



## **Step by Step SOA 12c Installation guide**

**Author: Amit Jain**

**Date written : 06/02/2014**

### **Platform Details**

- H/W Platform: Linux soa12c-live 3.8.13-55.1.1.el6uek.x86\_64 #2 SMP Thu Dec 11 00:20:49 PST 2014 x86\_64 x86\_64 x86\_64 GNU/Linux
- S/W Environment: Oracle
- Application Type: Middleware

### **Target readers**

Oracle SOA Suite Developers, System Administrators, Technical Architects, Technical Leads.

### **Keywords**

SOA 12c, Database Installation, Fusion Middleware

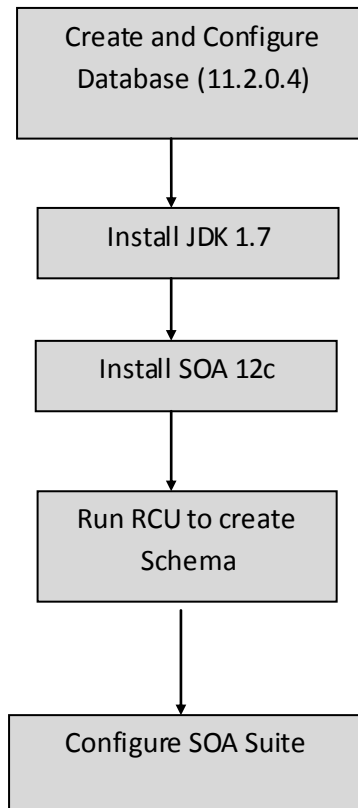
### **Overview**

This document provides a step by step procedure for the installation of Oracle SOA Suite 12c

## Contents

Sequence of Installation.....	4
Database Installation.....	5
Oracle SOA 12c Installation .....	16
Run RCU to create schema.....	22
Create a domain.....	27

# Sequence of Installation



**Note:**

Please refer the screenshots of the installation and/or configuration below each section.

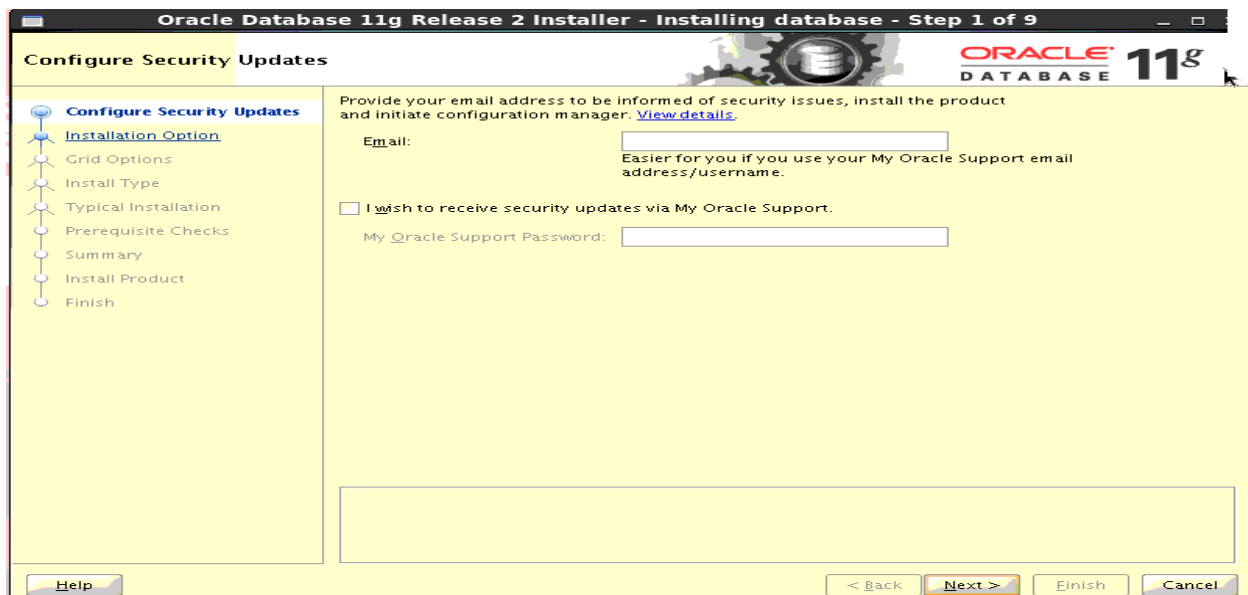
# Database Installation

- 1) Login as root user and install the Database package from yum repository by giving the below command. It will take care of the all the pre-requisite required by Oracle Database Server (<http://www.oracle.com/technetwork/articles/servers-storage-admin/ginnydbinstallonlinux-488779.html>)

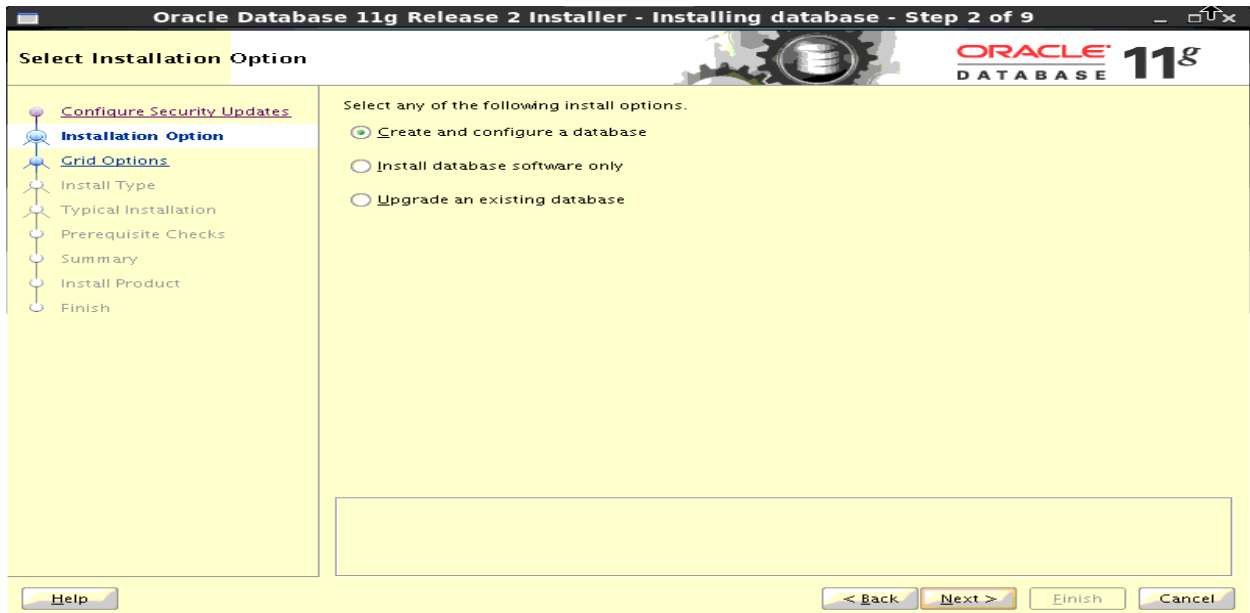
```
yum install oracle-rdbms-server-11gR2-preinstall
```

- 2) Download Oracle Database installer from support.oracle.com  
**Patch 13390677: 11.2.0.4.0 PATCH SET FOR ORACLE DATABASE SERVER**
- 3) Out of the 7 parts, for standard Database, we require only first 2 parts:  
p13390677\_112040\_Linux-x86-64\_1of7.zip  
p13390677\_112040\_Linux-x86-64\_2of7.zip
- 4) Unzip the above files.
- 5) Run the installer in the command prompt

```
./runInstaller
```



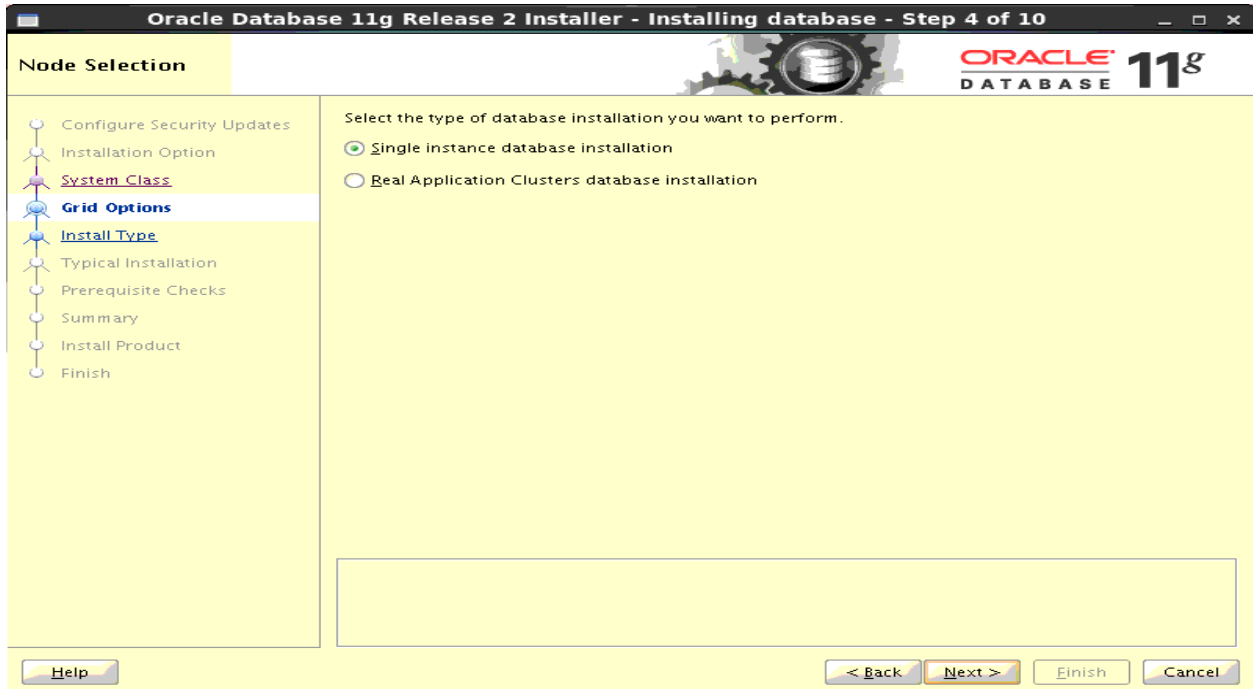
- 6) Click Next



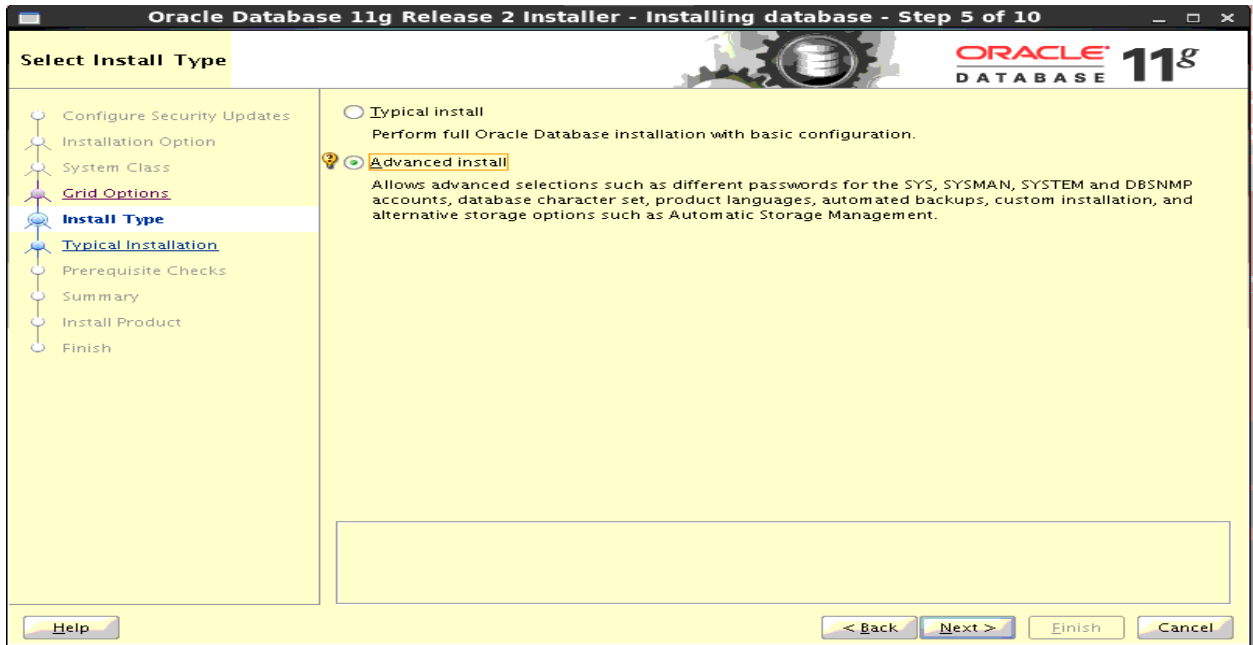
7) Select Create and Configure a database and hit Next



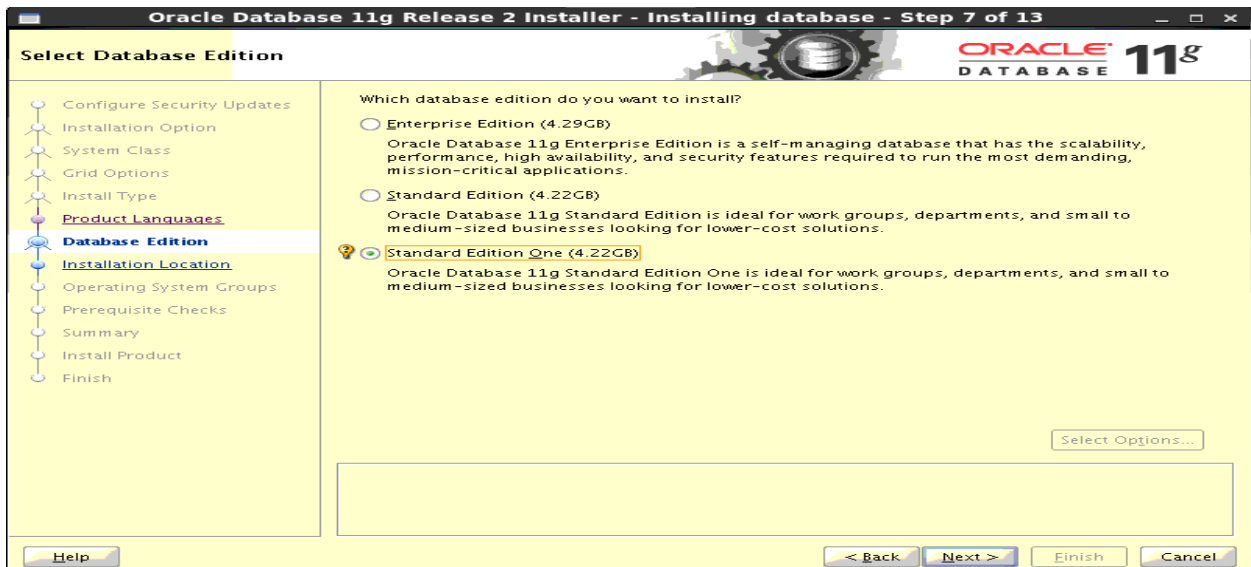
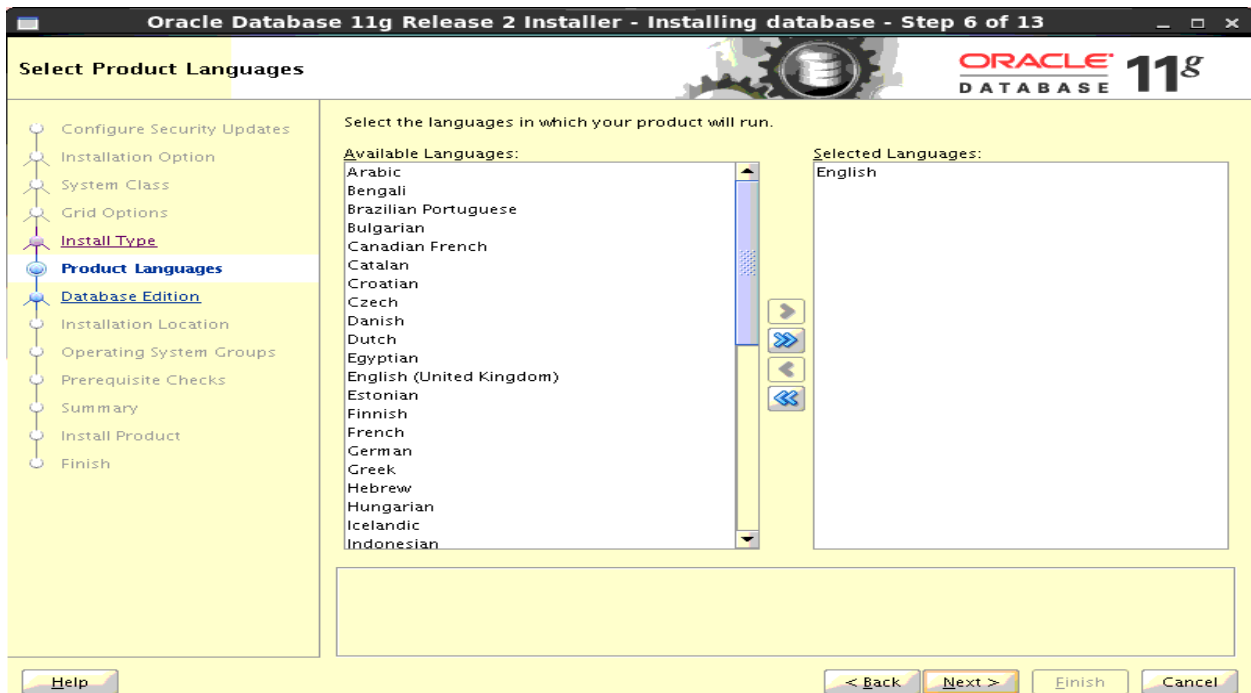
8) Select Server Class



