

# **Quick Start Guide for Oracle® SOA Suite 11gR1 (11.1.1.5.0)**

Version 1.2

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**ORACLE®**

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# Introduction to Oracle SOA Suite



[Oracle SOA Suite](#) is a comprehensive, hot-pluggable software suite to build, deploy and manage Service-Oriented Architectures (SOA). The components of the suite benefit from common capabilities including consistent tooling, a single deployment and management model, end-to-end security and unified metadata management.

Oracle SOA Suite's hot-pluggable architecture helps businesses lower upfront costs by allowing maximum re-use of existing IT investments and assets, regardless of the environment (OS, application server, etc.) they run in, or the technology they were built upon. It's easy-to-use, re-use focused, unified application development tooling and end-to-end lifecycle management support further reduces development and maintenance cost and complexity.

The products included in this suite are listed below:

- ❑ [BPEL Process Manager](#)
- ❑ [Human Workflow](#)
- ❑ [Integration Adapters](#)
- ❑ [Business Rules](#)
- ❑ [Business Activity Monitoring](#)
- ❑ [Complex Event Processing](#)
- ❑ [Oracle Service Bus](#)
- ❑ [Oracle B2B](#)
- ❑ [Oracle Web Services Manager](#)

## Oracle BPM Suite



The Oracle BPM Suite is layered on the Oracle SOA Suite and shares many of the same product components, including:

- ❑ [Human Workflow](#)
- ❑ [Oracle Adapter Framework for Integration](#)
- ❑ [Business Rules](#)

The Oracle BPM Suite provides an integrated environment for developing, administering, and using business applications centered around business processes.

# Installing Oracle SOA Suite

## Introduction

This chapter provides the instructions for installing and configuring Oracle SOA Suite 11gR1 (11.1.1.5.0), released in May 2011.

It does not describe how to upgrade from earlier versions of SOA Suite.

Please check [Understanding Your Installation Starting Point](#) to decide whether you want to do a full installation or an upgrade installation.

The guide now includes the installation and configuration of [Oracle Service Bus](#).

If you follow the instructions to install SOA Suite below, you are only one step away from having [BPM Suite](#) as well. The only addition to the SOA Suite is the installation of the **BPM Extension for JDeveloper**, which will also be explained later in this guide.

These instructions are Windows based, but Linux users should have no difficulty adjusting them for their environment.

## What You Will Need and Where to Get It

Before you can begin the installation, you need to check your machine, download installation files, and check your database, browser, and JDK versions. Follow the instructions in this section carefully for a successful install.

## What to install

This document describes how to install SOA Suite (including Oracle Service Bus) from scratch on Windows.

If you want more details about other installation options or how to install other components, please visit the [Fusion Middleware: Download, Installation & Configuration Readme](#) or the [Oracle® Fusion Middleware Installation Guide for Oracle SOA Suite and Oracle Business Process Management Suite](#)

The [Oracle SOA Suite Downloads page](#) lists all necessary components for an installation of the base components on Windows, Linux and a Generic platform, but the section [Download files](#) below also lists the components you need to download for an installation on Windows.

While the Oracle SOA Suite Downloads page does not list the components needed for an Oracle Service Bus (OSB) installation, please visit the [Oracle Service Bus Downloads page](#) for OSB related downloads.

Database		WebLogic Server	RCU
SOA	OSB	JDeveloper	SOA Extension

## Memory and Disk Space Requirements

The software requires a minimum of 3 GB available memory to run, but more is recommended.

If you have less, separate the installation of the database, servers, and JDeveloper to different machines.

If you install SOA Suite without Oracle Service Bus, you need about 4.81 GB of disk space to download the install files plus about 5.15 GB to install everything. Your database takes an additional 5 GB (or so, depending on your configuration).

Oracle Service Bus will add about 1.2 GB of disk space.

## Download files

Create c: \stageFMW to hold the download files used for installation. If you already have this directory from a previous install, empty it first.

This document assumes this directory. If you save the files somewhere else then make sure there are *no spaces* in your path and adjust accordingly when c: \stageFMW is referenced in this document.

Download the following to c: \stageFMW. Some file names may be slightly different. The Database component is handled later in this document.

Some components are generic and some are platform specific. Read the list carefully.

- ❑ **Oracle WebLogic Server + Coherence - Package Installer 10.3.5**, Size: 706 MB, Check Sum: 413041778: [wls1035\\_win32.exe](#)  
Please download this WebLogic Server installer if you're not planning to install Oracle Service Bus or if you're not planning to use Oracle Enterprise Pack for Eclipse (OEPE), the IDE for this release of Oracle Service Bus.
  
- ❑ **Oracle WebLogic Server + Coherence + OEPE - Package Installer 10.3.5**, Windows:  
Size: 1 GB, Checksum: 2447322966: [wls1035\\_oepe111172\\_win32.exe](#)  
Please download this WebLogic Server installer if you're planning to install Oracle Service Bus and use Oracle Enterprise Pack for Eclipse (OEPE), the IDE for this release of Oracle Service Bus.
  
- ❑ **Repository Creation Utility 11.1.1.5.0**, Size: 309 MB, Check Sum: 2130853384:  
[ofm\\_rcu\\_win\\_11.1.1.5.0\\_disk1\\_1of1.zip](#)
  
- ❑ **SOA Suite 11.1.1.5.0** (2 parts)  
[ofm\\_soa\\_generic\\_11.1.1.5.0\\_disk1\\_1of2.zip](#), Size: 1.25 GB, Check Sum: 1350681827 and  
[ofm\\_soa\\_generic\\_11.1.1.5.0\\_disk1\\_2of2.zip](#), Size: 1.69 GB, Check Sum: 1007146161
  
- ❑ **JDeveloper 11.1.1.5.0** : [jdevstudio11115install.exe](#), Size: 1.17 GB, Check Sum: 4189206608
  
- ❑ **JDeveloper extension for SOA**: it is recommended to install this via the JDeveloper Updates Wizard as described in section [Update JDeveloper with latest SOA extension](#) below.  
Only if there is no internet connection available on the computer where JDeveloper is installed, the extension can be downloaded from [Oracle SOA Composite Editor](#).  
**Note: You need to make sure to download the correct version!**

- ❑ **Oracle Service Bus 11.1.1.5.0** All Platforms: Size: 1.1 GB, Checksum: 1325019043, [ofm\\_osb\\_generic\\_11.1.1.5.0\\_disk1\\_1of1.zip](#)
- ❑ If you also want to use **BPM Suite**, you also need the **JDeveloper extension for BPM**, see [Update JDeveloper with latest SOA extension](#).

Extract the installation files as follows:

- ofm\_soa\_generic\_11.1.1.5.0\_disk1\_1of2.zip and ofm\_soa\_generic\_11.1.1.5.0\_disk1\_2of2.zip to c:\stageFMW\SOA
- ofm\_rcu\_win\_11.1.1.5.0\_disk1\_1of1.zip to c:\stageFMW\RCU
- ofm\_osb\_generic\_11.1.1.5.0\_disk1\_1of1.zip to c:\stageFMW\OSB

## Check your browser

- ❑ Enterprise Manager requires Firefox 3, Safari 4+ or IE 7+.
- ❑ BAM requires IE 7 or 8
  - IE 7 without special plug-ins (there's a Pro-search plug-in and Microsoft Internet Explorer Knowledge Base Update (KB2416400) that causes problems).
  - IE 6 has a few UI issues. Firefox does not work.

## Check your JDK

The WebLogic server installation exe is packaged with a JDK. The JDeveloper exe also comes with a JDK.

If you are going to install WebLogic server and JDeveloper on the same machine, you use the JDK from WebLogic for JDeveloper too. However, if you are going to install on separate machines, you need to have **JDK 6.0 Update 24 for Windows** for JDeveloper, available at <http://www.oracle.com/technetwork/java/javase/downloads/index.html>

## Installation

Now you have all of the files required for the installation of SOA Suite 11.1.1.5.0, except possibly the database. The first step is to confirm your database installation and install a database if necessary.

## Install the database

Database		WebLogic Server	RCU
SOA	OSB	JDeveloper	SOA Extension

Determine which database version you have already, if any, and then decide which database version you will use for your SOA installation.

Oracle Database is the recommended database for SOA Suite deployments.

[Oracle Express Edition \(XE\) 10.2.0.1](#) does not meet the minimum version requirement for supported use, but will generally work in a personal development environment.

You need one of

- ❑ [XE Universal or Standard database version 10.2.0.1](#), or
- ❑ Oracle 10g database version 10.2.0.4+ or
- ❑ Oracle 11g database version 11.1.0.7+ or 11.2.0.1+

You may see problems with installing XE when you already have 10g installed on Windows. The Windows registry sometimes gets the database file locations confused. If you need to uninstall a database, you should follow the instructions.

