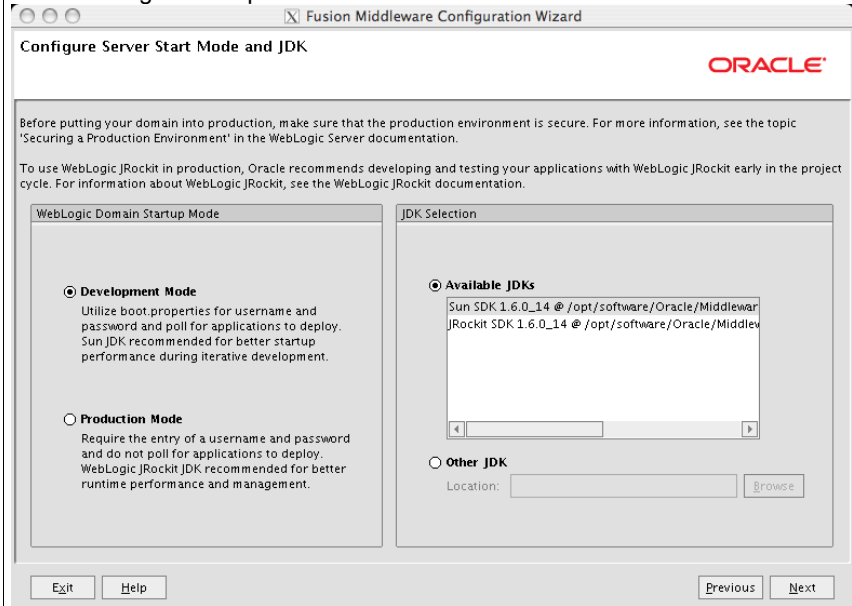
Enter UserName (weblogic) and Password (password1)

Click Next to proceed

Sun Glasfish WebSpace 10 Server Hands On Exercises

Configure Server Start Mode and JDK screen

The following shows up.



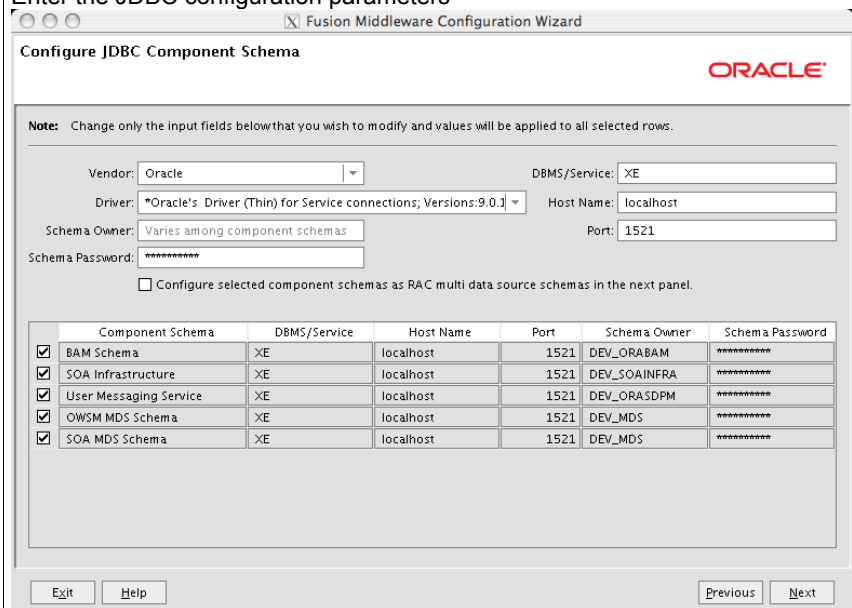
Click Next to proceed

Configure JDBC Component Schema screen

Enter the JDBC configuration parameters

Database Connection details enter the following parameters :

host : jeos-ubuntu-08-04.3-ip or localhost
 port : 1521
 Service Name : XE
 User : sys
 Password : sysmanager