9) Select Single Instance

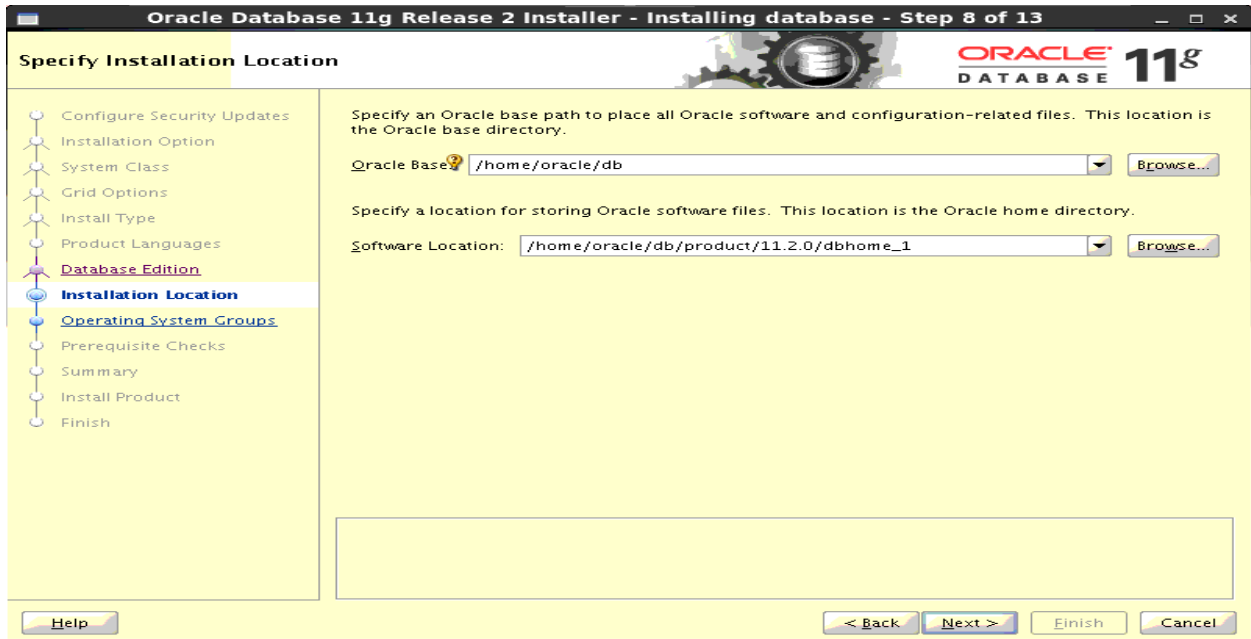


10) Select Advanced Install



11) Select Standard Edition One

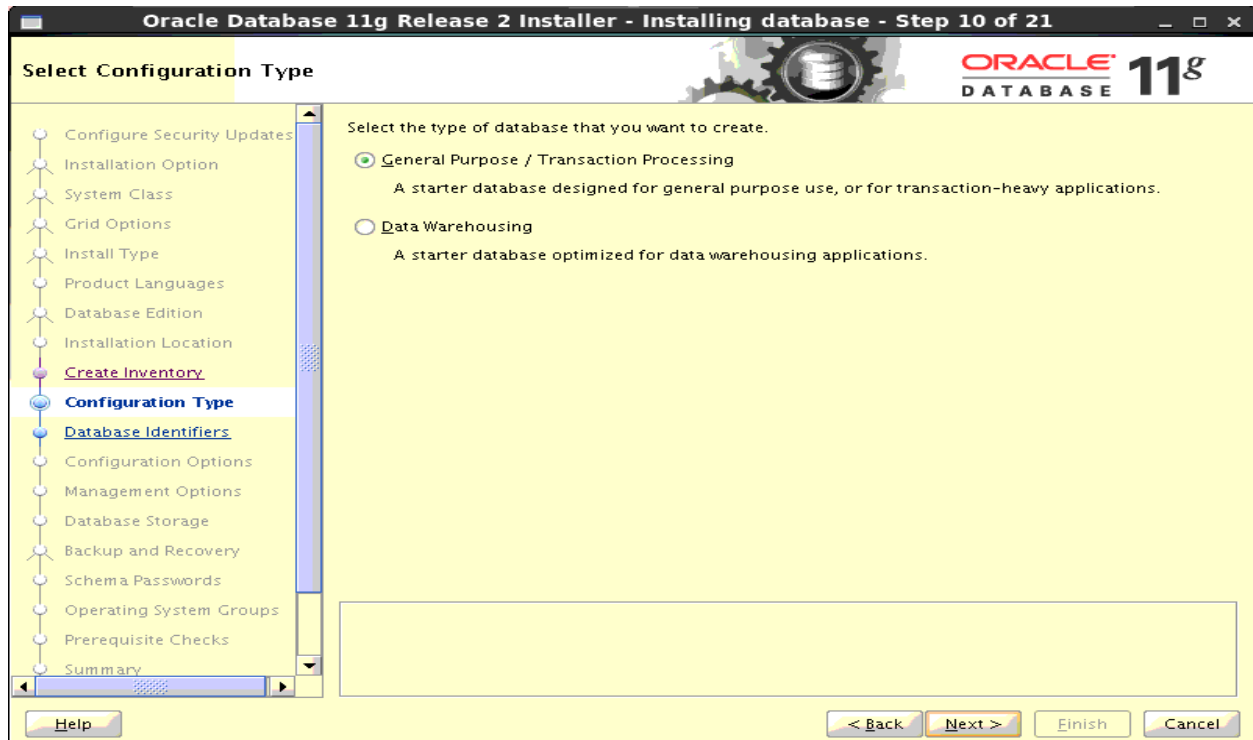




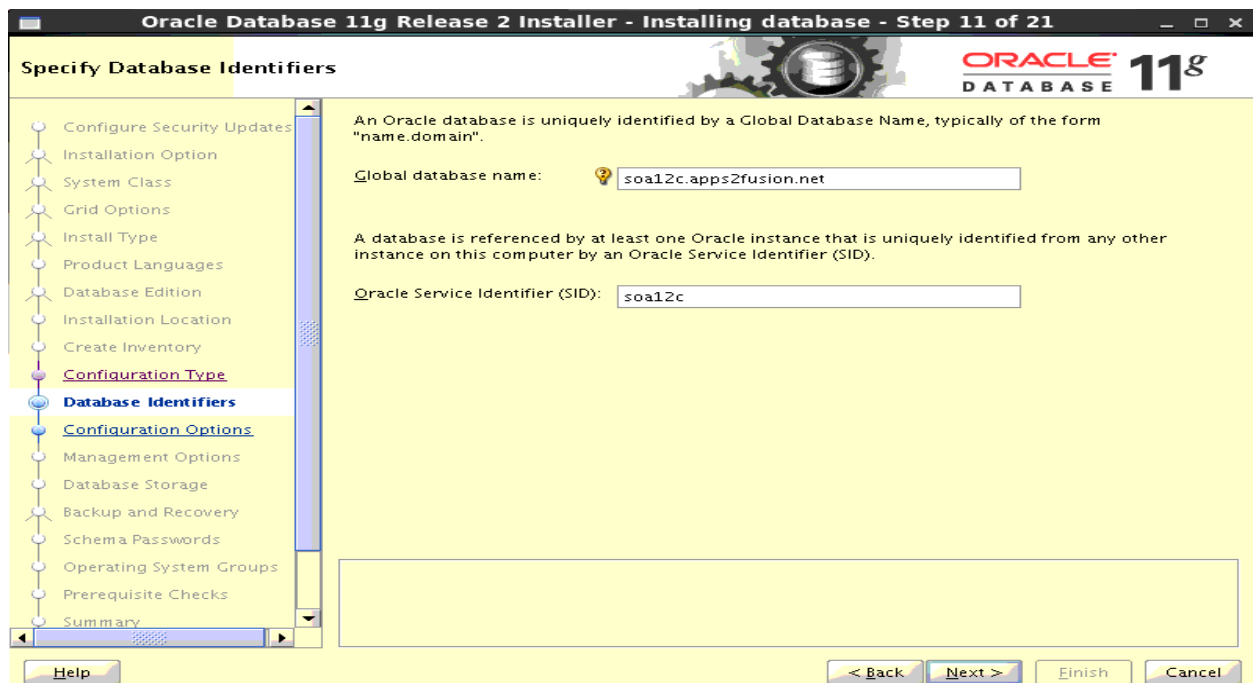
12) Give Orade Base as some directory location



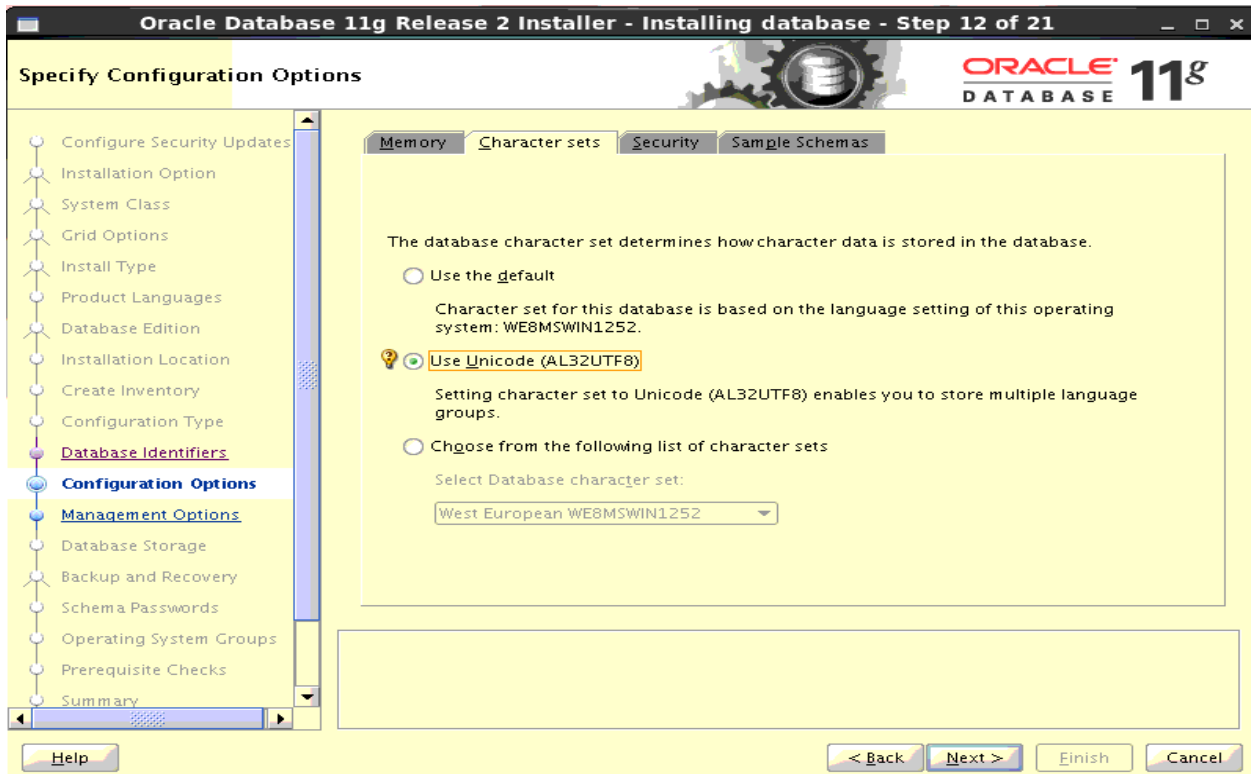
13) Select the default Inventory Location. Hit Next



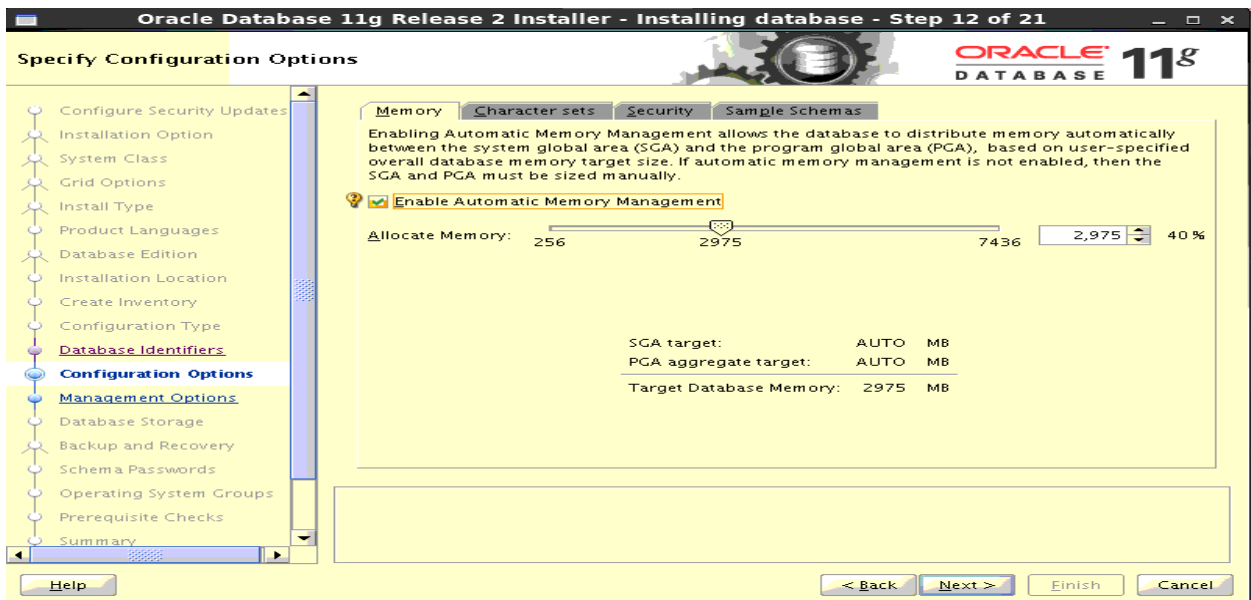
14) Select General Purpose Database



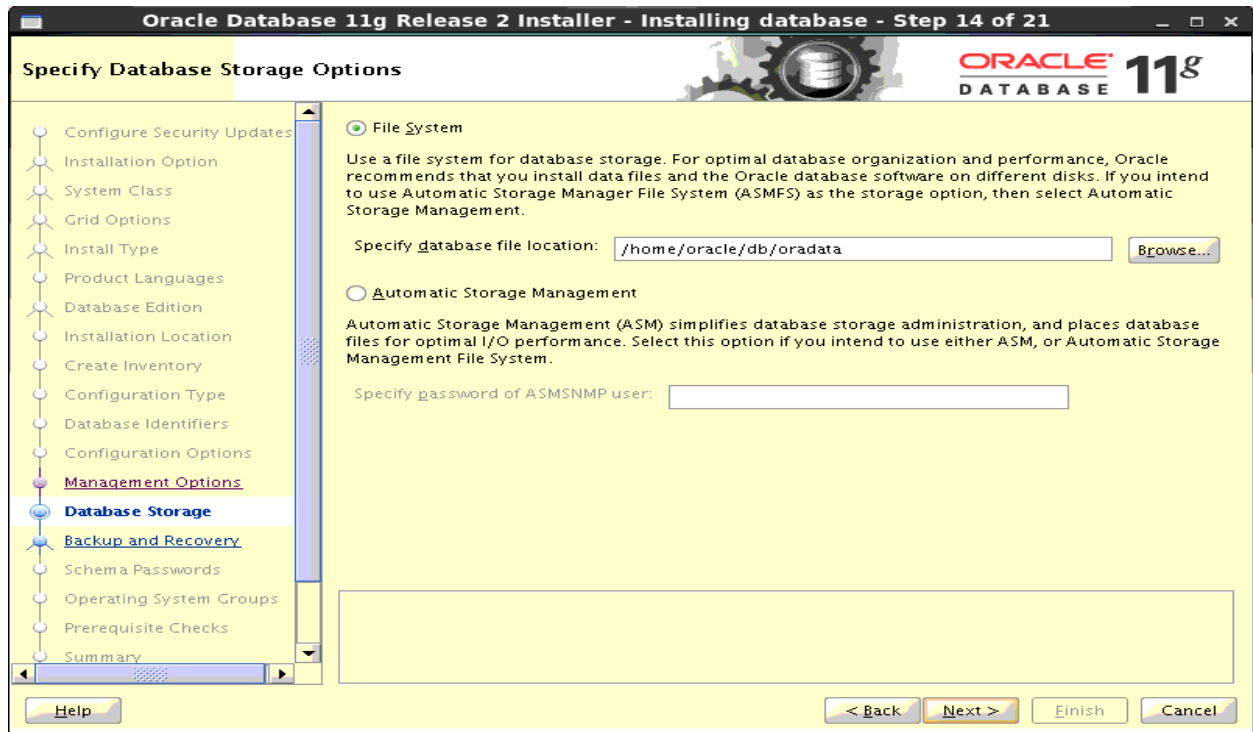
15) Give the Service Name for your Database.



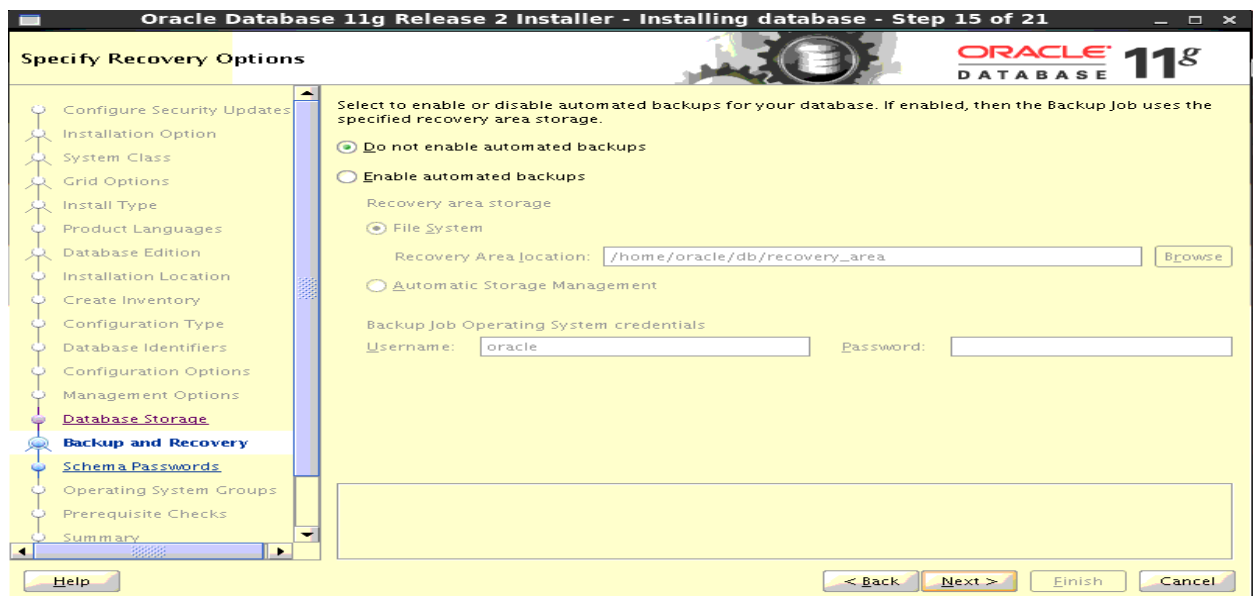
16) Select Character set as AL32UTF8.



17) Adjust the memory as per your environment.