- ❑ If you need to uninstall XE, be sure to follow these instructions
  - Oracle Database Express Edition Installation Guide
  - 10g Release 2 (10.2) for Microsoft Windows
  - Part Number B25143-03, Section 7 [Deinstalling Oracle Database XE](#)
- ❑ If you need to uninstall 10.2, be sure to follow these instructions
  - Oracle Database Installation Guide
  - 10g Release 2 (10.2) for Microsoft Windows (32-Bit)
  - Part Number B14316-04, Section 6 [Removing Oracle Database Software](#)
- ❑ If needed, install `OracledbUninstall.exe` (or `Oracledb.exe`)

When you are using Oracle XE, you must update database parameters if you have never done this for your database installation. You only have to do this once after installing. Set the processes parameter to  $\geq 300$  as follows.

The shutdown command can take a few minutes. Sometimes the shutdown/startup command fails. In that case, simply restart the XE service in the Control Panel/Administrative Tools/Services dialog after setting your parameters.

```
sqlplus sys/welcome1@XE as sysdba
SQL> show parameter session
SQL> show parameter processes
SQL> alter system reset sessions scope=spfile sid='*';
SQL> alter system set processes=300 scope=spfile;
SQL> shutdown immediate
SQL> startup
SQL> show parameter session
SQL> show parameter processes
```

## Install WebLogic server

Database		WebLogic Server	RCU
SOA	OSB	JDeveloper	SOA Extension

Once your database is ready, you can install the next step, the WebLogic server.

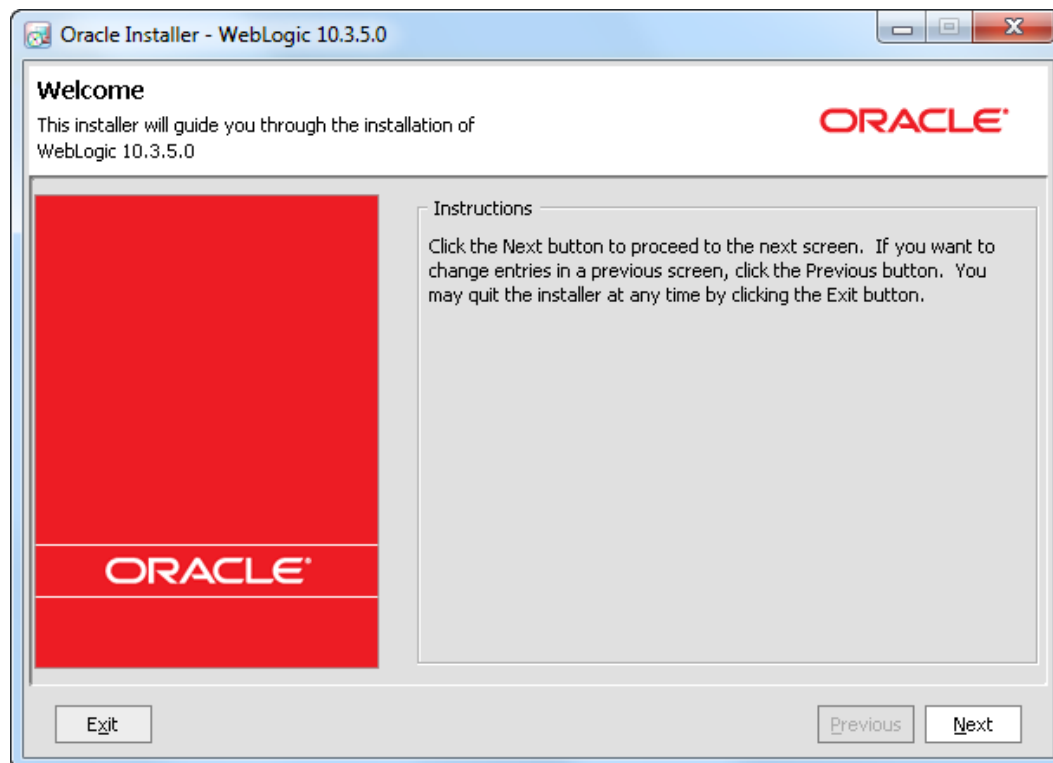
If you have installed SOA 11g before and want to install again in the same location, you must uninstall the previous one first. See the section at the end of this document on uninstalling.

You can choose whether to install WebLogic Server without OEPE, or to install the version that includes OEPE, depending on your use case.

When you are ready to install, complete the following.

- ❑ Open a command window and enter

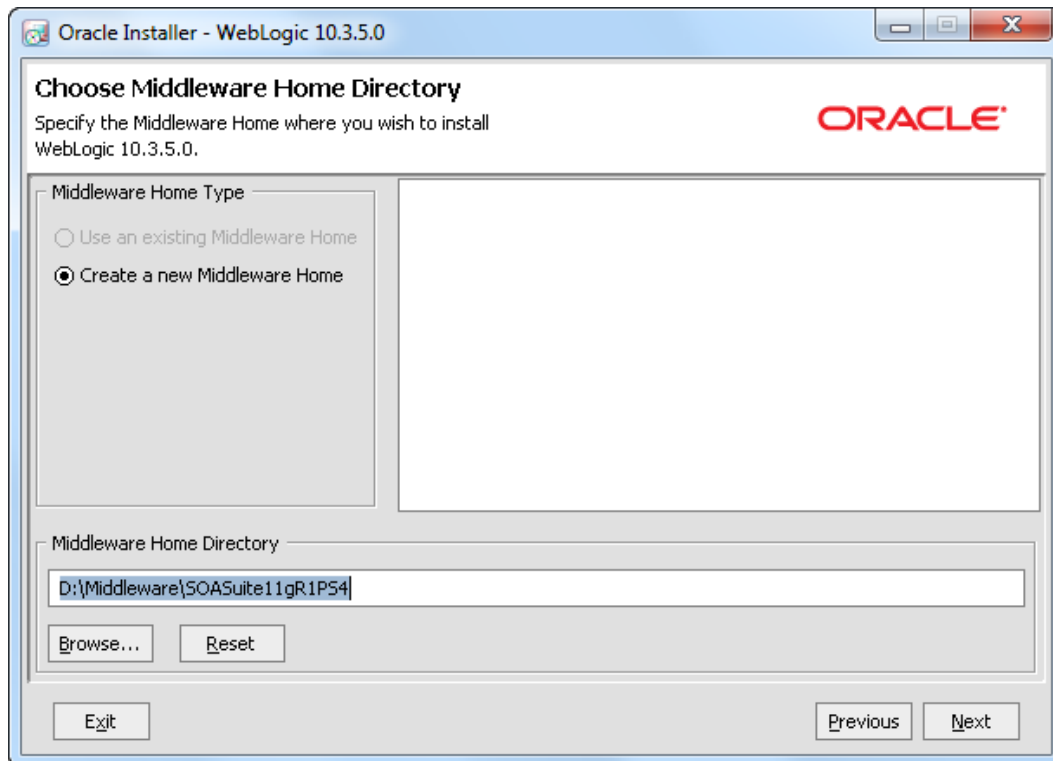
```
cd c:\stageFMW
wl s1035_wi n32. exe
or
wl s1035_oepe111172_wi n32. exe (For OSB and OEPE installation)
```
- ❑ When the install wizard comes up, click **Next**





- ☒ Select *Create a new Middleware Home* and enter D: \Mi ddI eware\SOASui te11gR1PS4

This document assumes that path. If you use a different middleware home then adjust accordingly when D: \Mi ddI eware\SOASui te11gR1PS4 is referenced throughout this document.