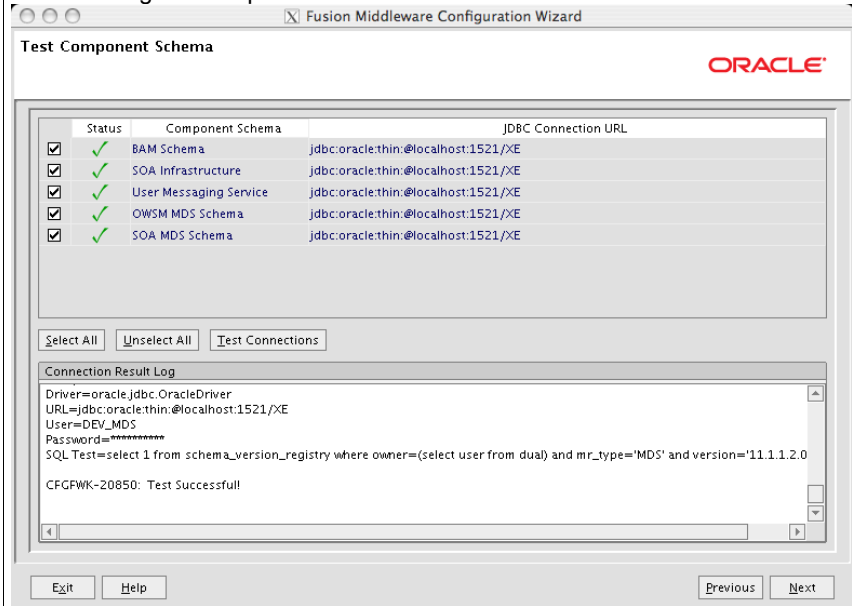


Click Next to proceed

Sun Glasfish WebSpace 10 Server Hands On Exercises

Test Component Schema

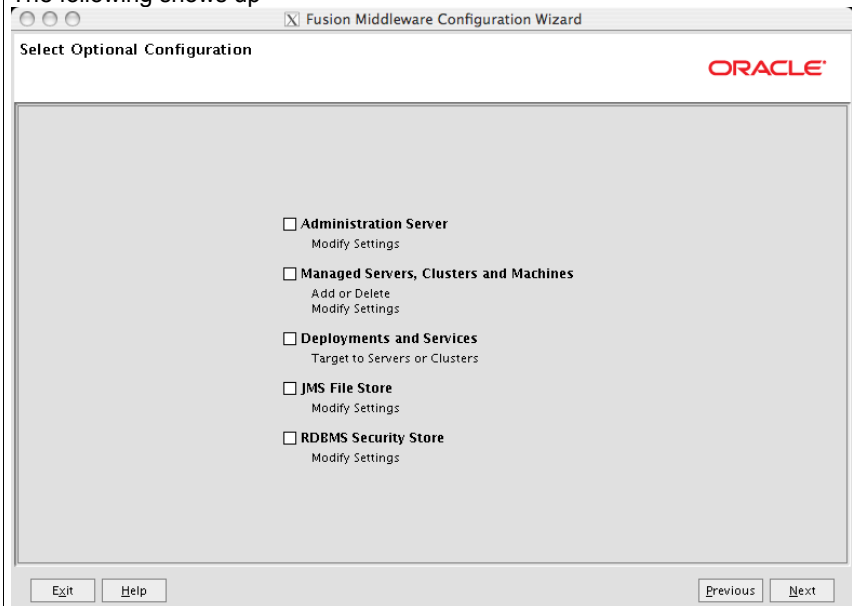
The following shows up :