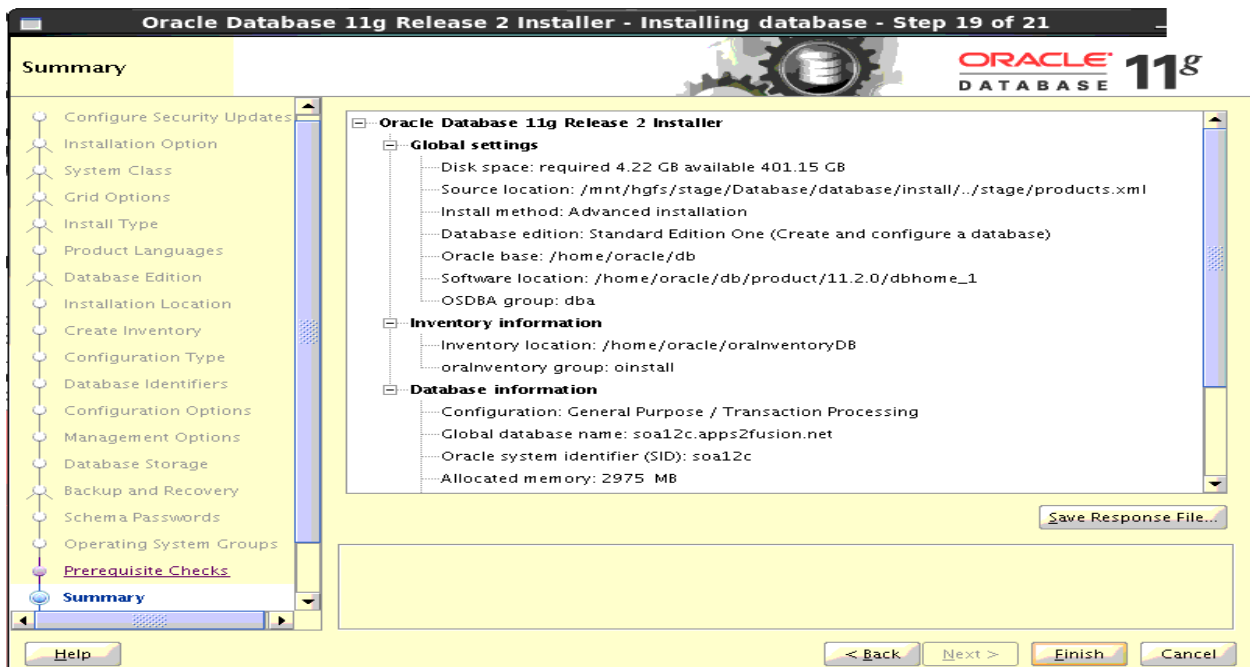
18) Click Next



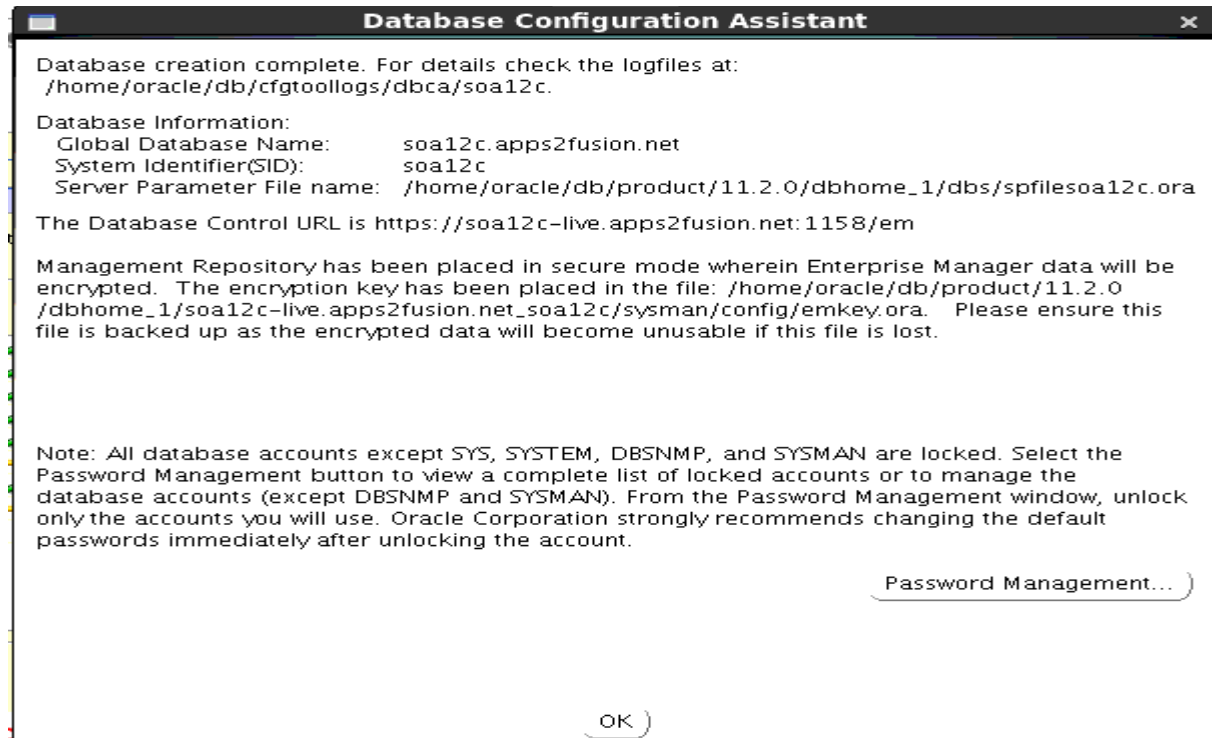
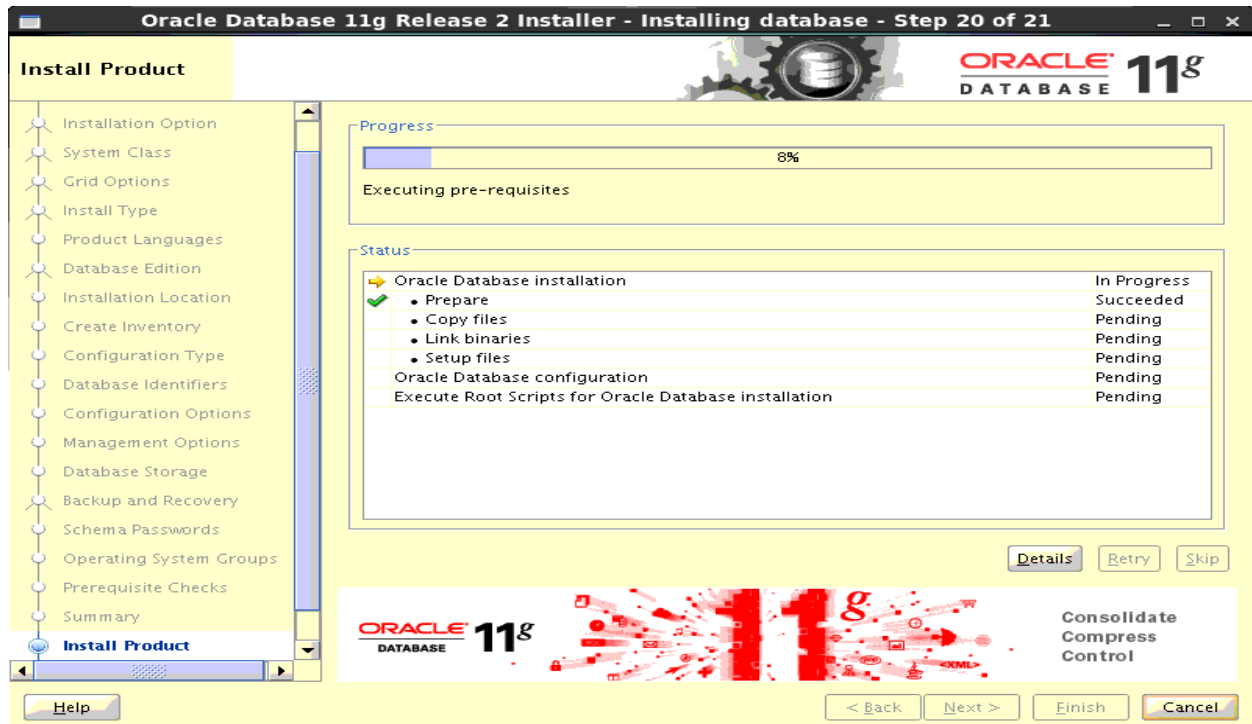
19) Click Next

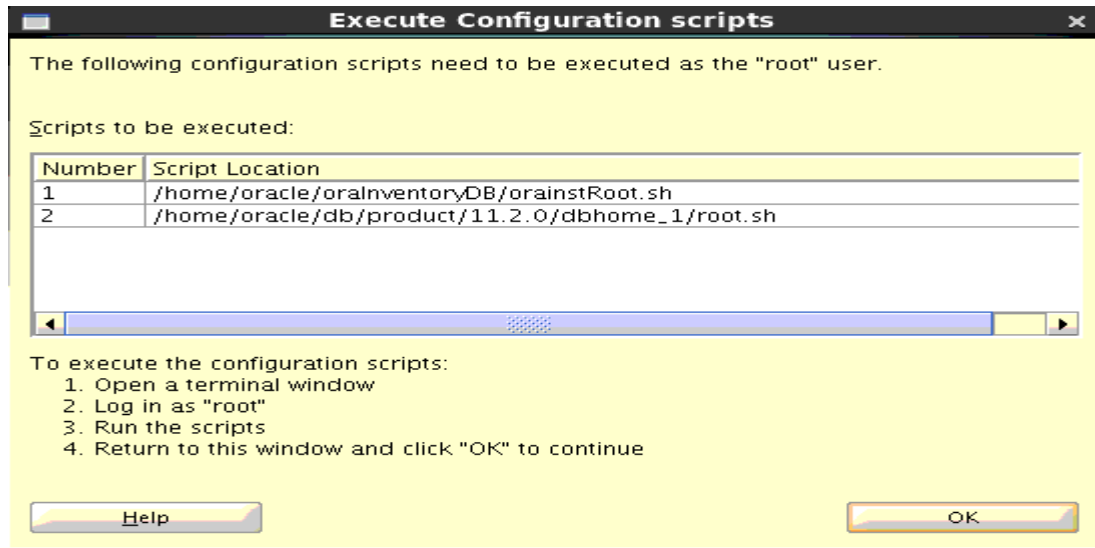


20) Select the group as oinstall and click Next.

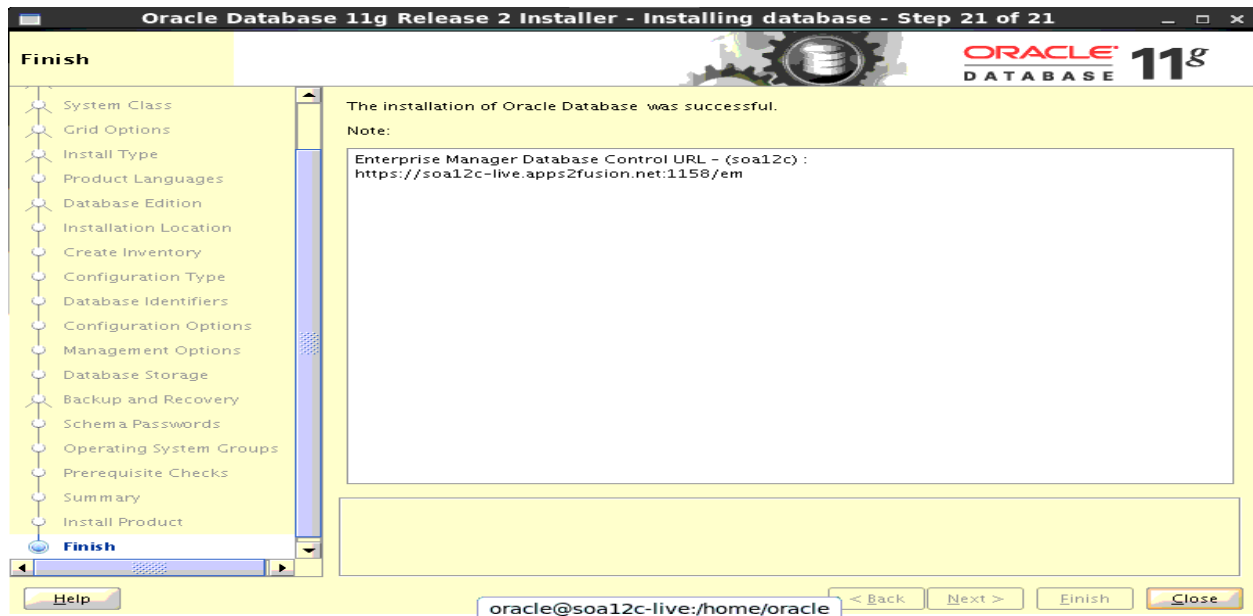


21) Click Finish.





22) Run the above scripts as root user and then click Ok.



23) Database is installed successfully and ready to use. Click Close.

# Oracle SOA 12c Installation

**Step 1:** Download Oracle SOA 12c installer.

Go to below link.

<http://www.oracle.com/technetwork/middleware/soasuite/downloads/index.html?ssSourceSiteId=opn>

Accept the License Agreement.

You must accept the [OTN Free Developer License Agreement](#) to download the free single developer desktop licensed version of Oracle Service Bus.

Accept License Agreement     Decline License Agreement

Click on Download link to download the installer.

**Free Oracle SOA Suite 12c Installations**

This is the latest release of the Oracle SOA Suite 12c. Please see the [Documentation](#) tab for Release Notes, Installation Guides and other release specific information. Please also see the [Samples](#) provided for this release.

**Release 12c (12.1.3.0.0)**

All Platforms - Generic 64bit JVM ▼

**Recommended Install Process**

The following table breaks out the pieces needed to install Oracle SOA Suite.

Components for a generic installation are available for downloading in the table below. This is a known installation and configuration path for this release. Please see the [Fusion Middleware: Download, Installation & Configuration Readme](#) and the [Installation Guide for Oracle SOA and BPM Suite](#) for assistance in creating alternative installation scenarios.

SOA Suite Quick Start Installer	
<b>1</b>	<b>SOA Suite 12.1.3</b> Size: 2.97 GB, Check Sum: 1579850769 <b>Note:</b> The generic SOA Suite Quick Start Installer for developers is used on all platforms. It allows you to quickly install a development or evaluation environment on a single host computer. It includes <a href="#">Oracle BPEL Process Manager</a> , <a href="#">Oracle Human Workflow</a> , <a href="#">Oracle Business Rules</a> , <a href="#">Oracle Mediator</a> , <a href="#">Oracle Service Bus</a> , <a href="#">Technology Adapters</a> <a href="#">Oracle Enterprise Scheduler</a> , <a href="#">SOA Spring Component</a> , <a href="#">Enterprise Manager Fusion Middleware Control</a> , <a href="#">Oracle JDeveloper</a> with SOA IDE extensions and an integrated <a href="#">WebLogic Server</a> and Java DB.
	<b>Download</b>



You will see one jar file downloaded to your system. Extract that jar file and you will see below two executable jar files.

- fmw\_12.1.3.0.0\_soa\_quickstart
- fmw\_12.1.3.0.0\_soa\_quickstart2

We need to run these executable jar files from command prompt, for that we require supported JDK  
You can download latest jdk from below link.

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

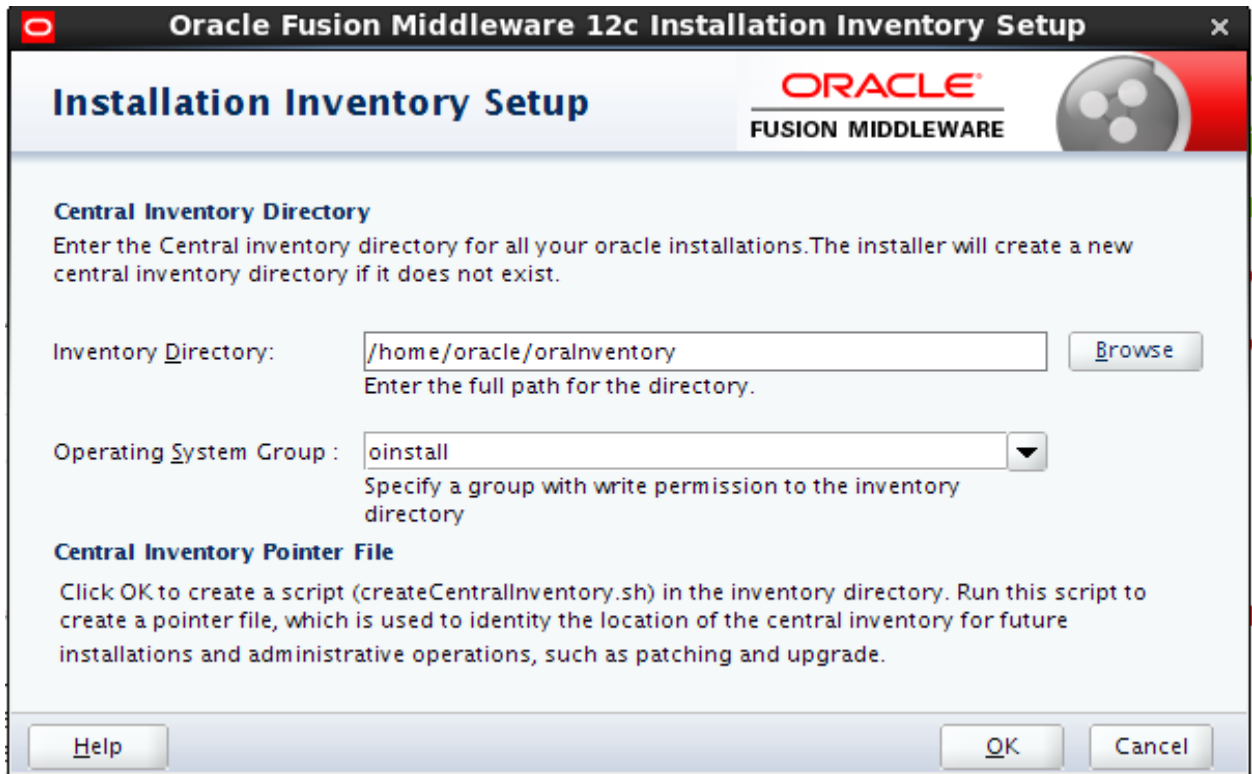
We are using **jdk1.7.0\_71**

Now run the below command by properly setting your **JAVA\_HOME** and **PATH** variable.