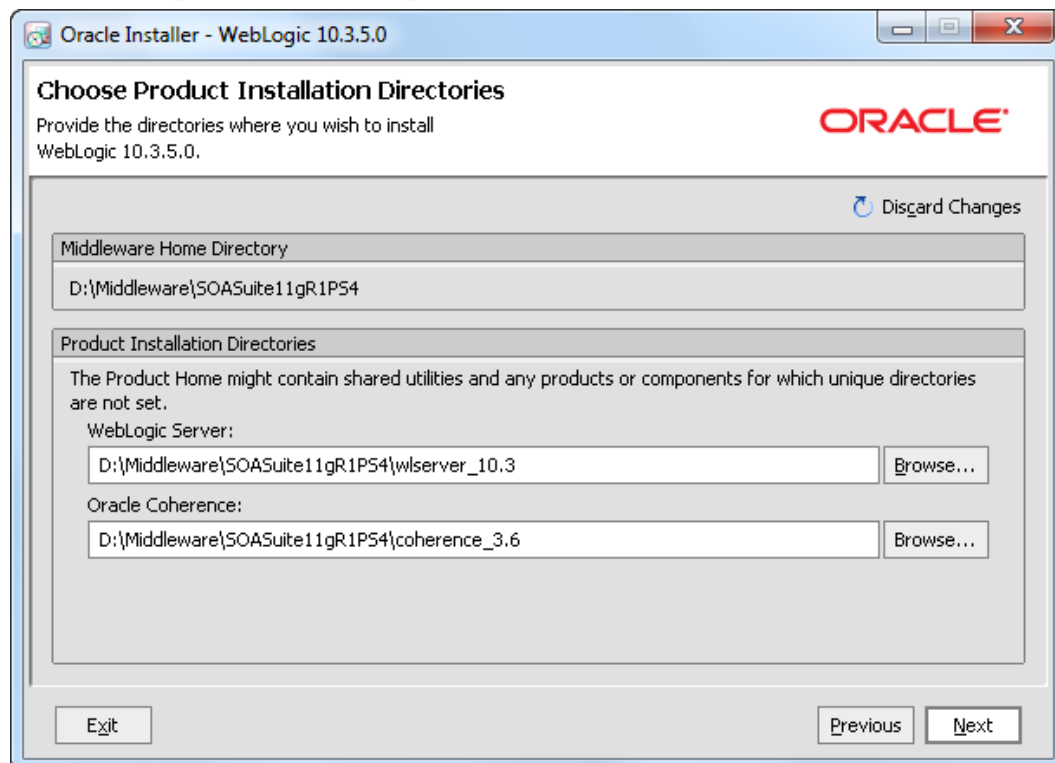


Click **Next**

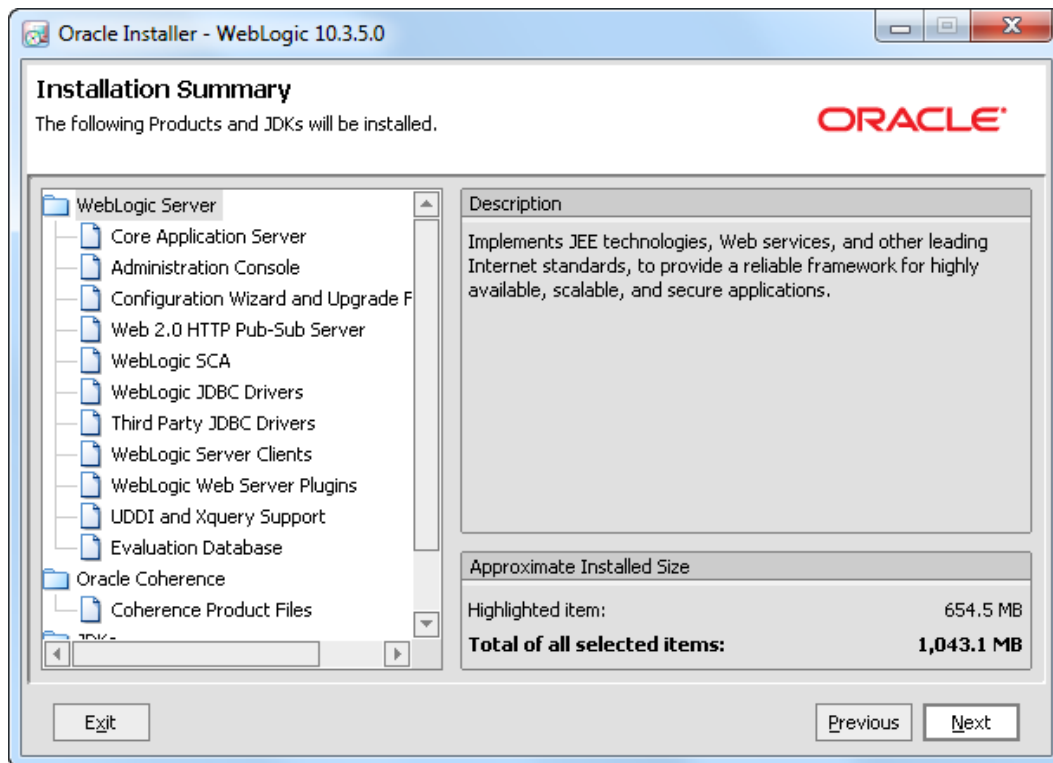
- ☒ Enter email to register for security alerts or deselect the checkbox and decline – whichever you prefer, click **Next**
- ☒ Select Typical, click **Next**



- Review installation directories (when installing OEPE, there will be a third directory **Oracle Enterprise Pack for Eclipse**)



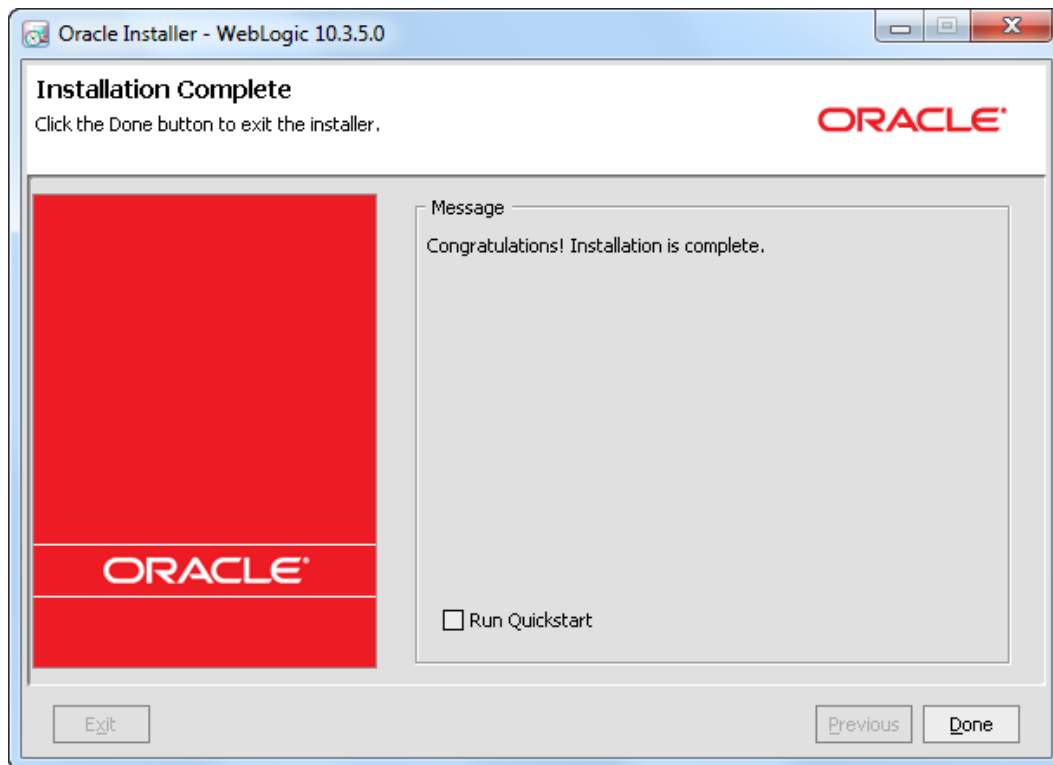
- ☒ Click **Next**
- ☒ Select “All Users” Start Menu folder, click **Next**
- ☒ Review summary



- ☒ Click **Next** to start the installation process.

Install takes about 5 minutes.

- ☒ When the install is complete, deselect *Run Quickstart* checkbox and click **Done**.



## Install database schema using RCU

Database		WebLogic Server	RCU
SOA	OSB	JDeveloper	SOA Extension

Now it is time to set up the database schema.

If you have installed SOA 11g before and you are not upgrading, you *must* drop your existing database schema before reinstalling or create a second schema for this installation. You cannot reuse an existing schema. See the section in this document on [uninstalling to drop an existing schema](#). After you drop the existing schema, come back here to configure the new schema.