Click Next to proceed

Select Optional Configuration screen

The following shows up

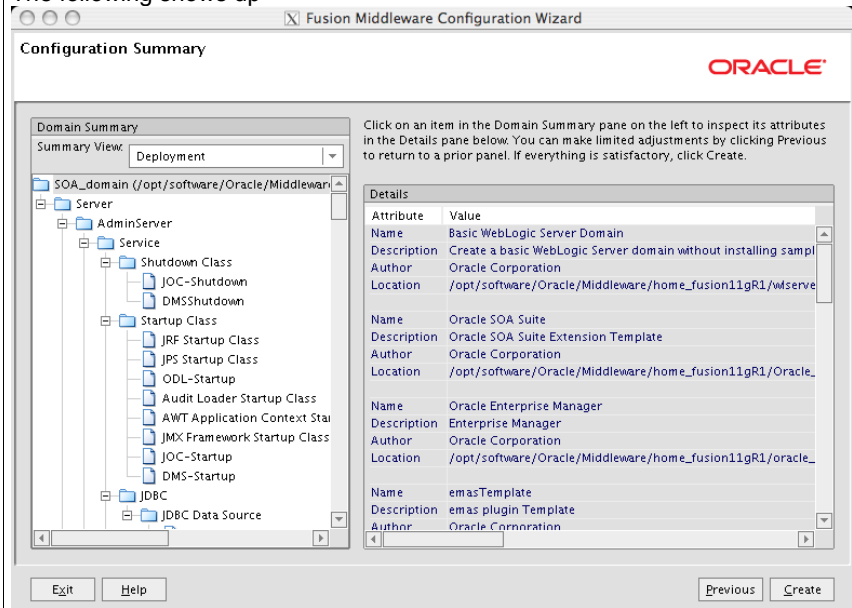


Click Next to proceed

Sun Glasfish WebSpace 10 Server Hands On Exercises

Configuration Summary screen

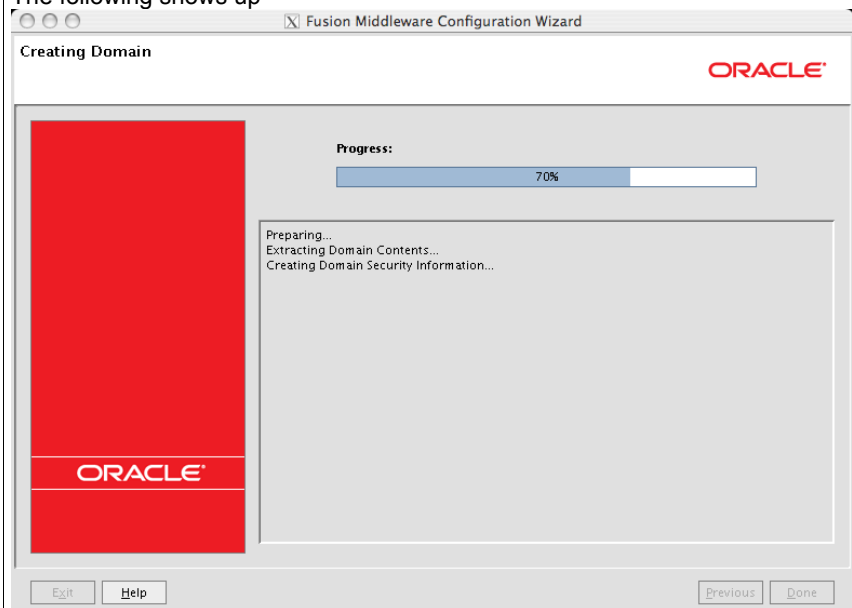
The following shows up



Click Create to proceed

Creating Domain screen

The following shows up



Domain Location :
/opt/software/Oracle/Middleware/home_fusion11gR1/user_projects/domains/S
OA_domain
Admin Server URL: http://jeos-ubuntu-08-4.3:7001

When the creation is complete, click Done to exit the installer

Sun Glasfish WebSpace 10 Server Hands On Exercises

Add port 7001 to the Firewall tables	<pre>jeos-ubuntu-08-04.3 >> sudo ufw allow 7001 jeos-ubuntu-08-04.3 >> sudo ufw status The configuration is : Firewall loaded To Action From -- - 22:tcp ALLOW Anywhere 22:udp ALLOW Anywhere 1521:tcp ALLOW Anywhere 1521:udp ALLOW Anywhere 9999:tcp ALLOW Anywhere 9999:udp ALLOW Anywhere 7001:tcp ALLOW Anywhere 7001:udp ALLOW Anywhere</pre>
--------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

You are done with the installation and configuration of SOASuite for jeos-ubuntu-08-04.3.

5. Starting Stopping the world

5.1. Oracle-XE database

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X oracle@ jeos-ubuntu-08-04.3-ip
Start Oracle-XE	The Database is automatically starts when the jeos-ubuntu-08-04.3 virtualbox image starts
Manually start Oracle-XE	jeos-ubuntu-08-04.3 >> sudo /etc/init.d/oracle-xe start
Stop Oracle-XE	jeos-ubuntu-08-04.3 >> sudo /etc/init.d/oracle-xe stop

5.2. Weblogic Admin server

5.2.1. Start/Stop server

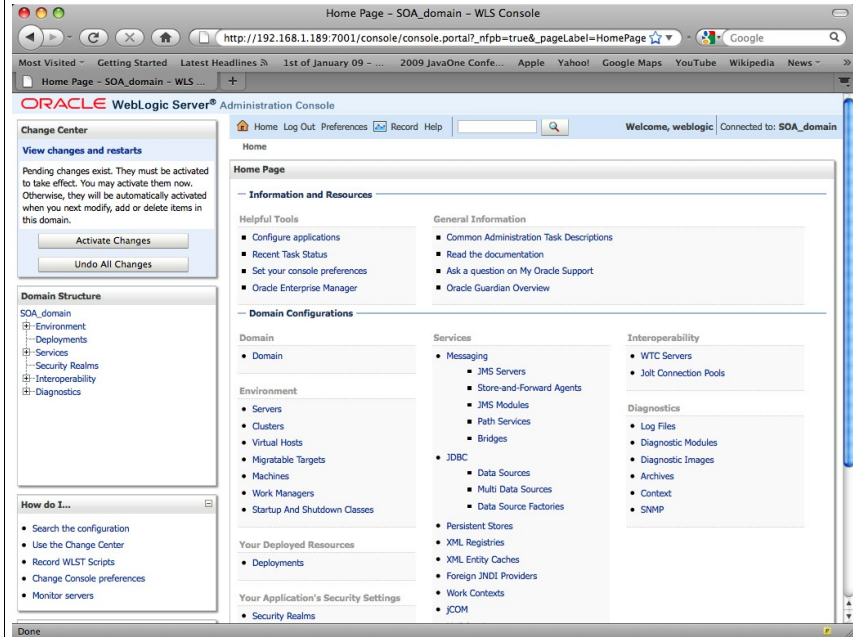
Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X soa@ jeos-ubuntu-08-04.3-ip
Start Weblogic Admin server	jeos-ubuntu-08-04.3 >> cd /opt/software/Oracle/Middleware/home_fusion11gR1/user_projects/domains/SOA_domain jeos-ubuntu-08-04.3 >> ./startWebLogic.sh&
Stop Weblogic Admin server	jeos-ubuntu-08-04.3 >> kill -9 process-id or jeos-ubuntu-08-04.3 >> ./stopWebLogic.sh