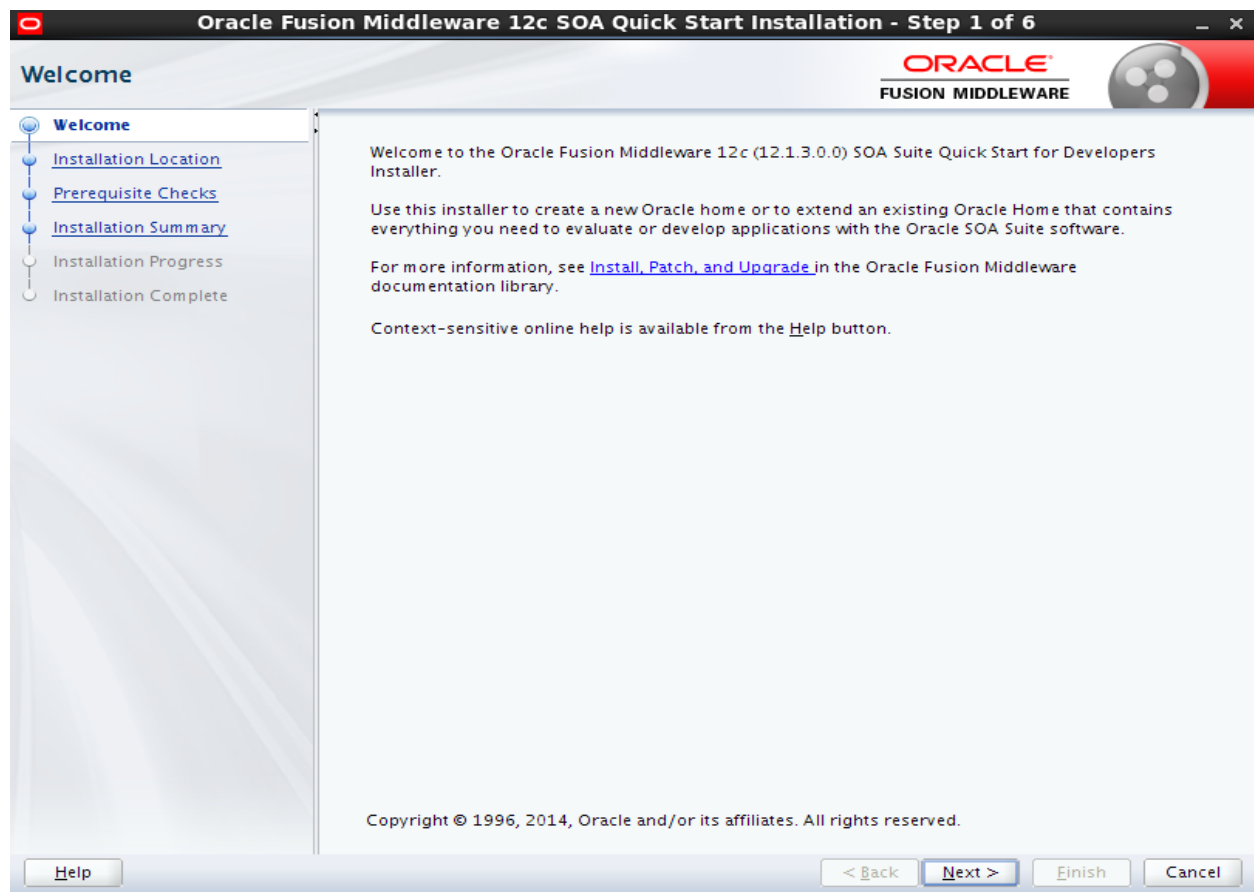
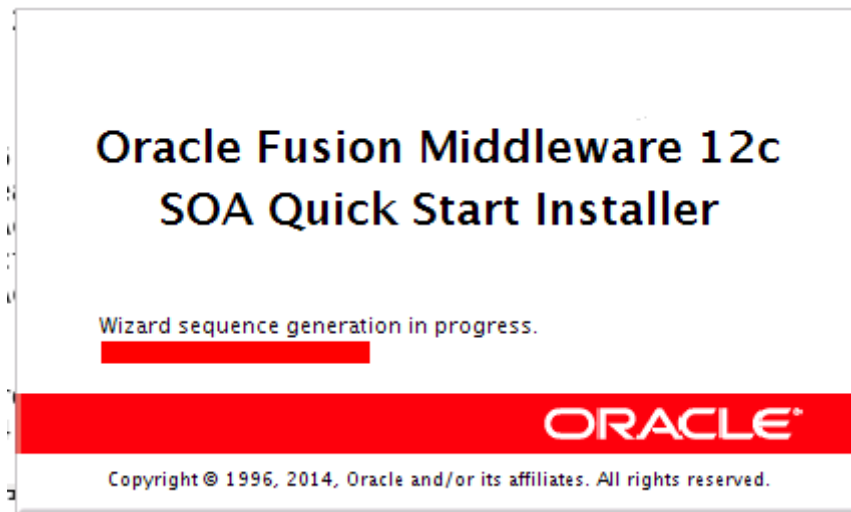
```
[oracle@soa12c-live stage]$ java -jar fmw_12.1.3.0.0_soa_quickstart.jar
Launcher log file is /tmp/OraInstall2014-12-16_09-28-24AM/launcher2014-12-16_09-28-24AM.log.
Extracting files.....
Starting Oracle Universal Installer
Starting Oracle Universal Installer

Checking if CPU speed is above 300 MHz.   Actual 2666.620 MHz   Passed
Checking monitor: must be configured to display at least 256 colors.   Actual 16777216   Passed
Checking swap space: must be greater than 512 MB.   Actual 16252924 MB   Passed
Checking if this platform requires a 64-bit JVM.   Actual 64   Passed (64-bit not required)
Checking temp space: must be greater than 300 MB.   Actual 38923 MB   Passed

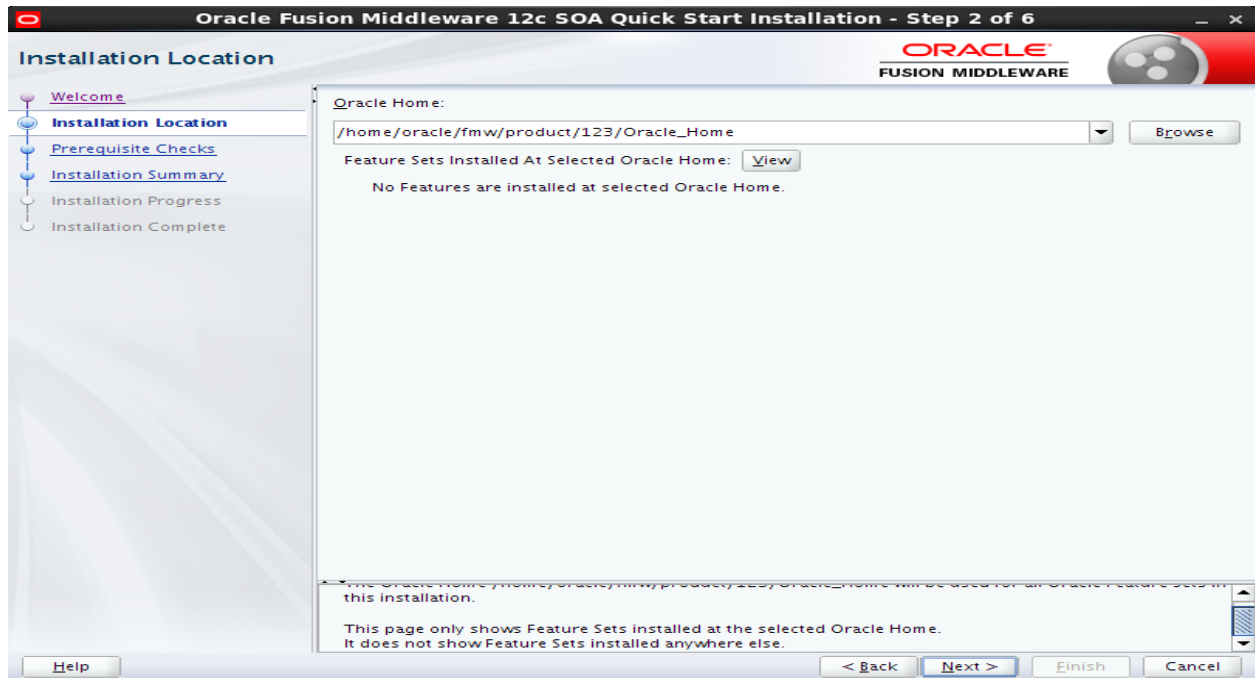
Preparing to launch the Oracle Universal Installer from /tmp/OraInstall2014-12-16_09-28-24AM
```



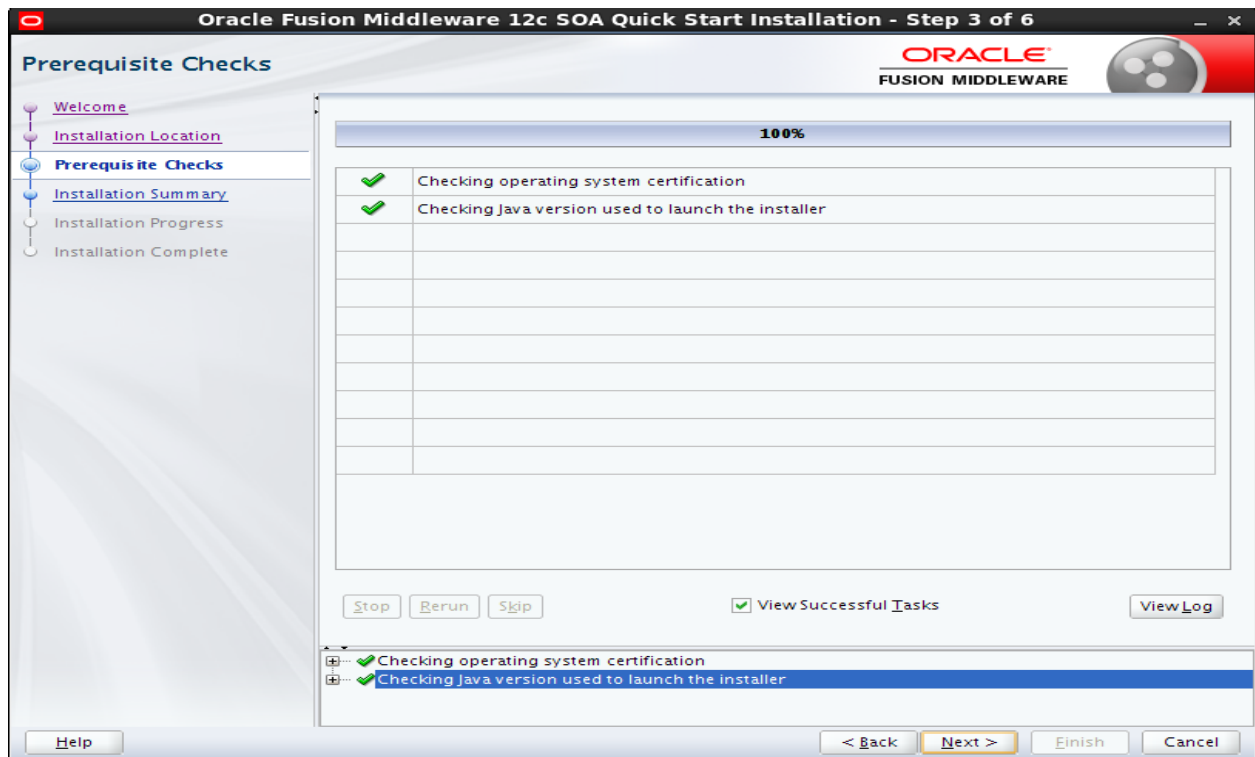
- 1) Give the Inventory Location and click Ok



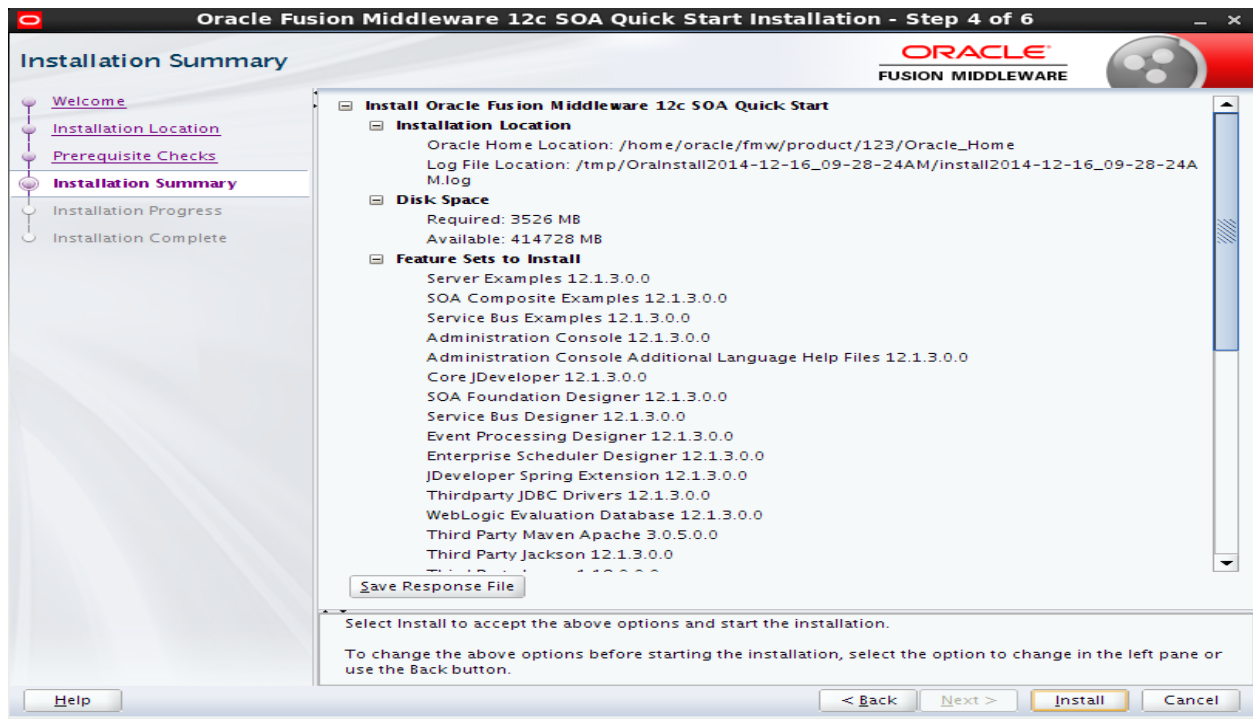
2) Click Next



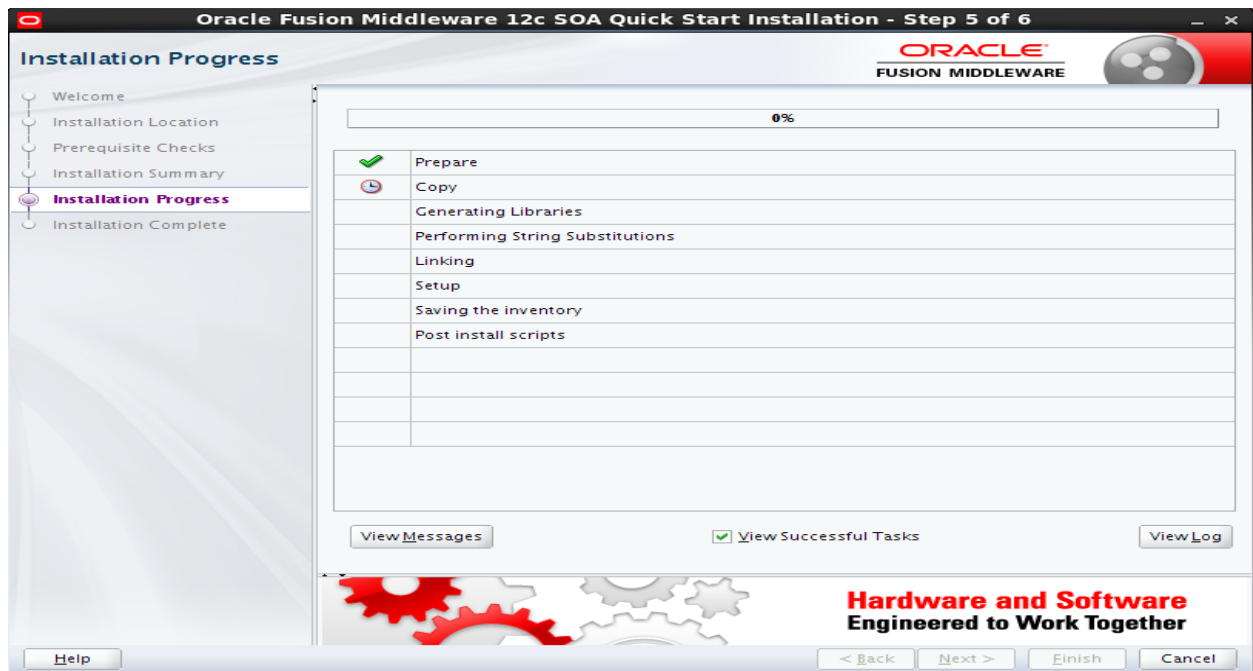
3) Give Oracle Home location and click Next.