### VERY IMPORTANT NOTE!!!!!!

If you are using Oracle XE as your database, you need to set the `RCU_JDBC_TRIM_BLOCKS` environment variable to TRUE **prior** to running RCU.

```
set RCU_JDBC_TRIM_BLOCKS=TRUE
echo %RCU_JDBC_TRIM_BLOCKS%
```

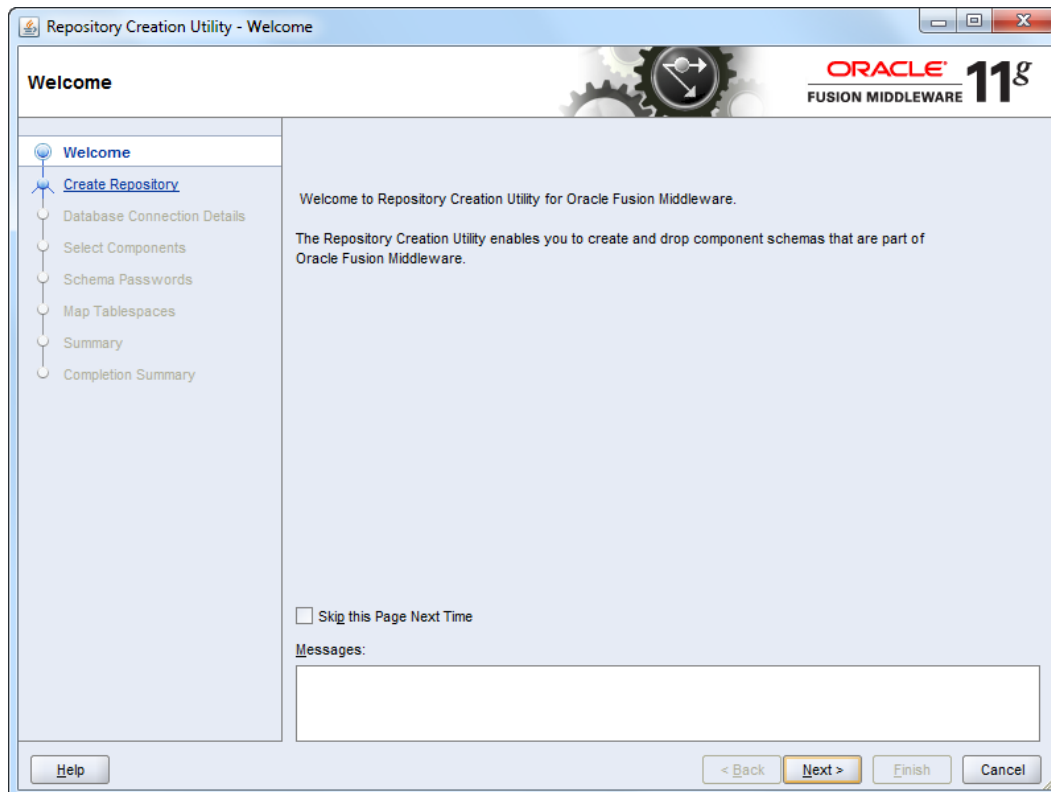
If you don't do this, you will run into problems that you might only realize when you start your implementation.

## Configure Schema

Now create the new schema. Open a command window and enter the following.

```
cd c:\stageFMW\RCU\rcuHome\BIN
rcu.bat
```

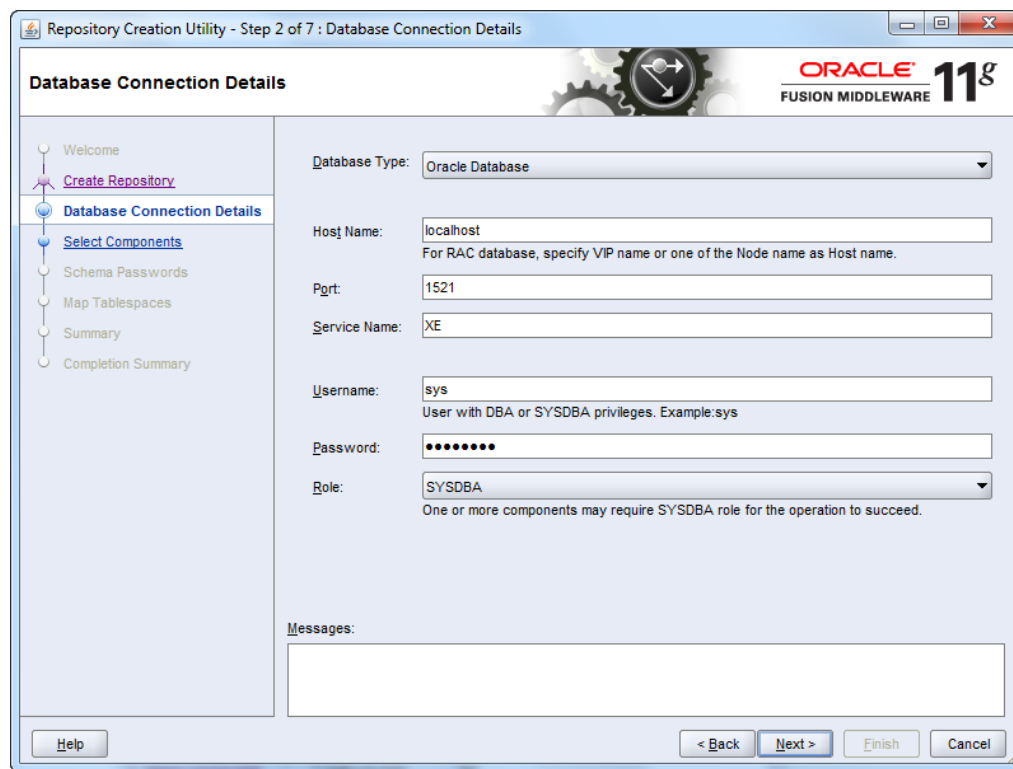
The Repository Creation Utility opens.



- ☒ On the welcome screen, click **Next**
- ☒ Select **Create**

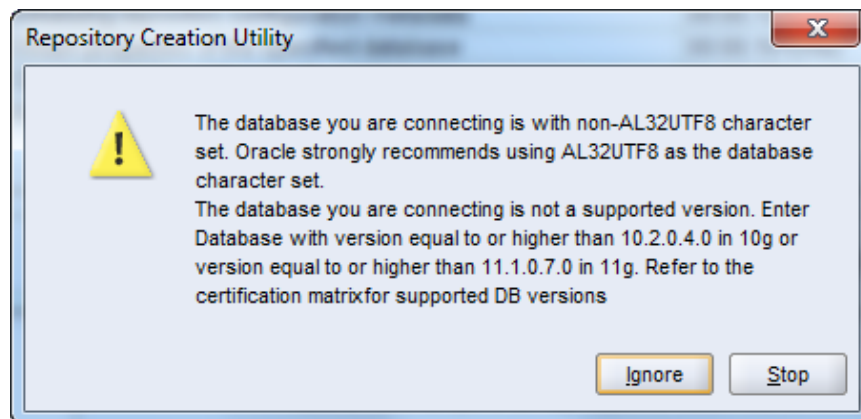
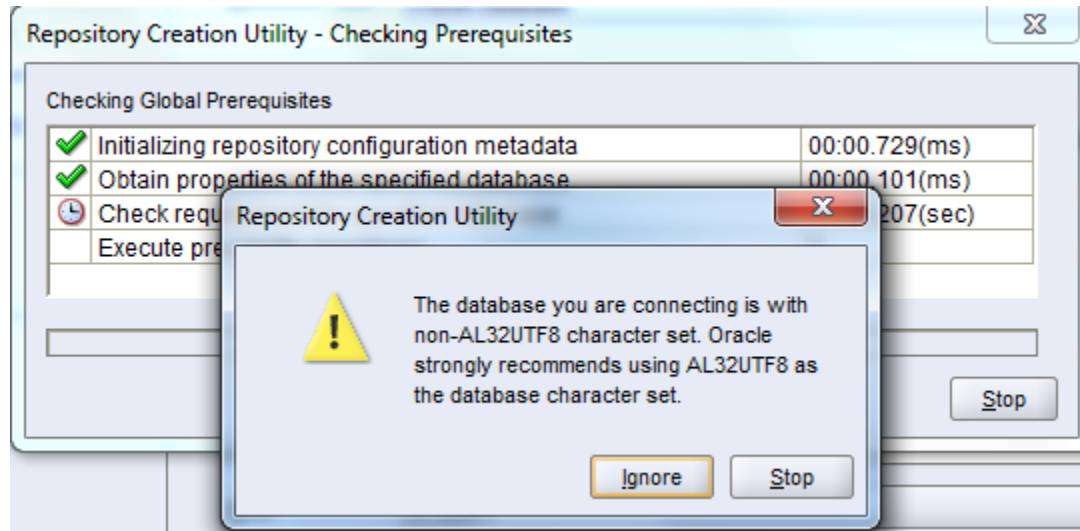


- ☒ Click **Next**
- ☒ Enter the database information



- ☐ Click **Next**

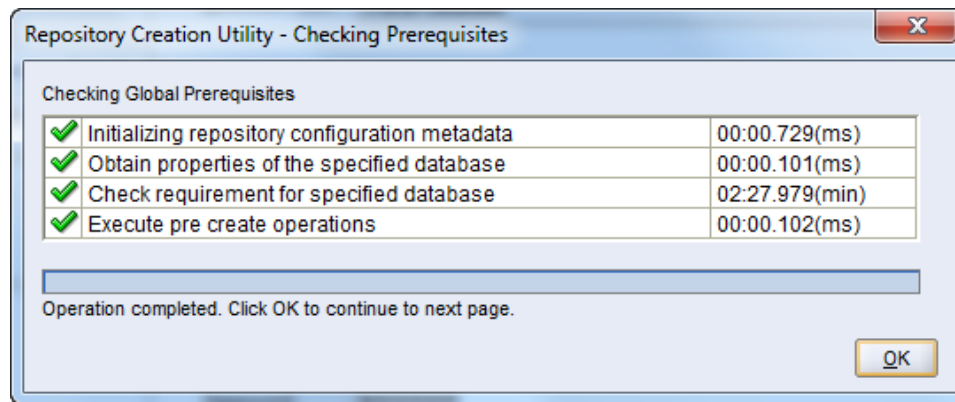
If you are using XE, you will see one or two warnings when you install the schema that this version is too old and is using the wrong character set.