5.2.2. URL

Step	Screenshot
Weblogic Admin server Console	On a remote system, the host-system, launch a Web browser on the following url : http://jeos-ubuntu-08-04.3-ip:7001/console . You should be able to see the

Sun Glasfish WebSpace 10 Server Hands On Exercises

following after the login page.



The Admin console is available

5.3. SOA Domain managed Server

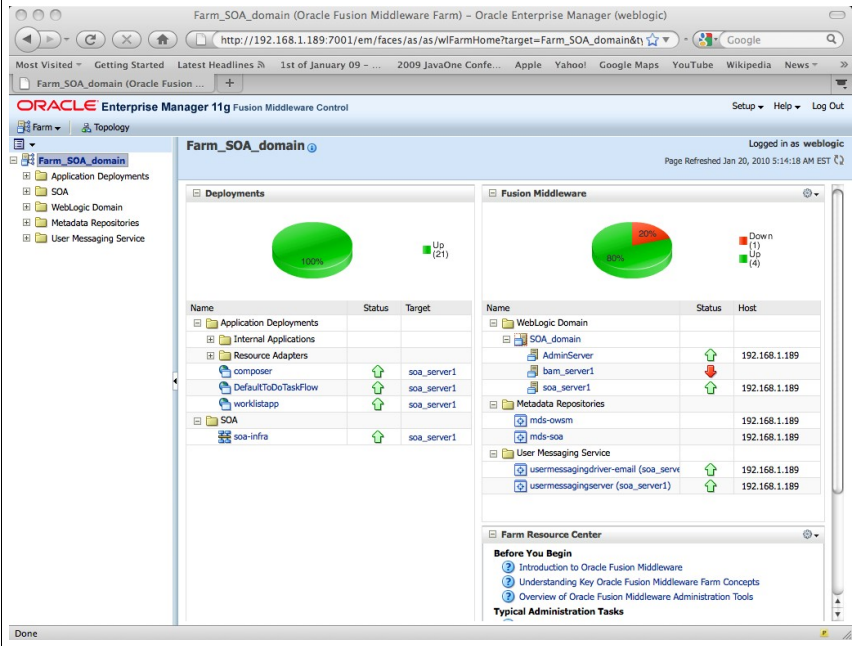
5.3.1. Start/Stop server

Step	Screenshot
Start a ssh session on jeos-ubuntu-08-04.3 if not already running	host-system>> ssh -X soa@jeos-ubuntu-08-04.3-ip
Start SOA Managed server	jeos-ubuntu-08-04.3 >> cd /opt/software/Oracle/Middleware/home_fusion11gR1/user_projects/domains/OA_domain/bin jeos-ubuntu-08-04.3 >> ./startManagedWebLogic.sh soa_server1 http://localhost:7001
Stop SOA Managed server	jeos-ubuntu-08-04.3 >> kill -9 process-id

5.3.2. URL

Step	Screenshot
SOA Managed server EnterpriseManager	On a remote system, the host-system, launch a Web browser on the following url http://jeos-ubuntu-08-04.3-ip:7001/em . You should be able to see the following after the login page.

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The screenshot displays the Oracle Enterprise Manager 11g Fusion Middleware Control console. The browser address bar shows the URL: http://192.168.1.189:7001/em/faces/jas/jwFarmHome?target=Farm_SOA_domain&t... The page title is "Farm_SOA_domain (Oracle Fusion Middleware Farm) - Oracle Enterprise Manager (weblogic)". The console shows a navigation tree on the left with "Farm_SOA_domain" selected. The main area is divided into two panels: "Deployments" and "Fusion Middleware". The "Deployments" panel shows a green progress indicator at 100% and a table with columns "Name", "Status", and "Target". The "Fusion Middleware" panel shows a green progress indicator at 20% and a table with columns "Name", "Status", and "Host". Below the tables, there is a "Farm Resource Center" section with links for "Before You Begin" and "Typical Administration Tasks".

The EnterpriseManager console is available

You are done with the installation and configuration of SOASuite for jeos-ubuntu-08-04.3.