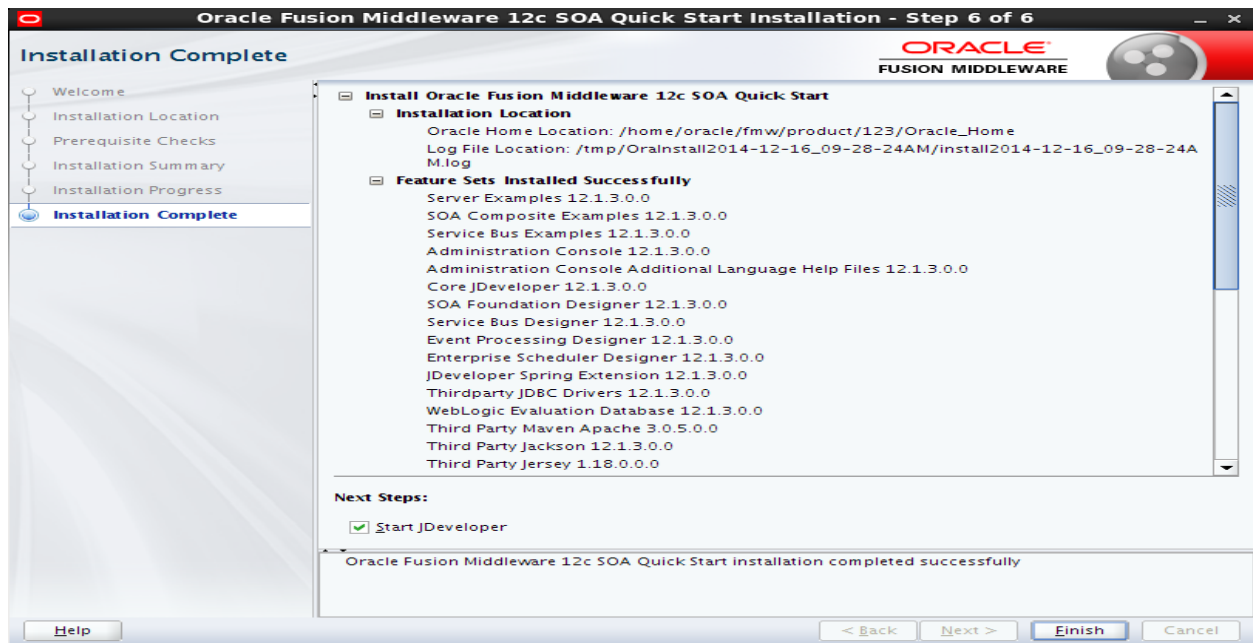
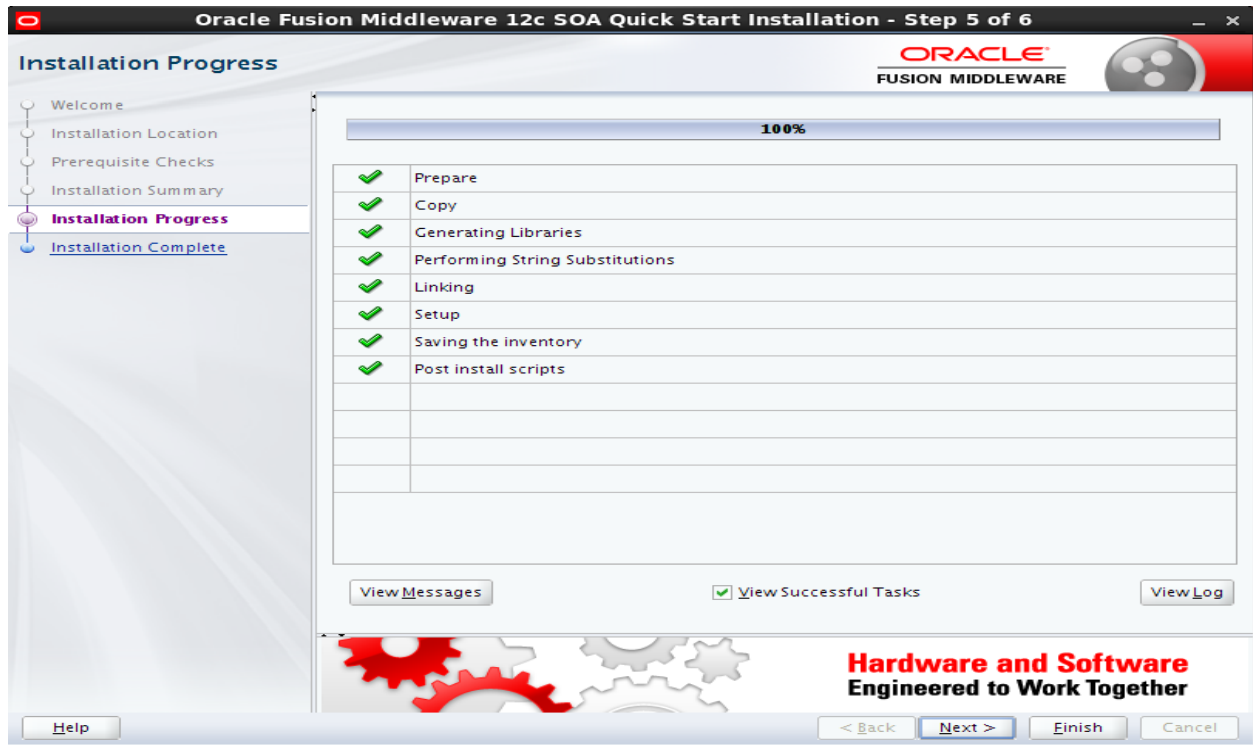


4) Once Pre-requisite checks are completed. Click Next.



5) Click Install.





6) Once the Installation is completed. Click Finish.

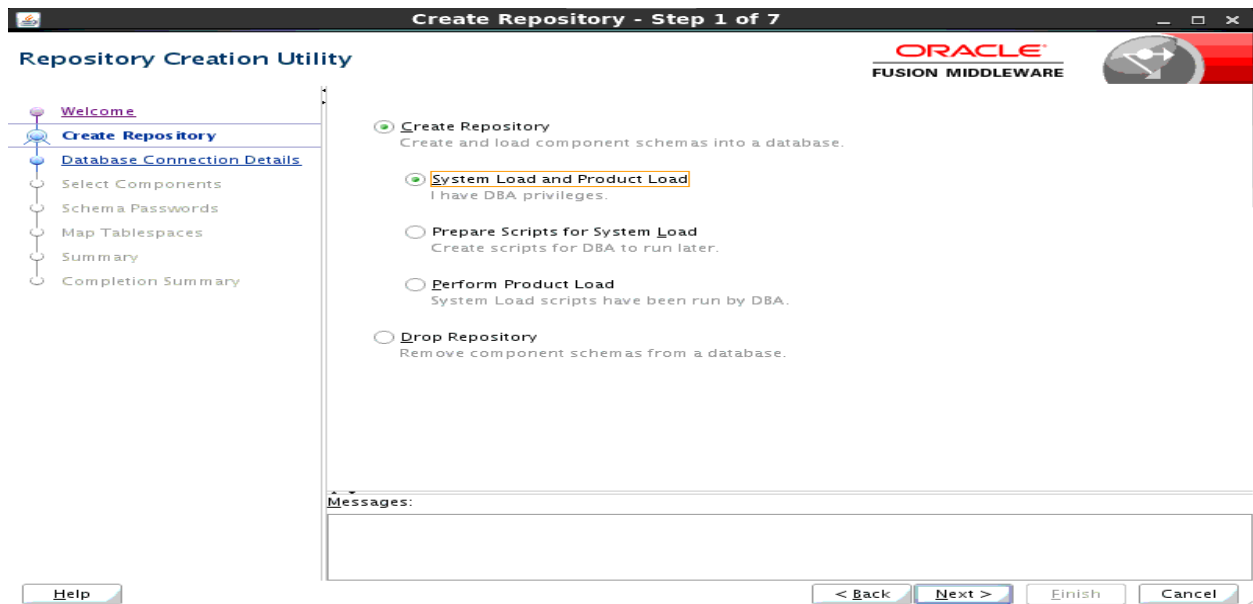
# Run RCU to create schema

- 1) Go to \$ORACLE\_HOME/oracle\_common/bin

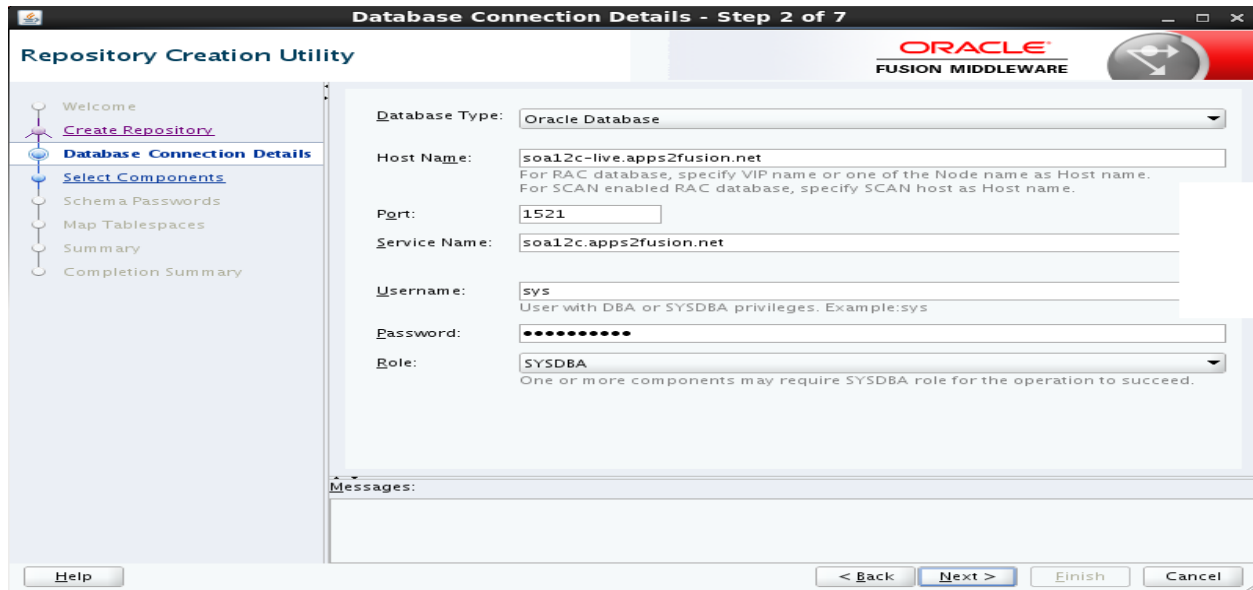
```
./rcu
```



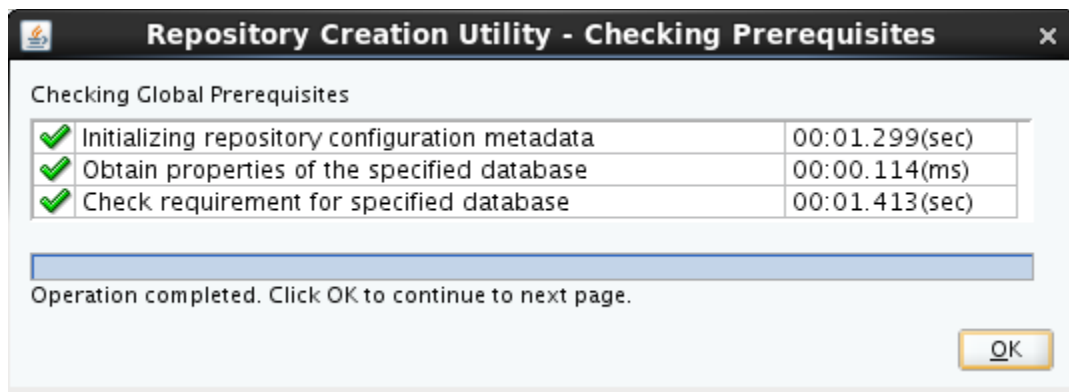
- 2) Click Next



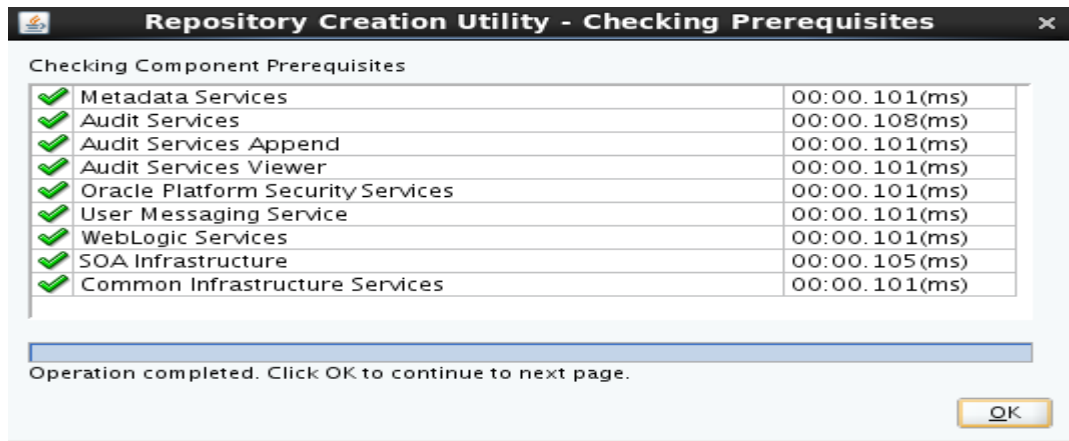
- 3) Select Create Repository.

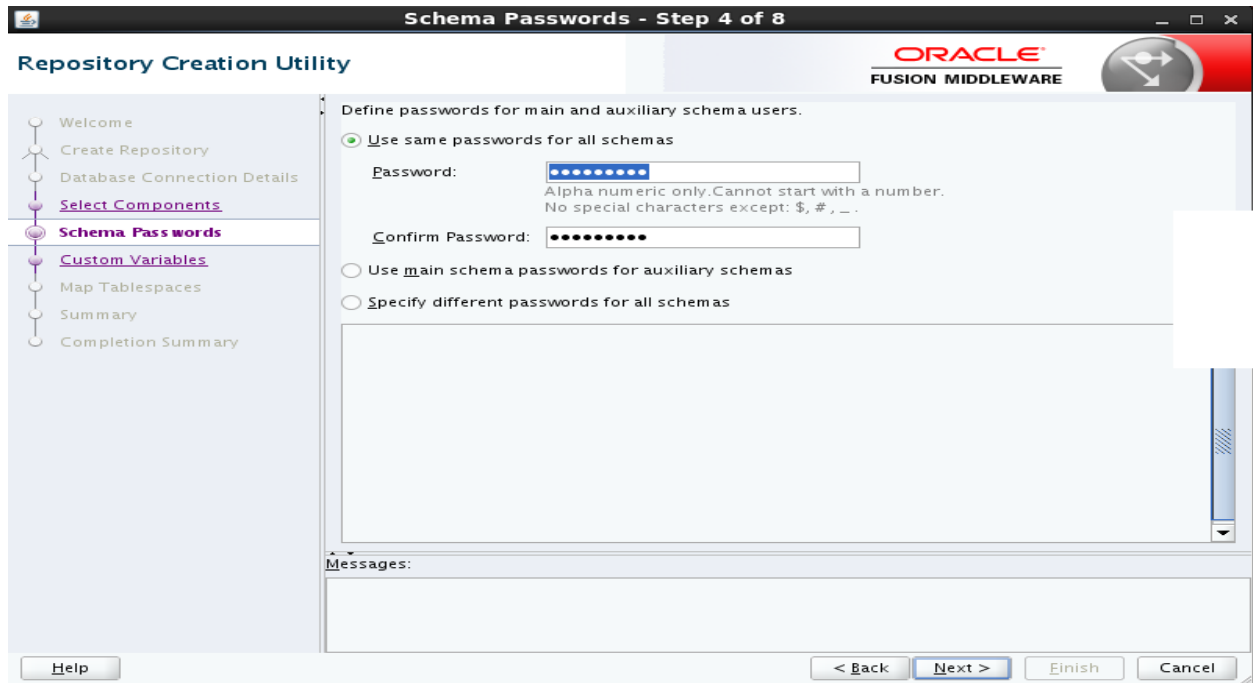


4) Give Database Details and click Next.

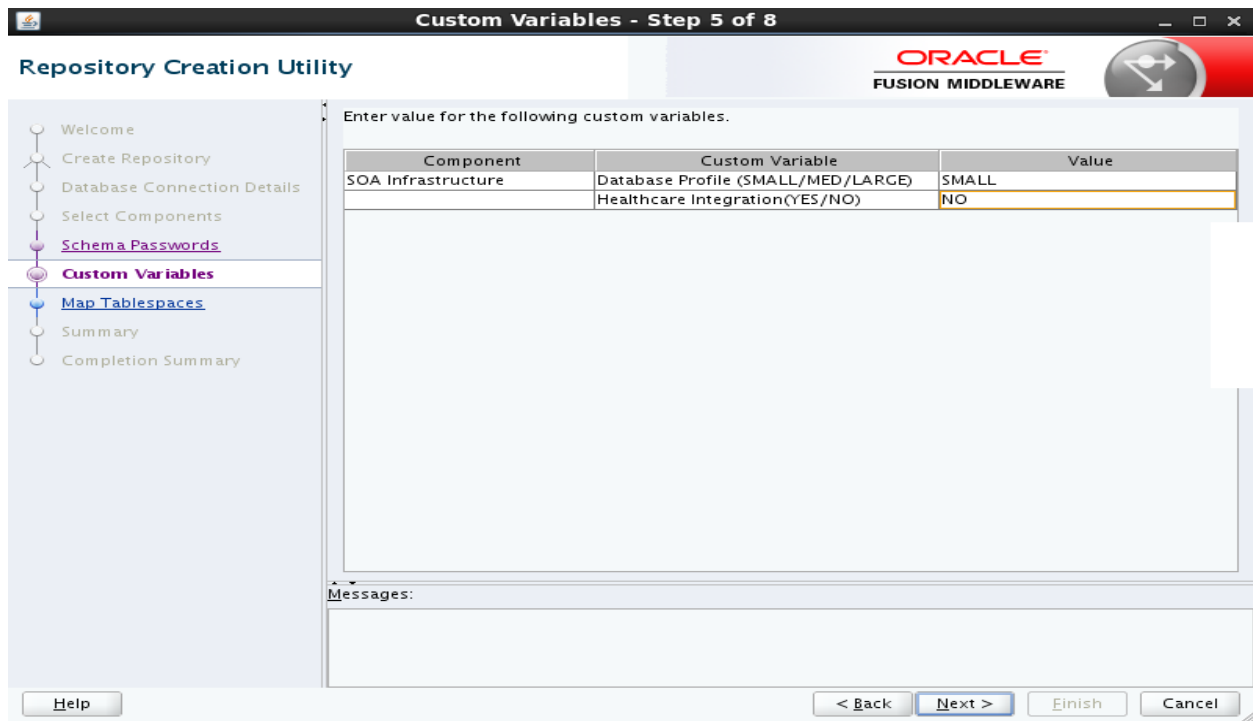


5) Select SOA Infrastructure Schema, MDS schema will get auto selected.



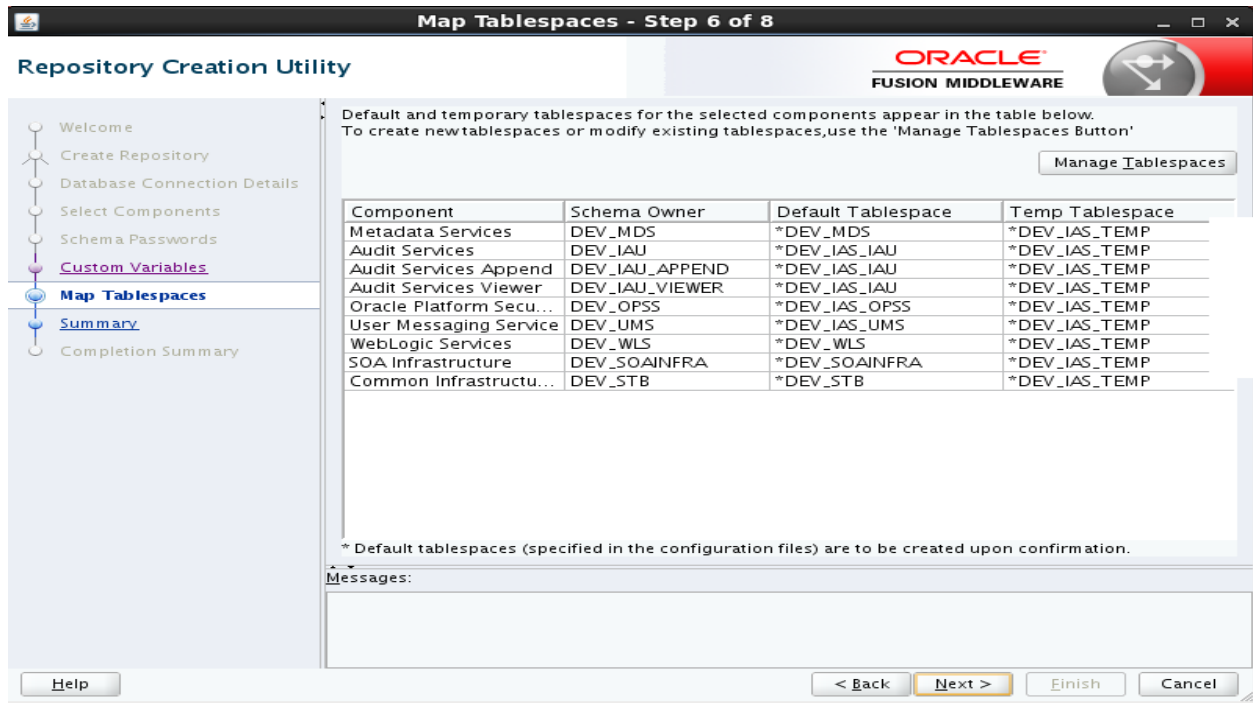


6) Give common password for all the schema.