You can safely ignore these warnings for your evaluation installation. If you wish to use extended character sets you must use **XE Universal**.

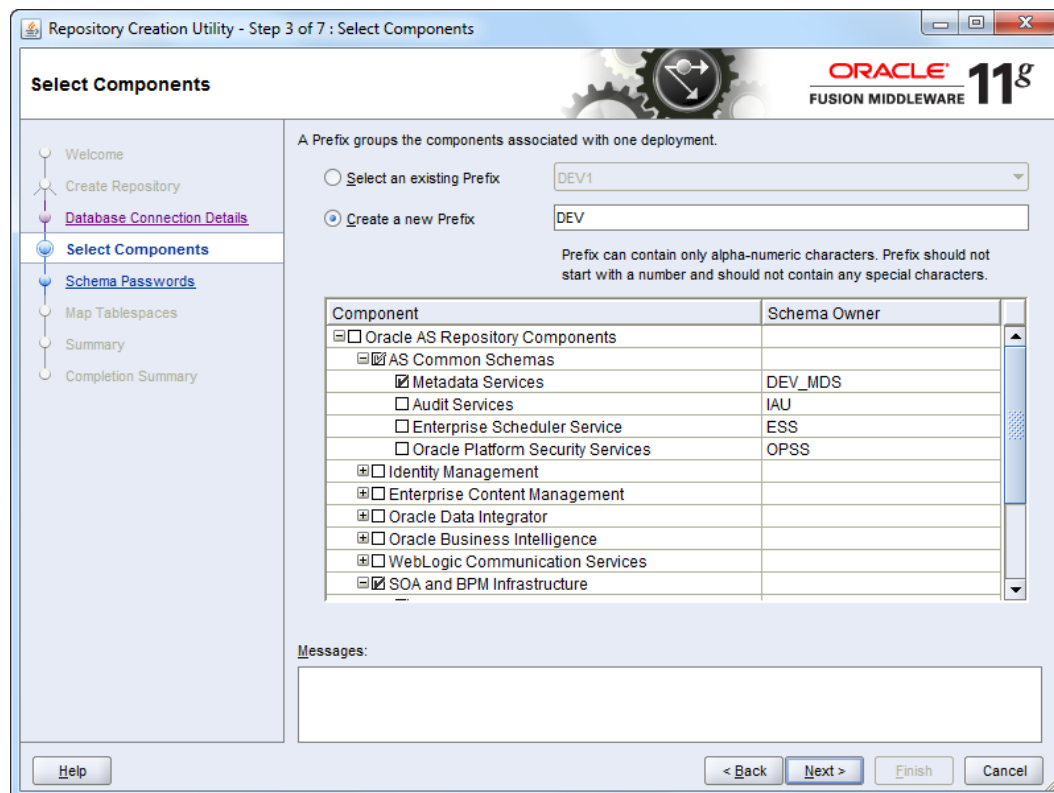
The pre-requisites are reviewed.

- ☐ When complete, click **OK**. The utility moves to the next page – with a slight delay, just wait for it.



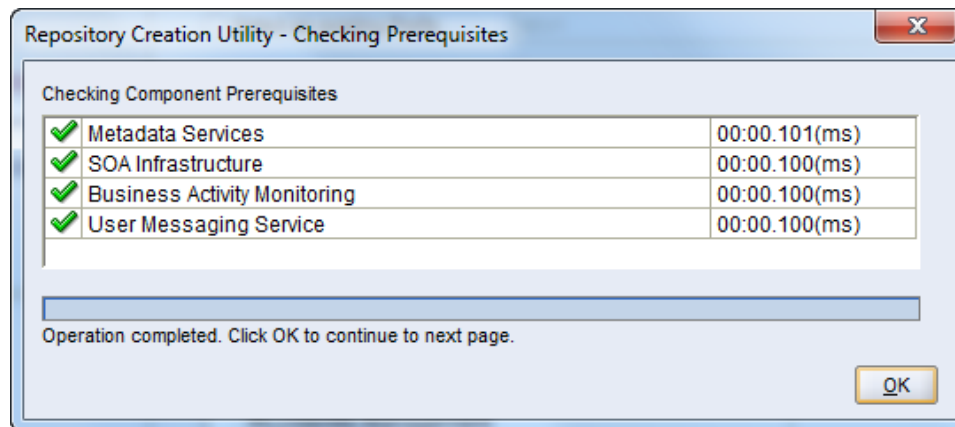
- ☒ On the Select Components screen, enter **DEV** in the field for creating a new prefix.
- ☒ Select the component SOA and BPM Infrastructure. Dependent schemas are selected automatically.

If you choose to select other components, these install instructions may not match your experience. Also, you may have to increase processes in XE (you will get a message telling you what is required).

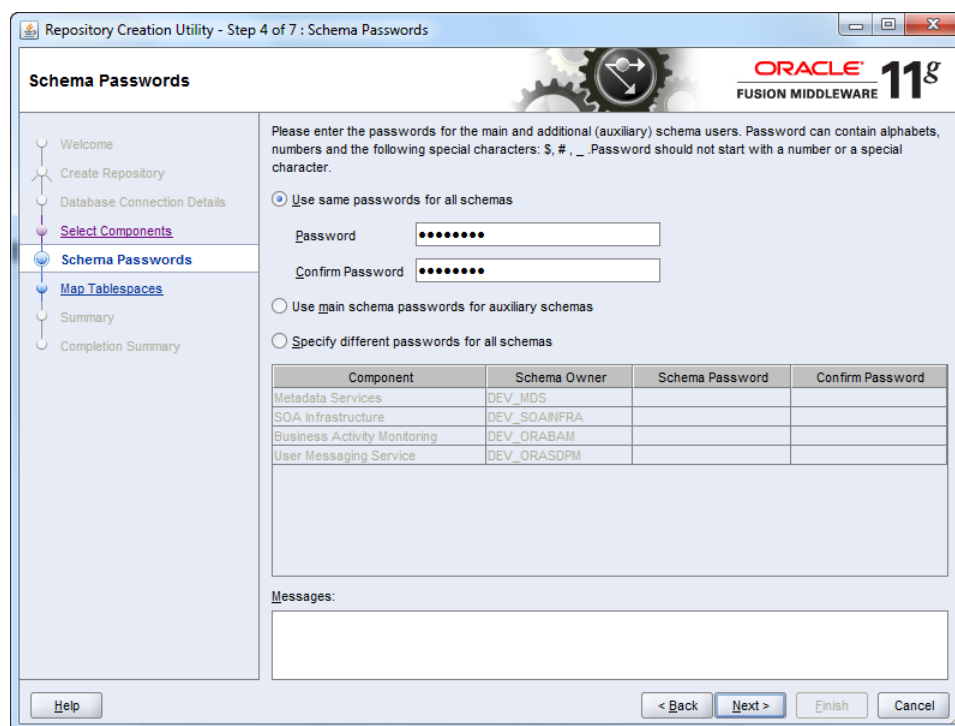


- ☒ Click **Next**
- ☒ The pre-requisites for this step are checked. When completed, click **OK**.

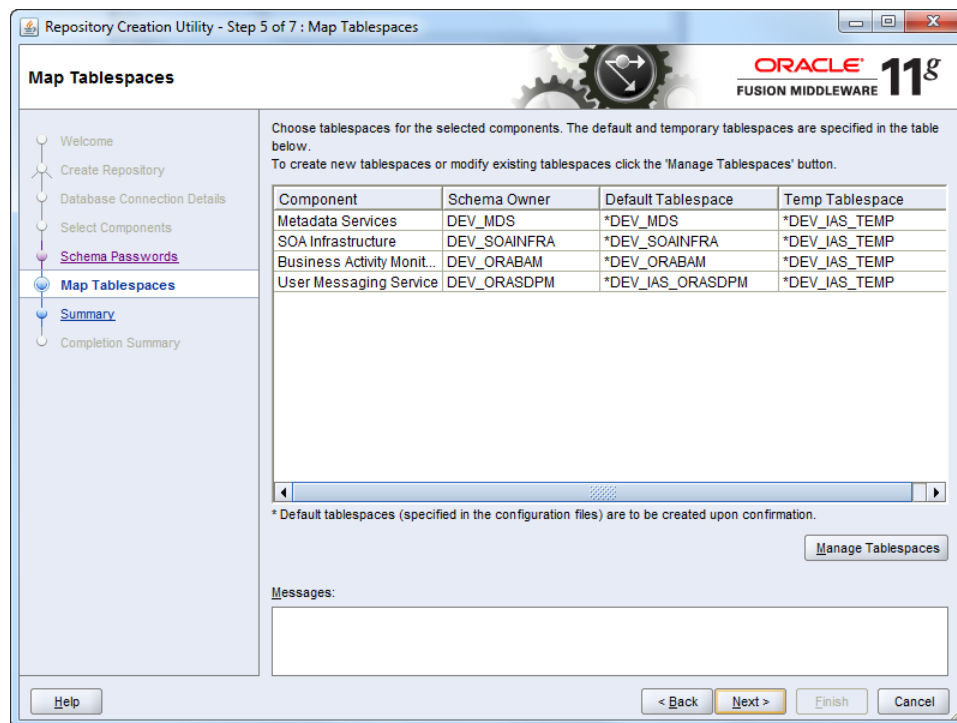




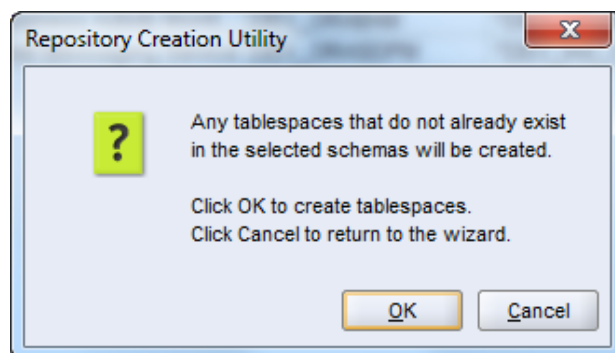
- Select the radio button to **Use the same password for all schemas**. Enter a schema password. The password **welcome1** is assumed in this document, but you should choose your own secure password or a different one for each schema and be sure to record your passwords as you will need them later.



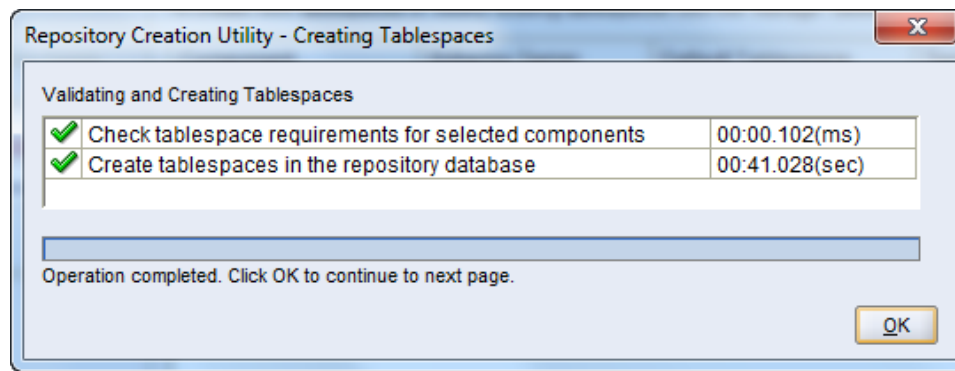
- Click **Next**
- Review the tablespaces and schema owners for the components



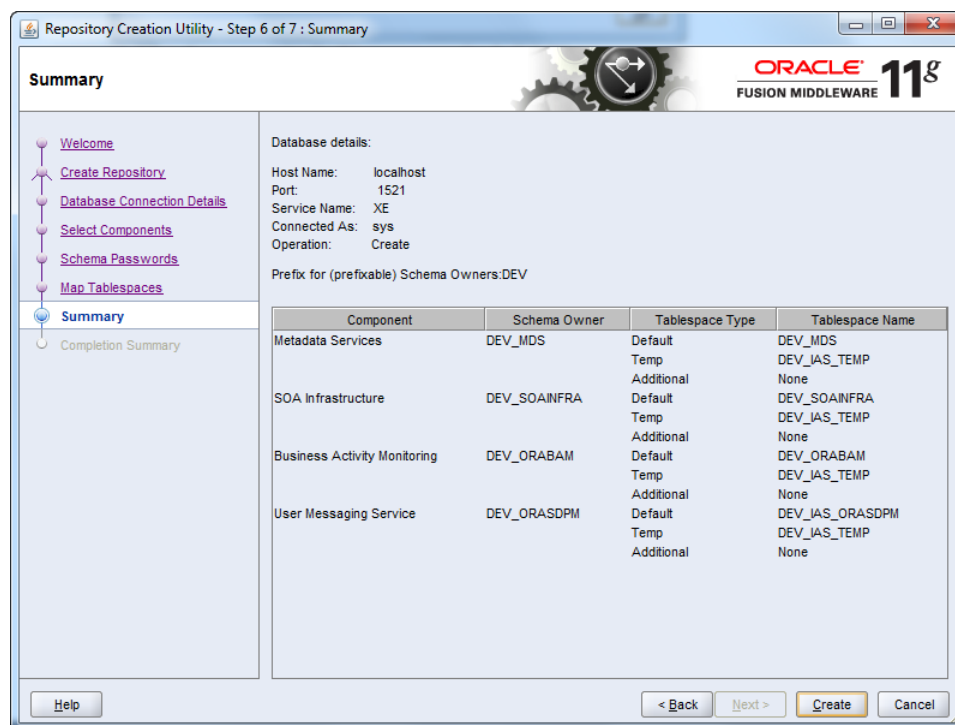
- ☐ Accepting the defaults, click **Next**



- ☐ Click **OK** to create the tablespaces.



- When the pre-requisites for this step are completed, click **OK**



- Click **Create** to create the tables. This takes about 2 minutes.



- When completed, click **Close**.

## Install SOA Suite – Base Components



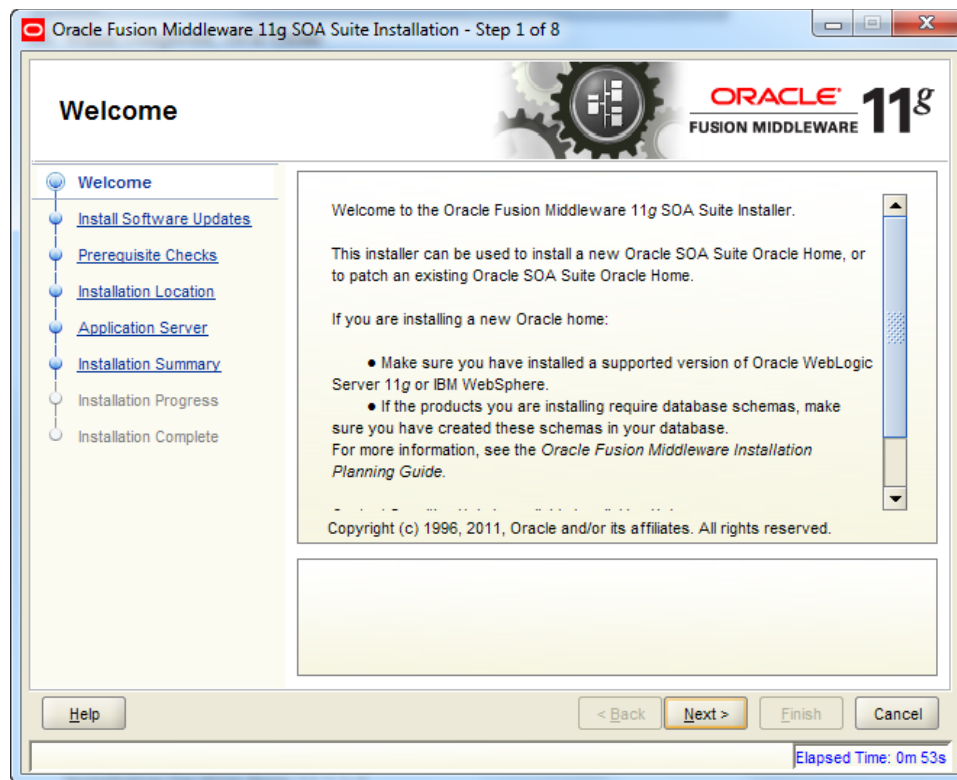
Once the schema has been created, you are ready to install the SOA server.

Locate the JDK directory path within the installed middleware home. You use this path in the next command. The JDK location is *jdk160\_24*.