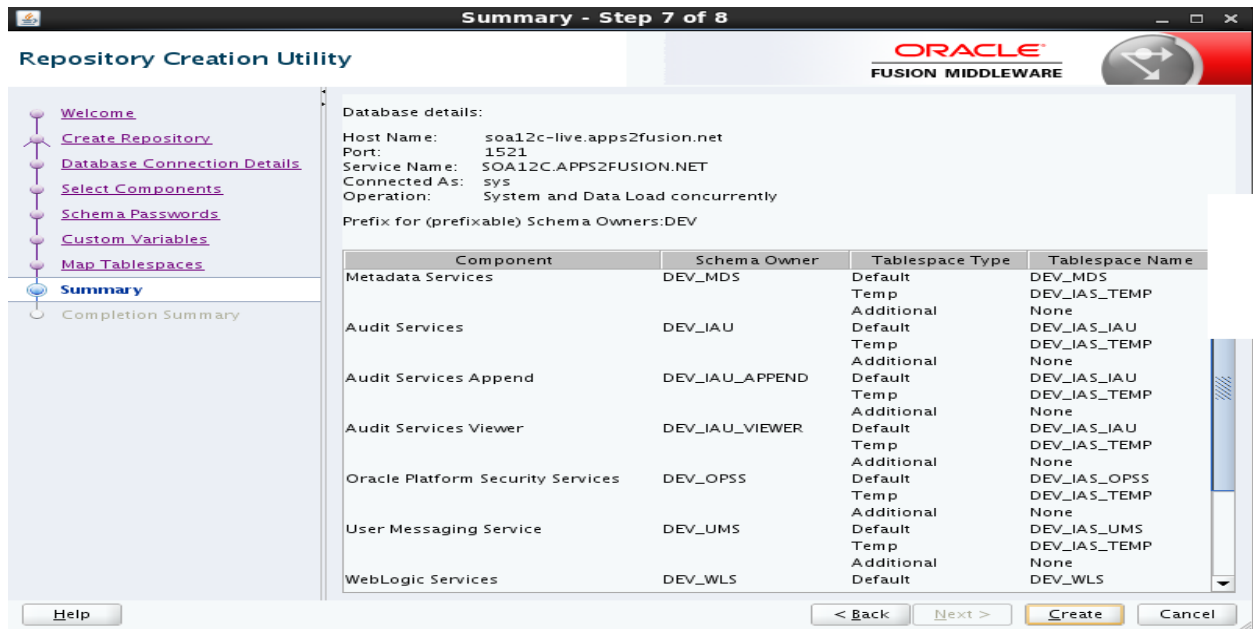


7) Leave default and click Next.

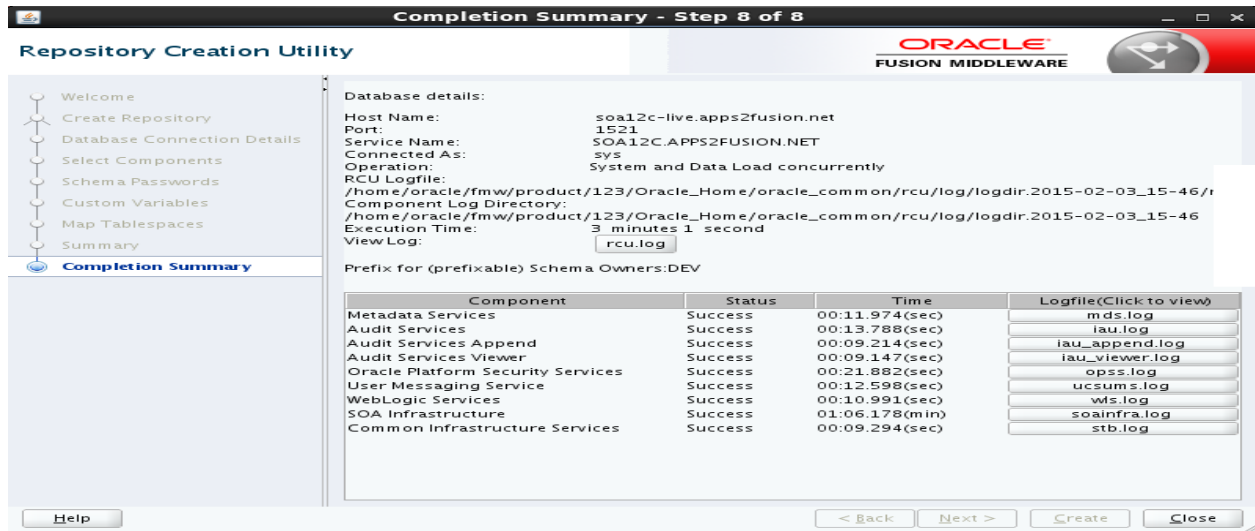




8) Click Next



9) Click Create, it will create the tablespace in the Database.



10) Once created, click Close.

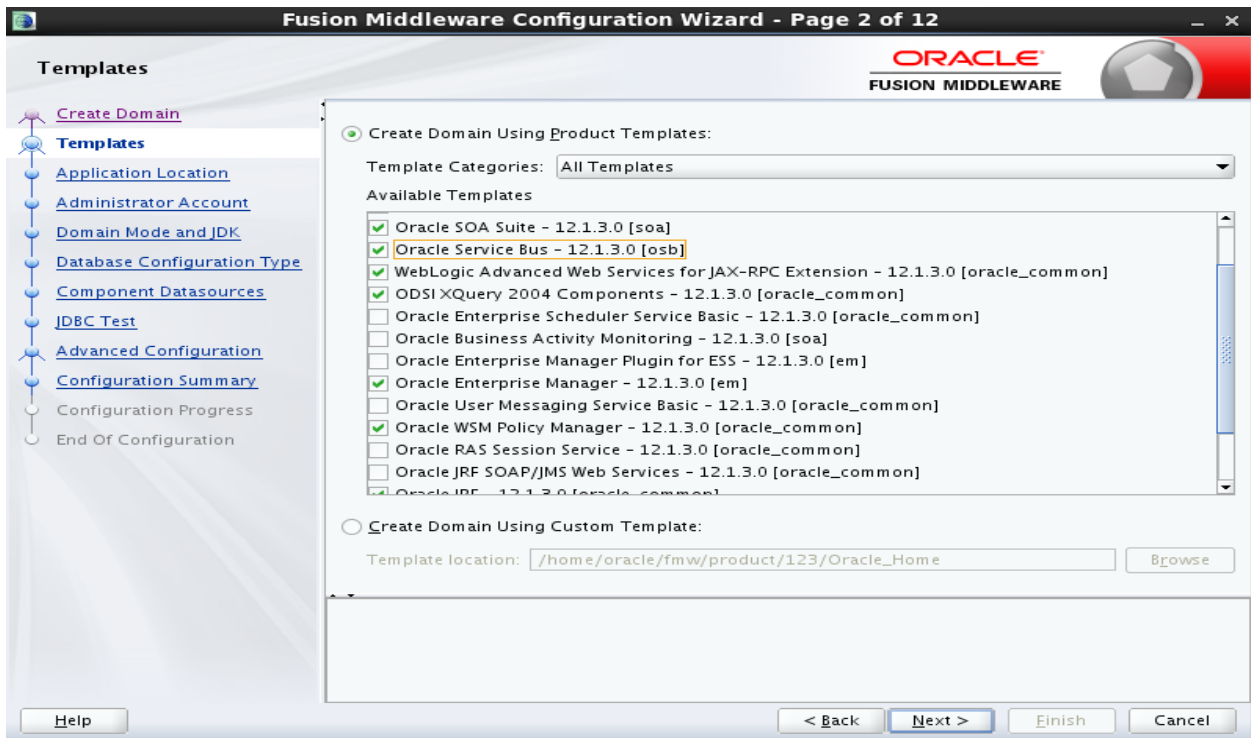
# Create a domain

- 1) Go to \$ORACLE\_HOME/oracle\_common/common/bin

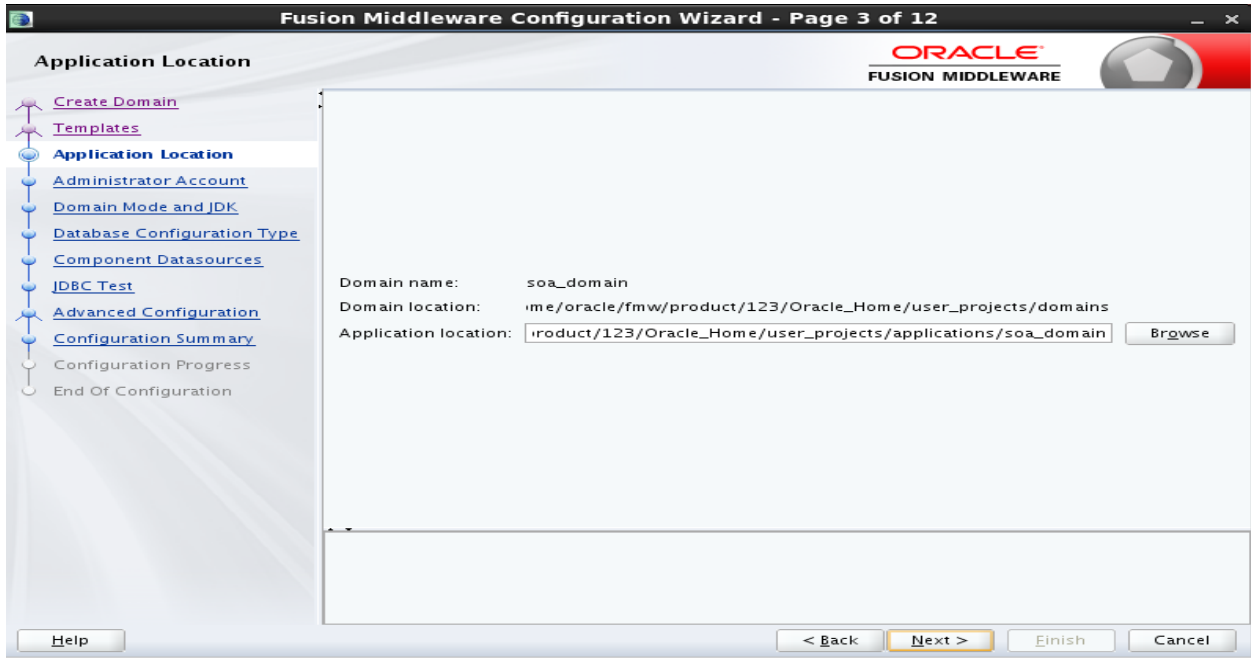
```
./config.sh
```



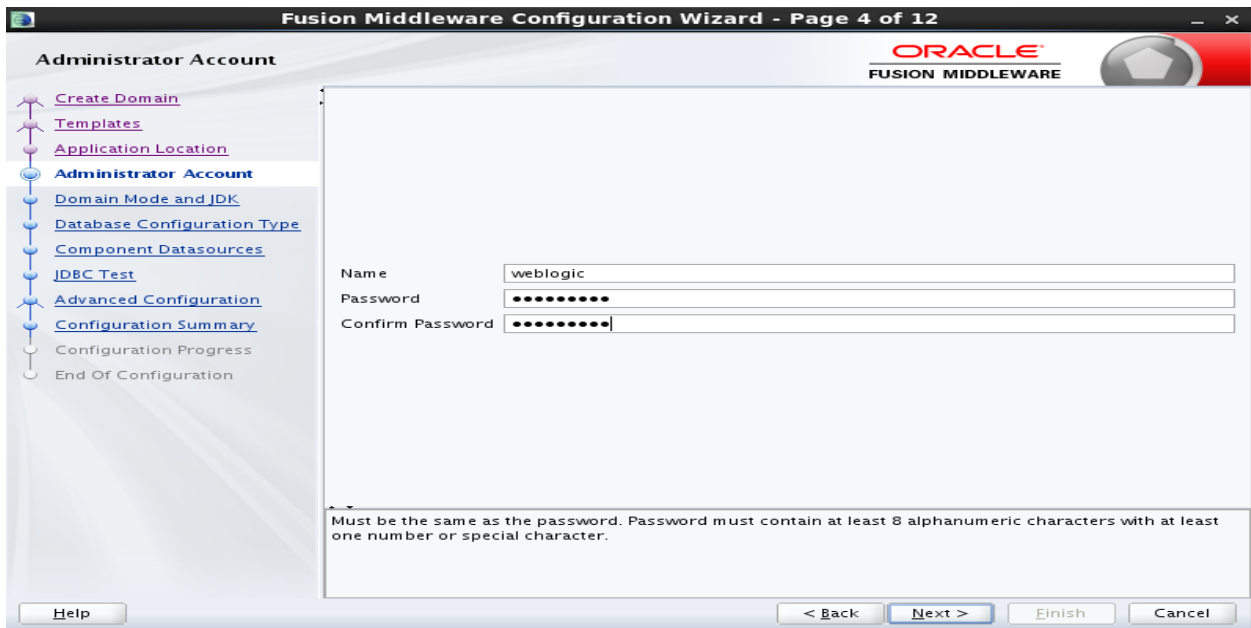
- 2) Select 'Create a new Domain' and give the domain location (default).



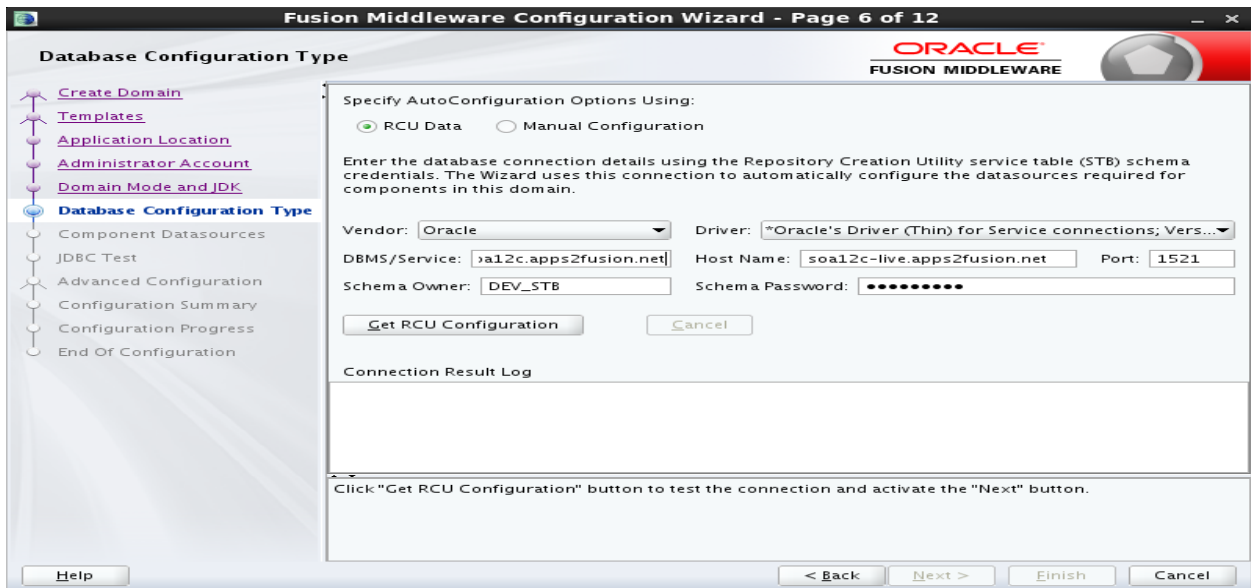
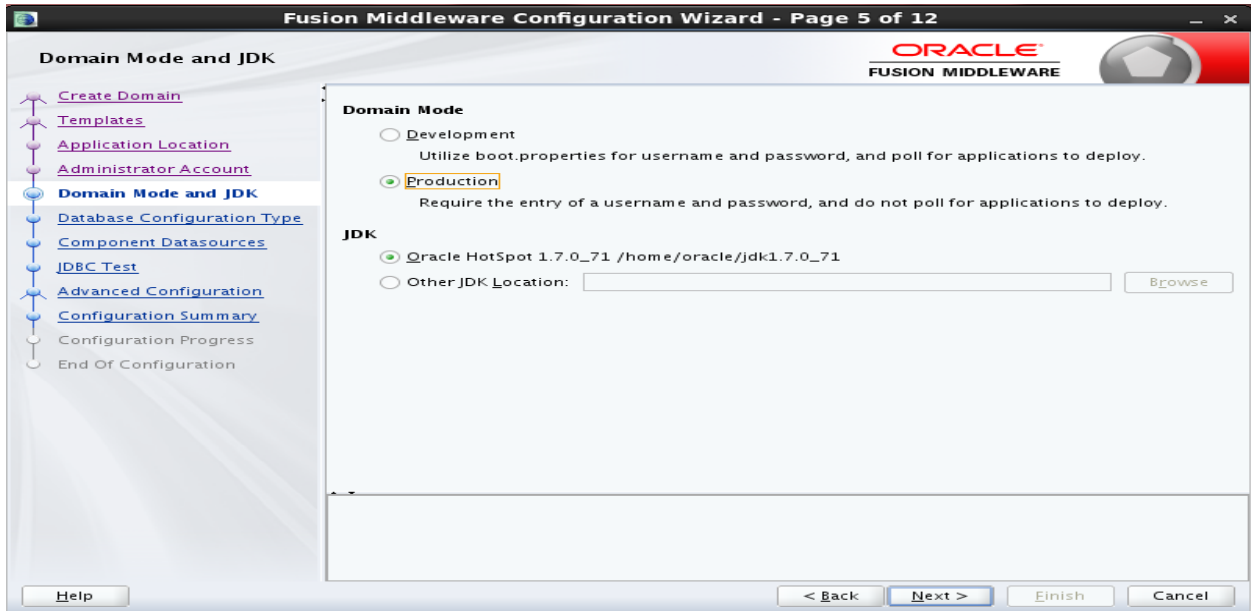
- 3) Select the selection as shown. We are also including OSB (optional).