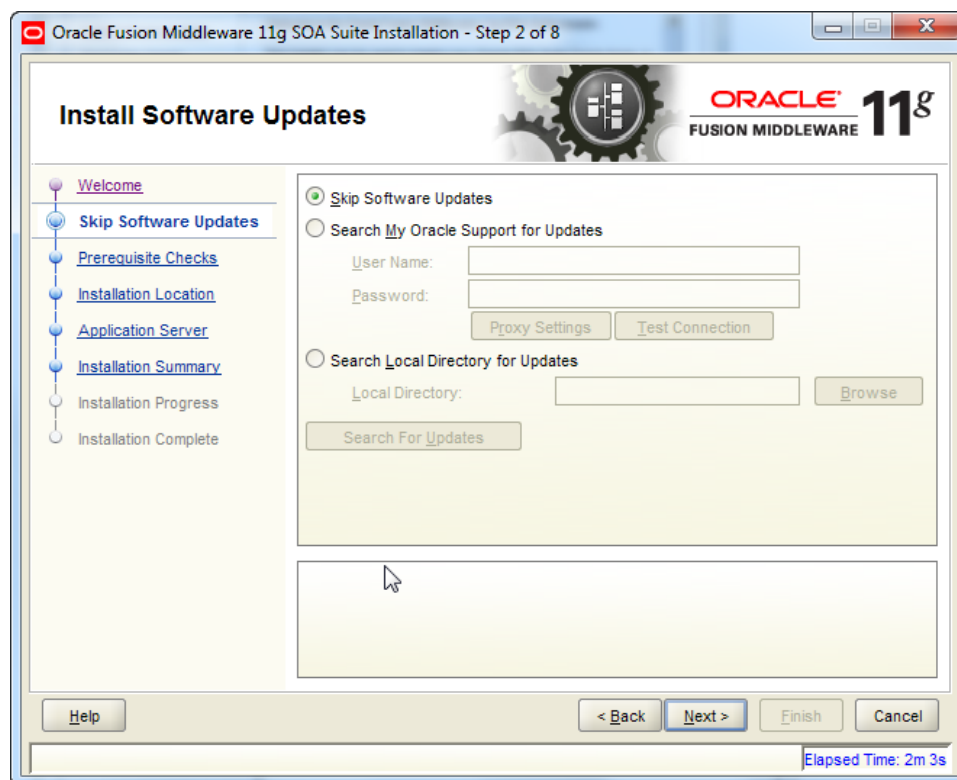
- In a command window enter  

```
cd c:\stageFMW\SOA\Disk1
setup -jreLoc D:\Middleware\SOASuite11gR1PS4\jdk160_24
```

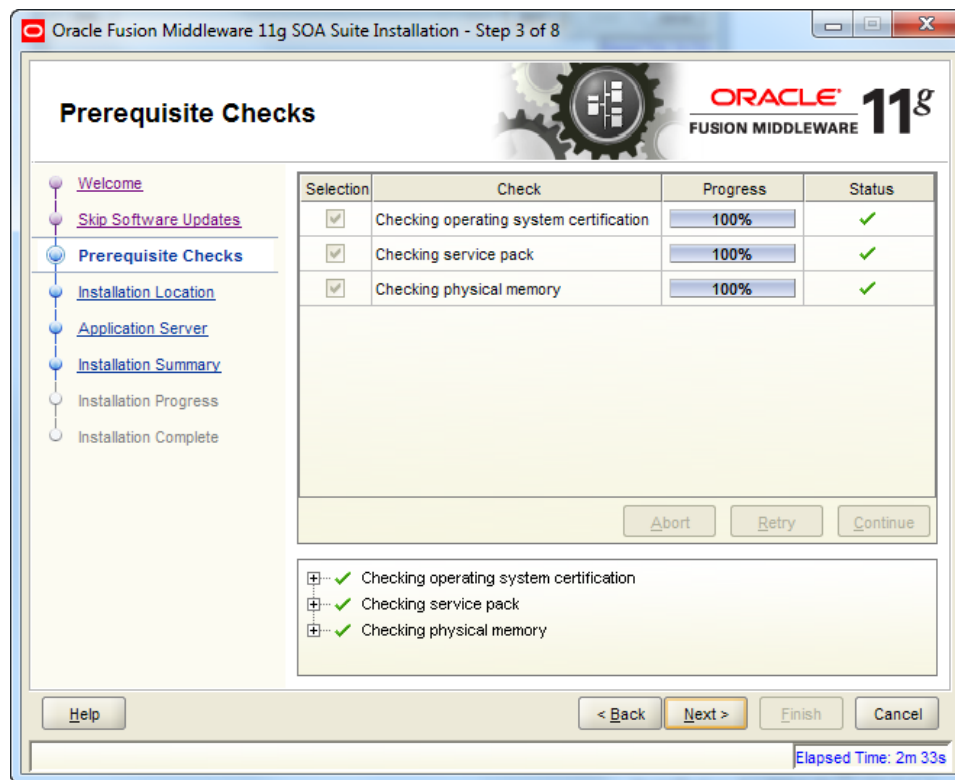
- When the install wizard welcome screen comes up, click **Next**



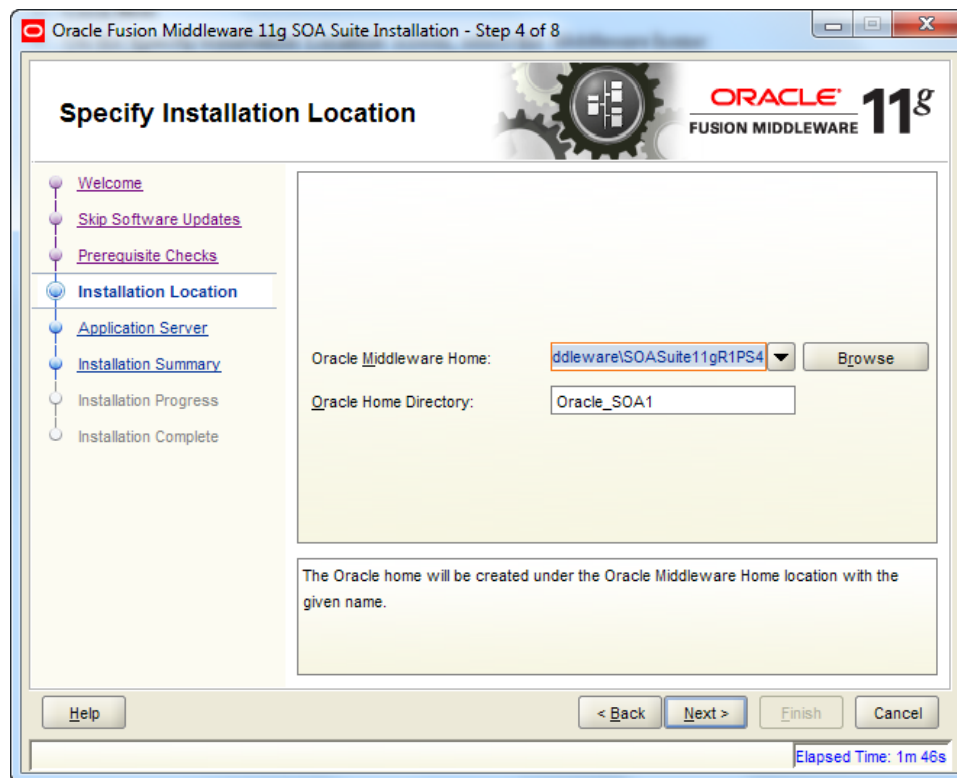
- ☐ Select “Skip Software Updates” and click **Next**



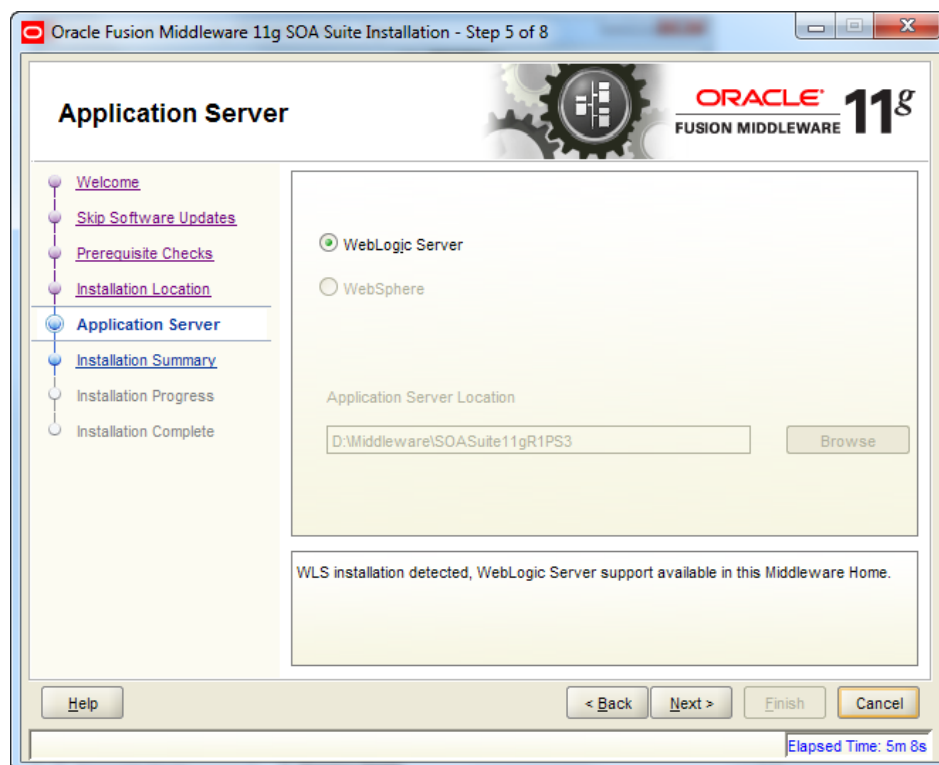
- ☒ Wait for the pre-requisite check to complete (it's quick!)