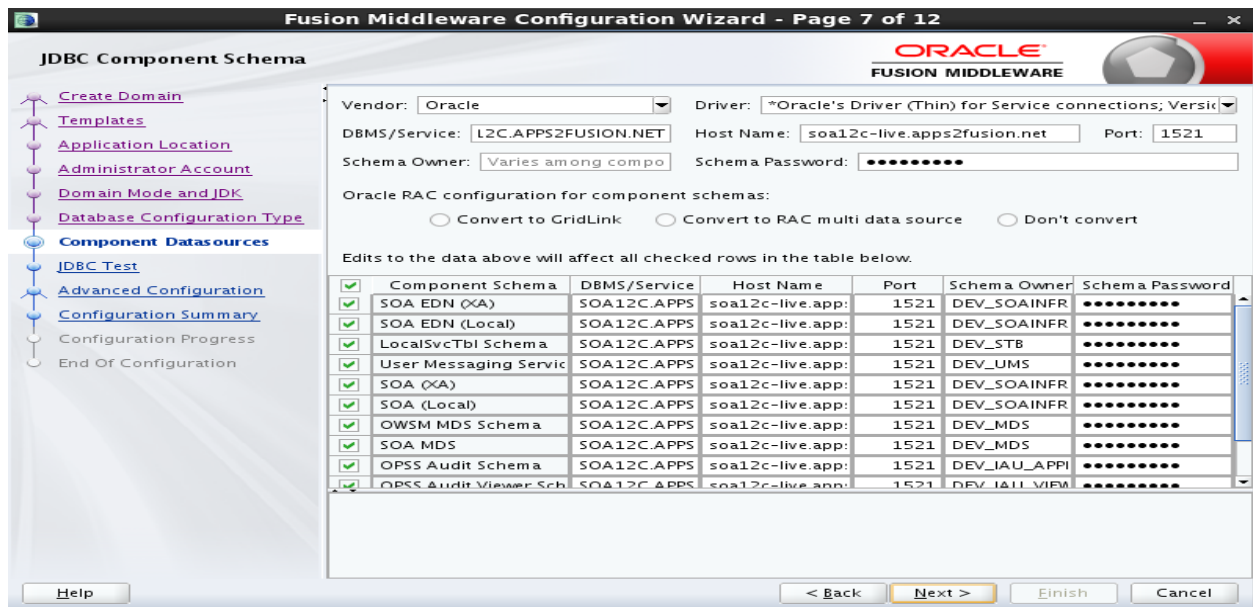
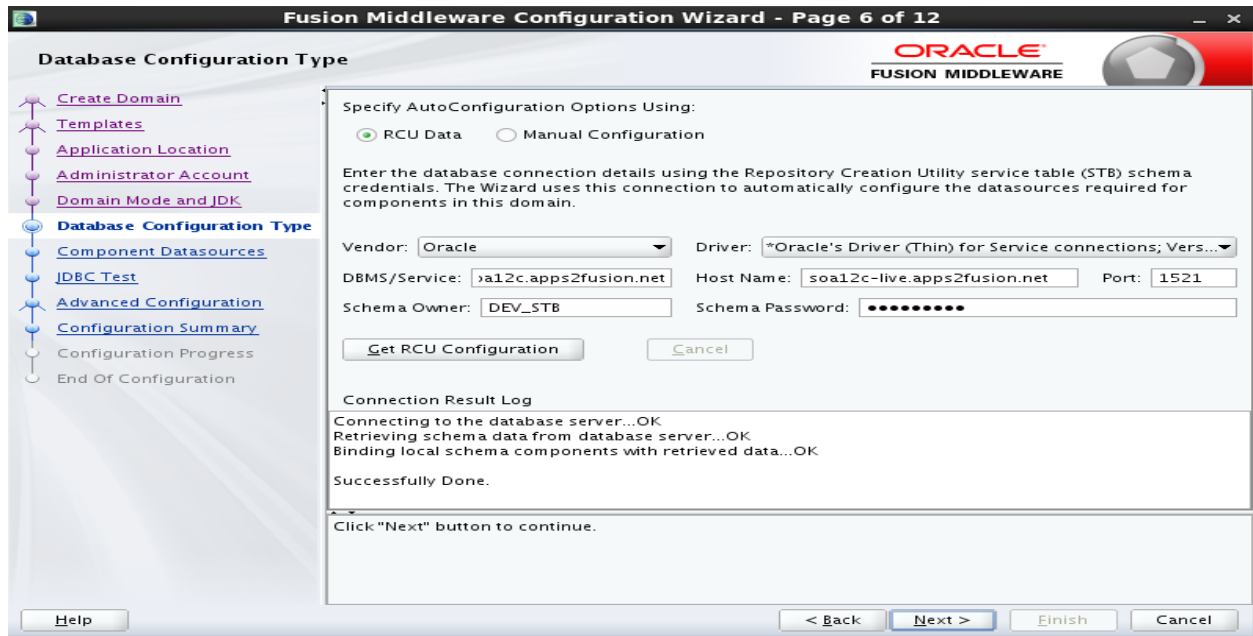
4) Leave default. Click Next.



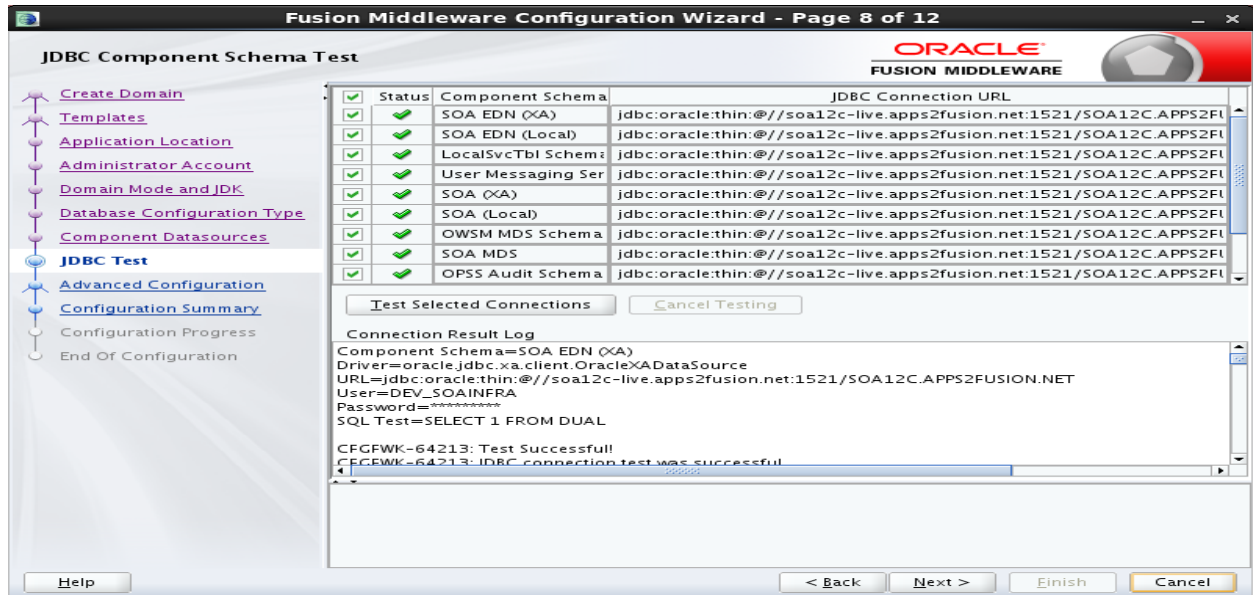
5) Give Username/password for the Administrator. Kindly keep this password safe.



6) Load the schema's by giving the Database details.



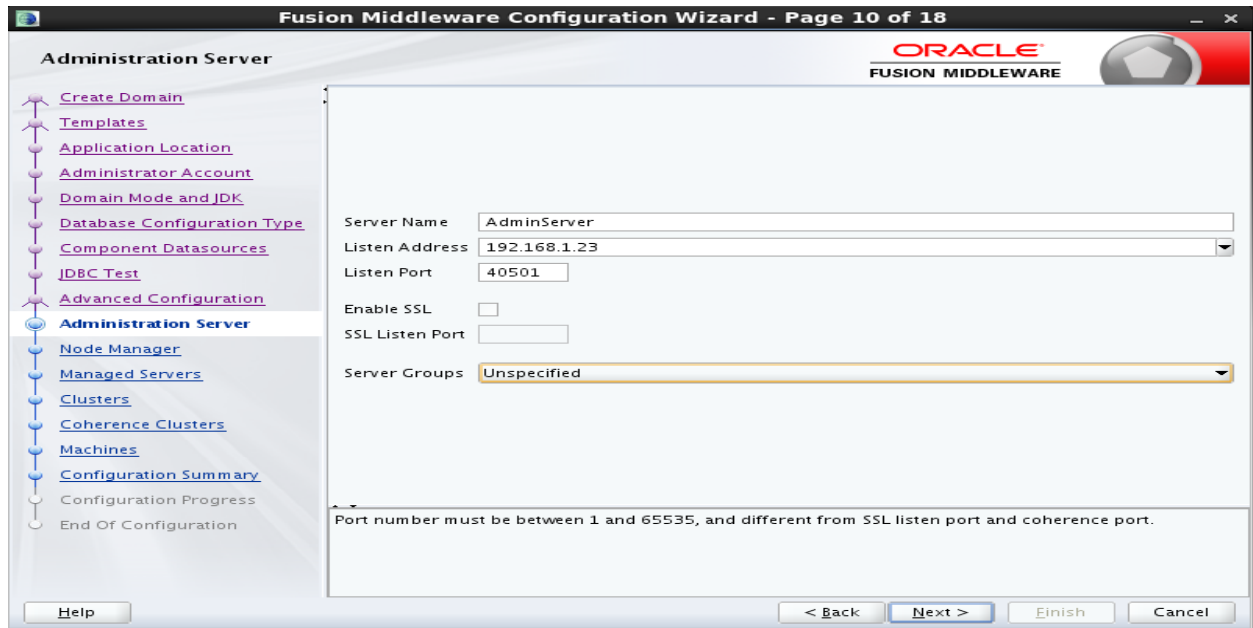
7) Give the correct details as shown, click Next.



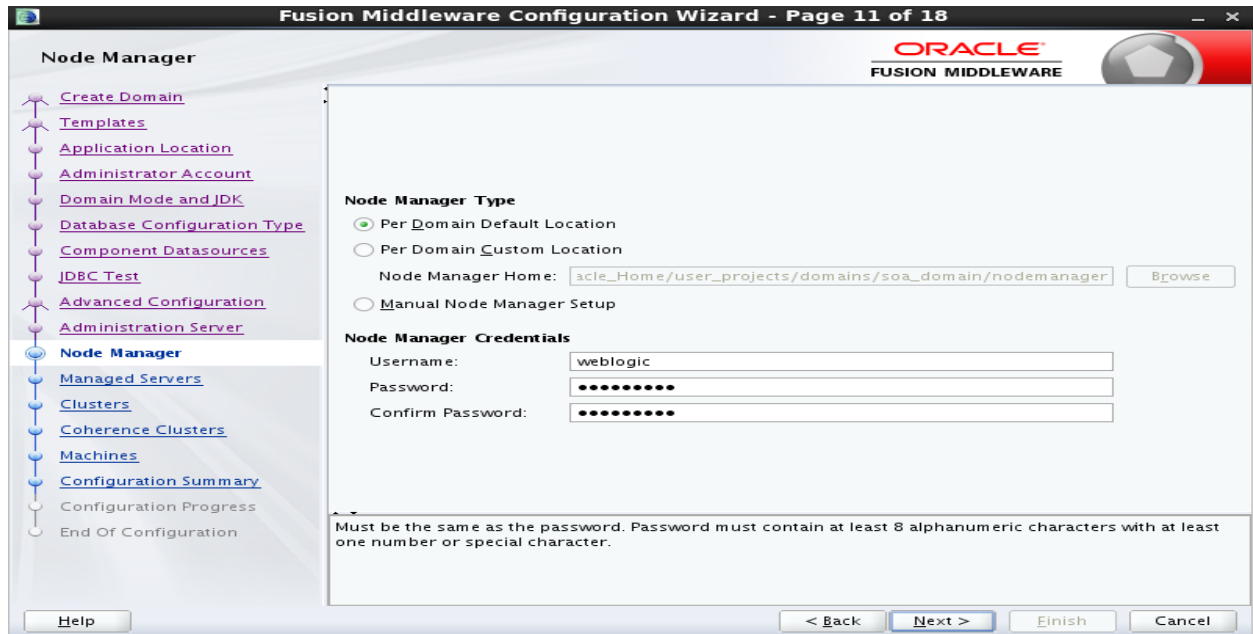
8) Once all Test are successful, Click Next.



9) Select Administration Server, Node Manager, Managed Servers, Clusters and Coherence.

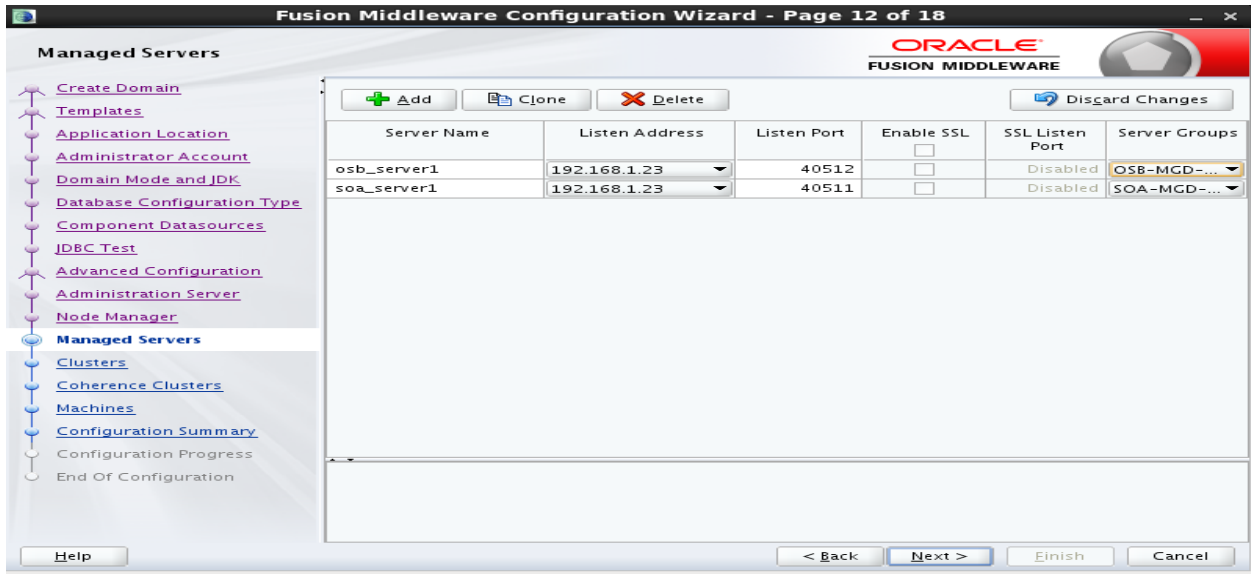


10) Give the ServerName, Port and Listen Address as IP of machine where the server will be running.

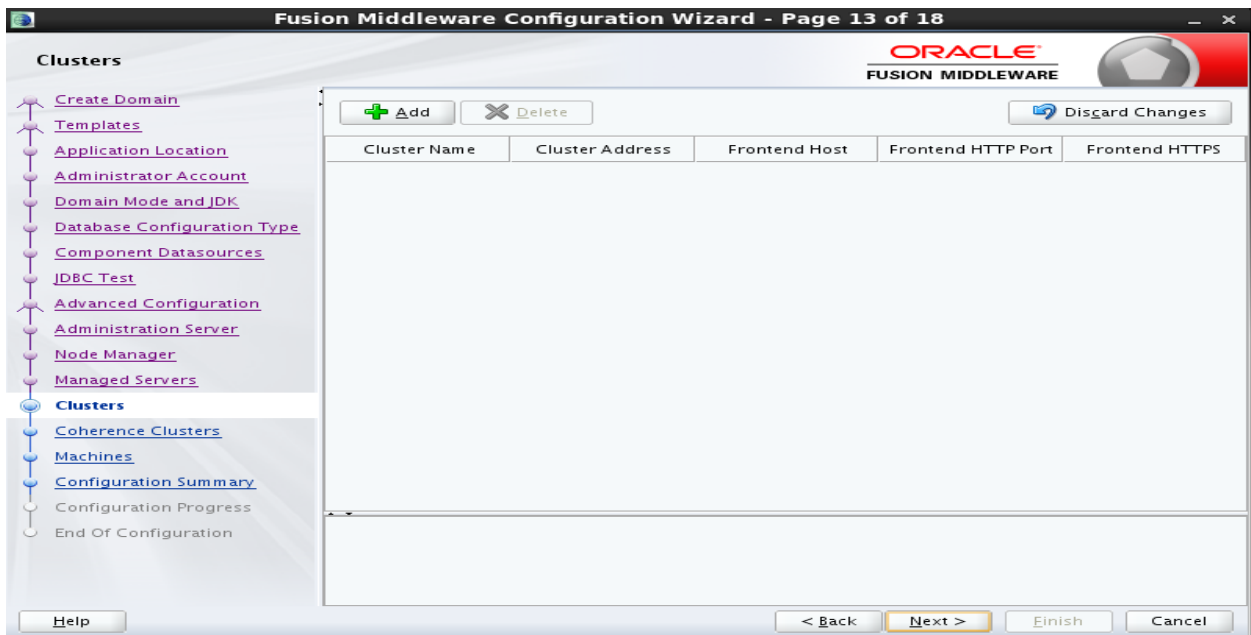


11) Select Per Domain and give Node manager username/password (we gave same as Admin User)

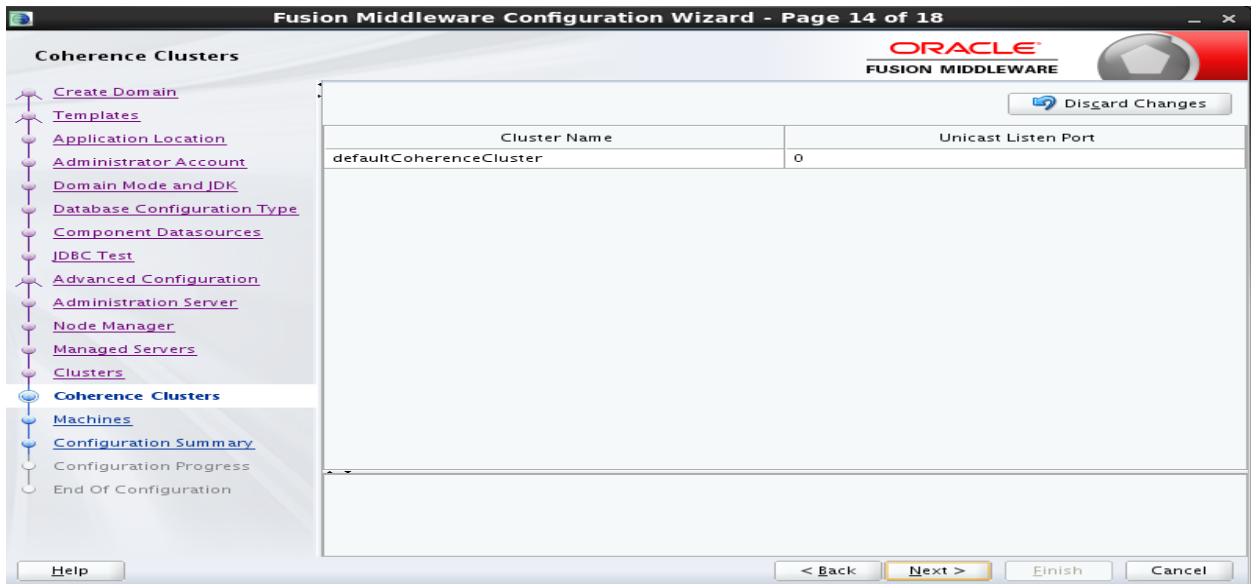




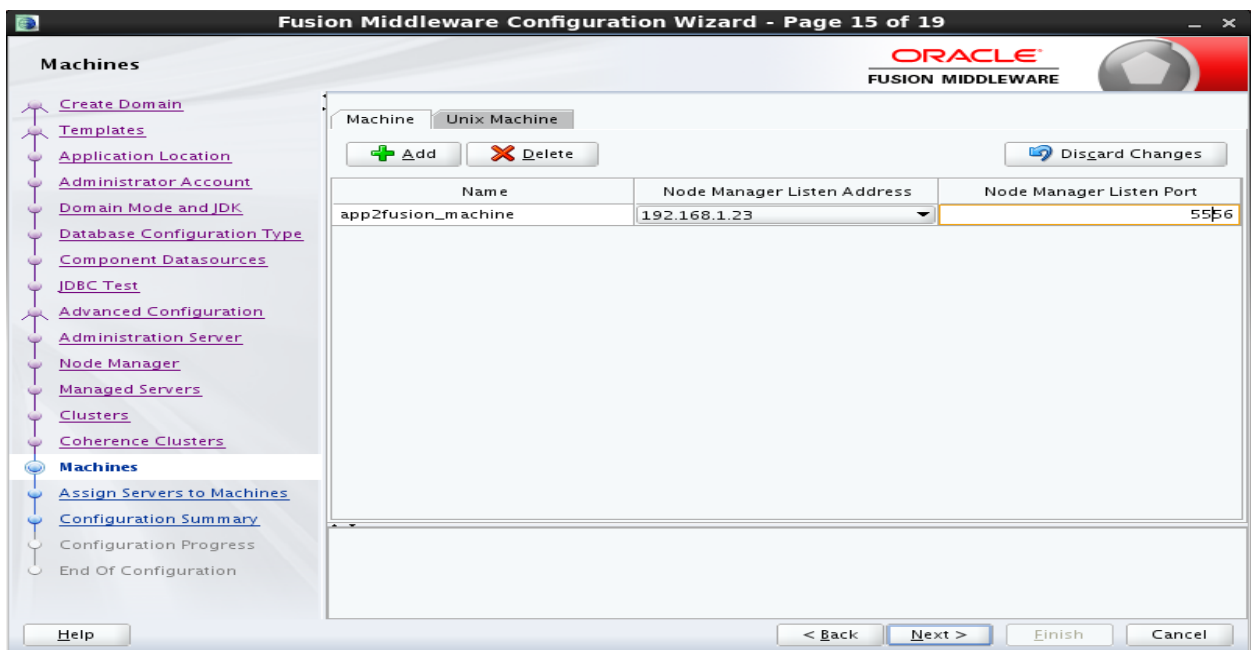
12) Give server name, ports and Listen Address.



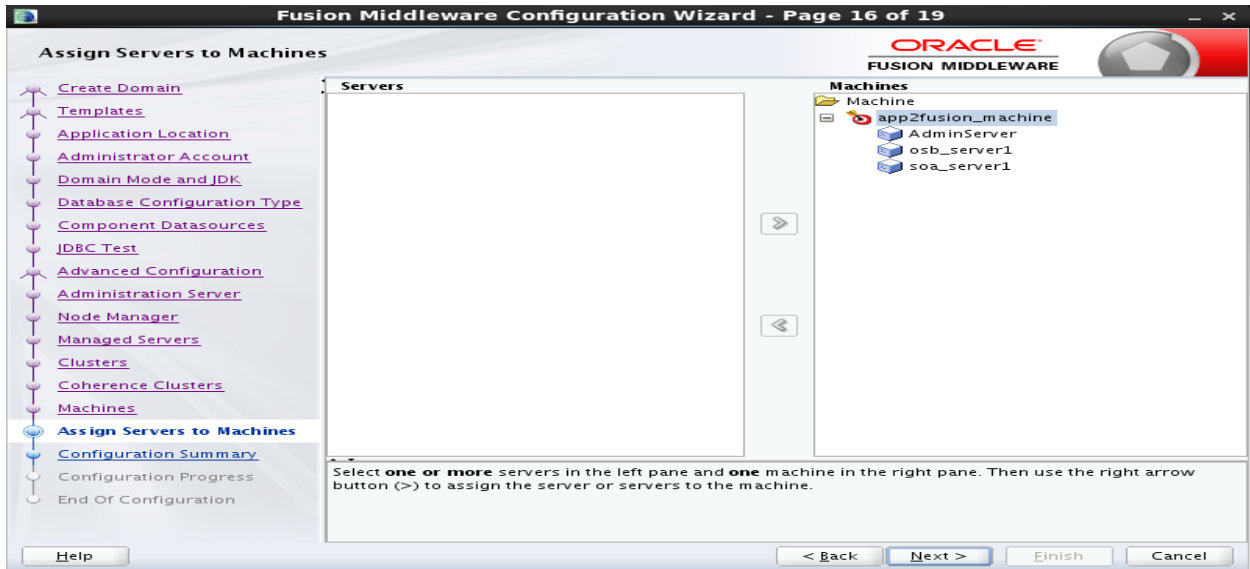
13) Click Next.



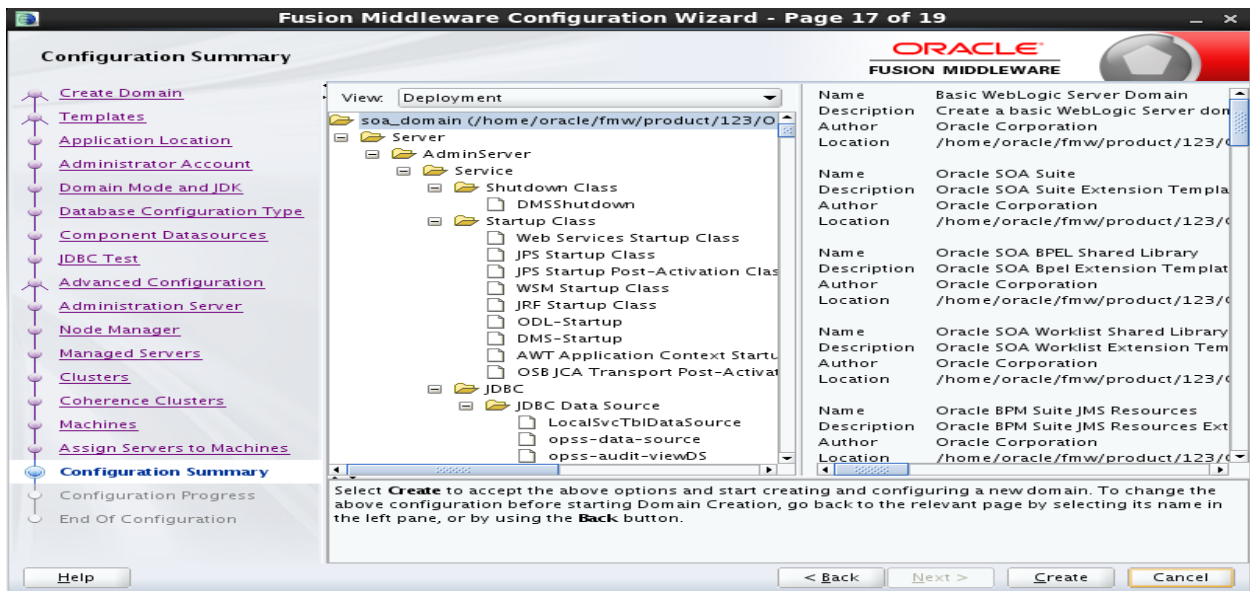
14) Click Next.



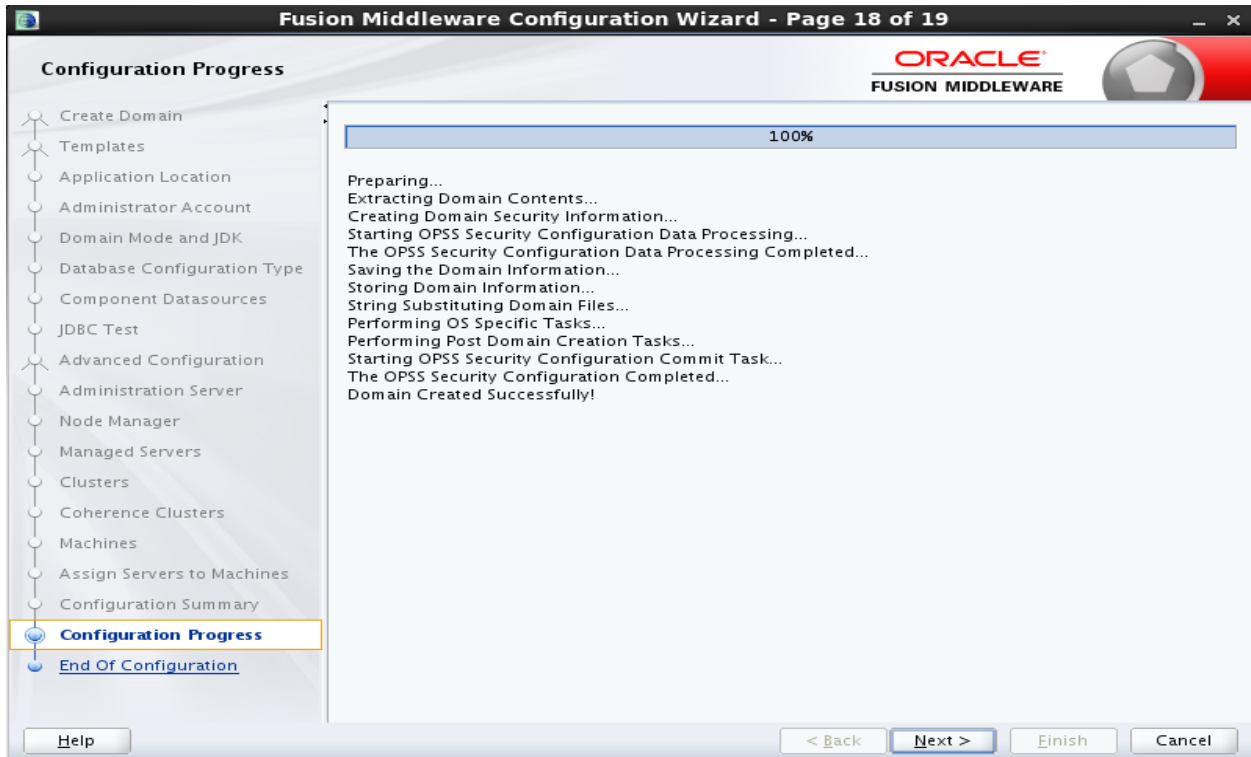
15) Give machine name as your choice. Listen Address as the machine IP and port.



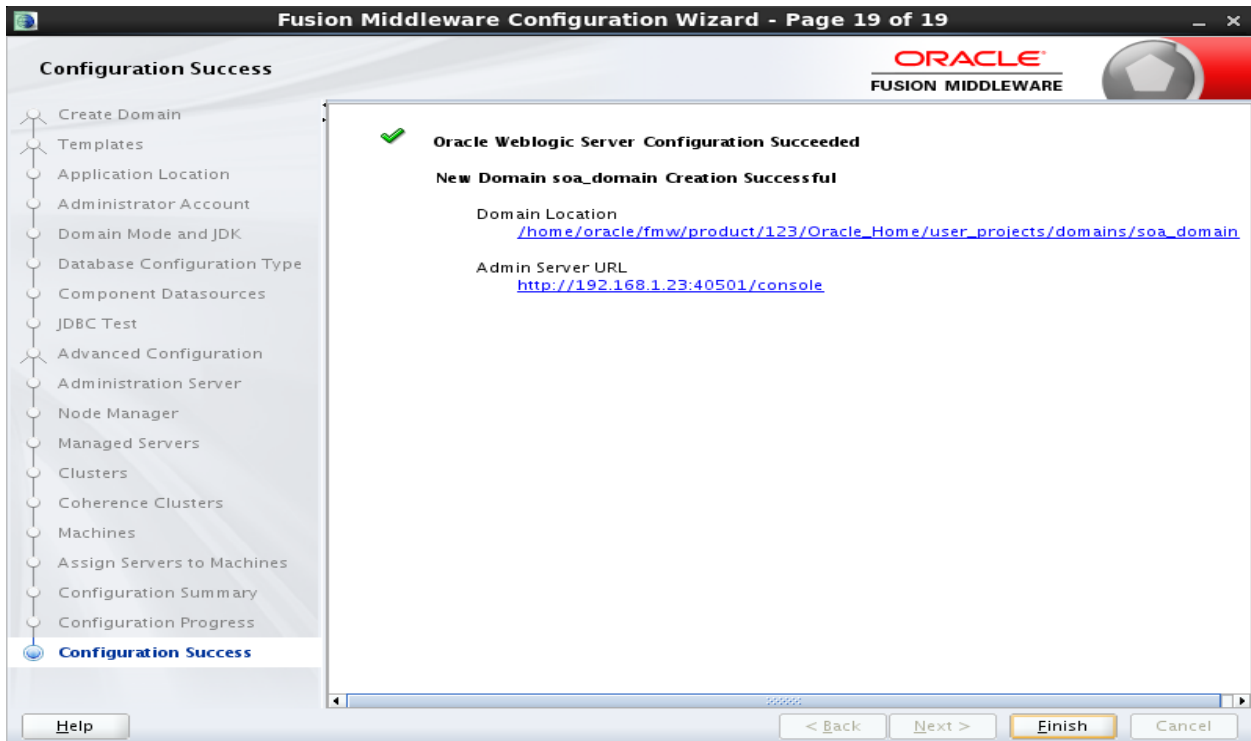
16) Move all the servers from Left Panel (under Servers) to Right panel (under Machines)



17) Click Create.



18) Click Next.



19) Note down the URL's to access the Admin Console. Click Finish.

Now start the AdminServer and nodemanager:

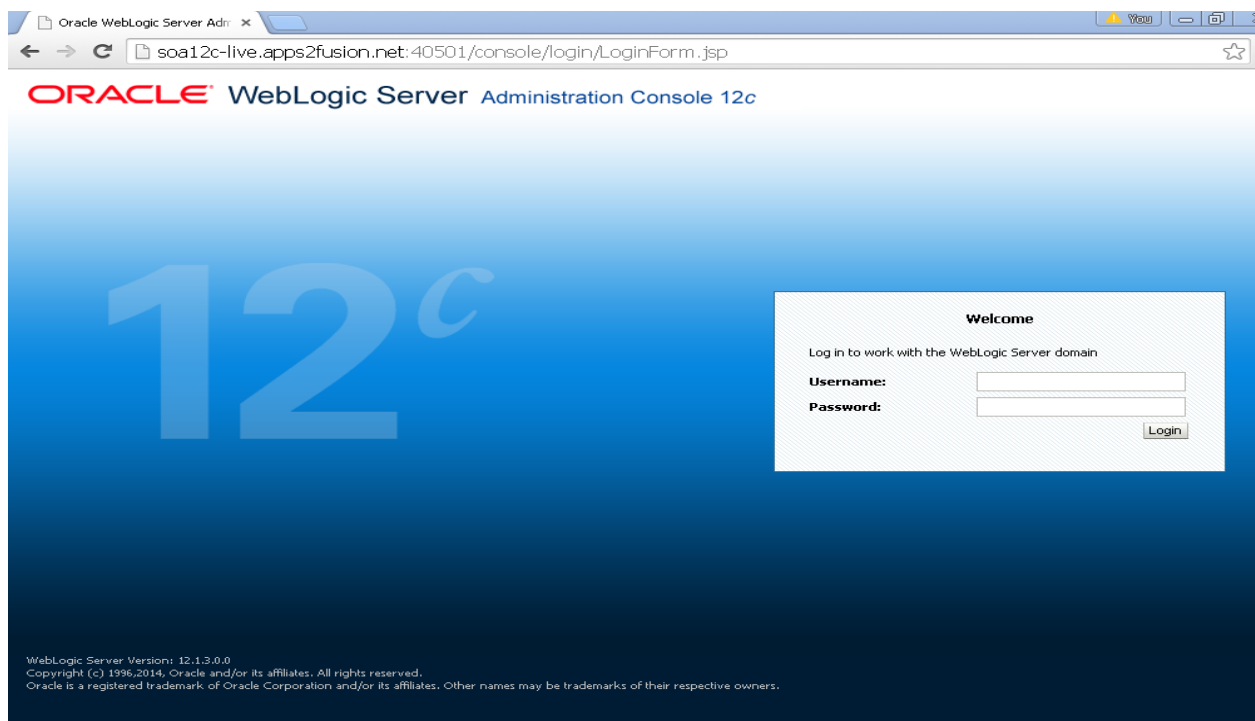
To start your per-domain Node Manager, go to **DOMAIN\_HOME/bin** directory.

```
nohup ./startNodeManager.sh &
```

Start AdminServer from same location:

```
./startWebLogic.sh
```

Once the server comes to 'RUNNING' Status. Navigate to the URL in browser.



20) Give Admin Username and password to login.

ORACLE WebLogic Server Administration Console 12c

Home Log Out Preferences Record Help Welcome, weblogic Connected to: soa\_domain

Home > Summary of Servers

**Summary of Servers**

Configuration Control

A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration. This page summarizes each server that has been configured in the current WebLogic Server domain.

**Customize this table**

**Servers (Filtered - More Columns Exist)**

Click the **Lock & Edit** button in the Change Center to activate all the buttons on this page.

New Clone Delete Showing 1 to 3 of 3 Previous | Next

<input type="checkbox"/>	Name	Type	Cluster	Machine	State	Health	Listen Port
<input type="checkbox"/>	AdminServer(admin)	Configured		app2fusion_machine	RUNNING	OK	40501
<input type="checkbox"/>	osb_server1	Configured		app2fusion_machine	RUNNING	OK	40512
<input type="checkbox"/>	soa_server1	Configured		app2fusion_machine	RUNNING	OK	40511

New Clone Delete Showing 1 to 3 of 3 Previous | Next

**Change Center**

**View changes and restarts**

Click the Lock & Edit button to modify, add or delete items in this domain.

Lock & Edit

Release Configuration

**Domain Structure**

soa\_domain

- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

**How do I...**

- Create Managed Servers
- Clone servers
- Delete Managed Servers
- Delete the Administration Server
- Start and stop servers

**System Status**

Health of Running Servers

Failed (0)

Critical (0)

21) Start soa\_server1 and osb\_server1 from the console.