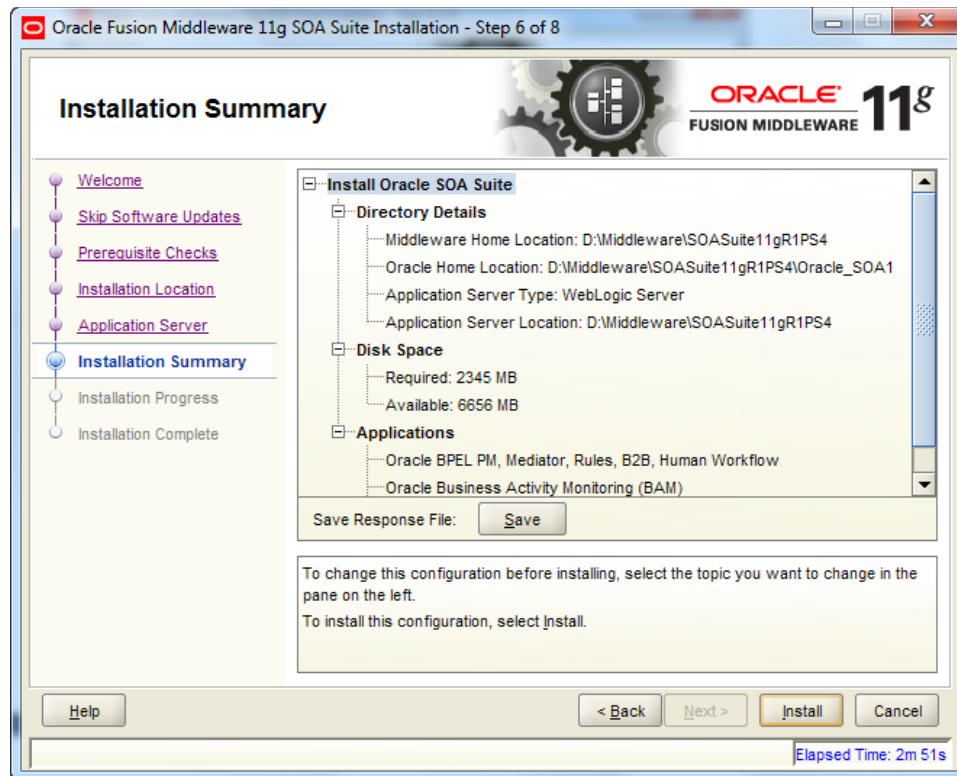
- ☒ Click **Next**
- ☒ On the **Specify Installation Location** screen, select the Middleware home:  
D: \Middleware\SOASuite11gR1PS4
- ☒ Accept the default Oracle home: Oracle\_SOA1  
If you use a different Oracle home then adjust accordingly when *Oracle\_SOA1* is referenced throughout this document.



Click **Next**

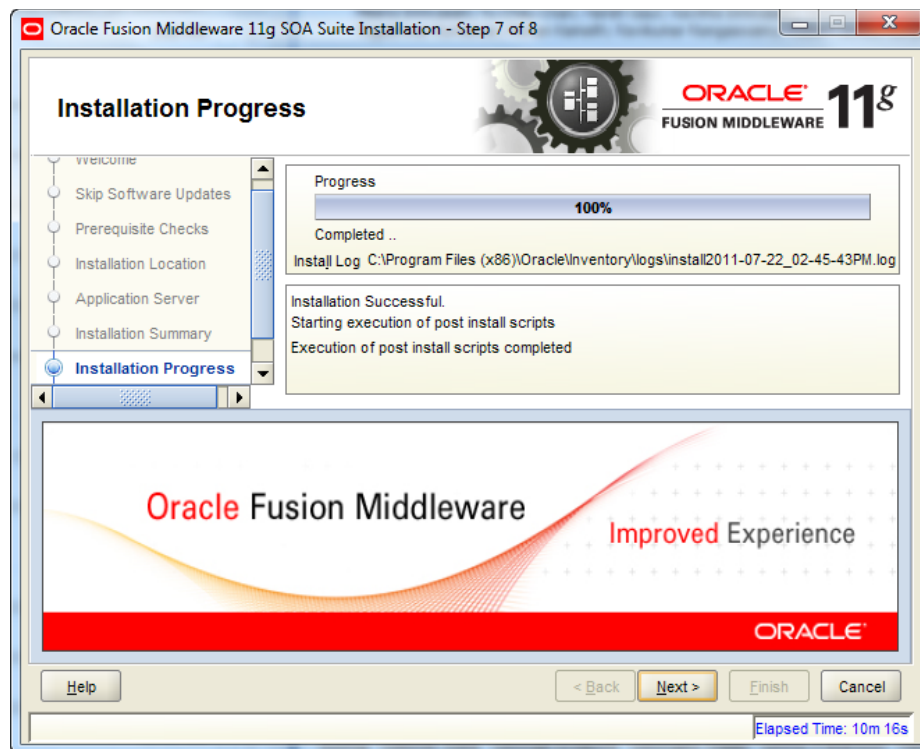


- ☒ Accept the default on the Application Server page and click **Next**
- ☒ Review summary

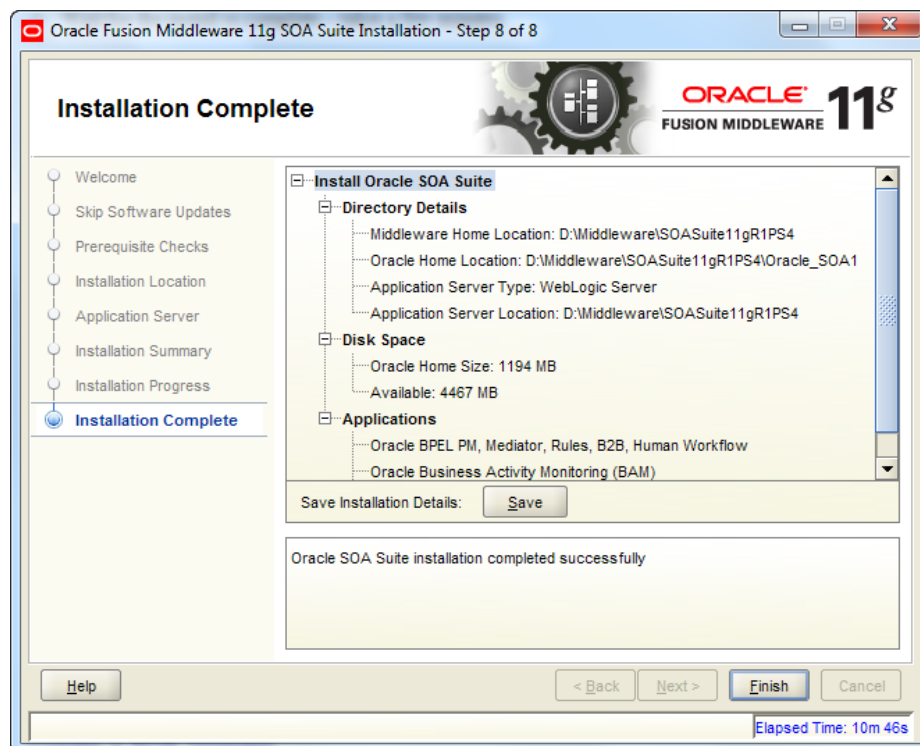


- ☒ Click **Install**
- ☒ Wait for the install to complete – takes a few minutes.





- When install reaches 100%, click **Next** and then click **Finish**



## Add Service Bus

Database		WebLogic Server	RCU
SOA	OSB	JDeveloper	SOA Extension

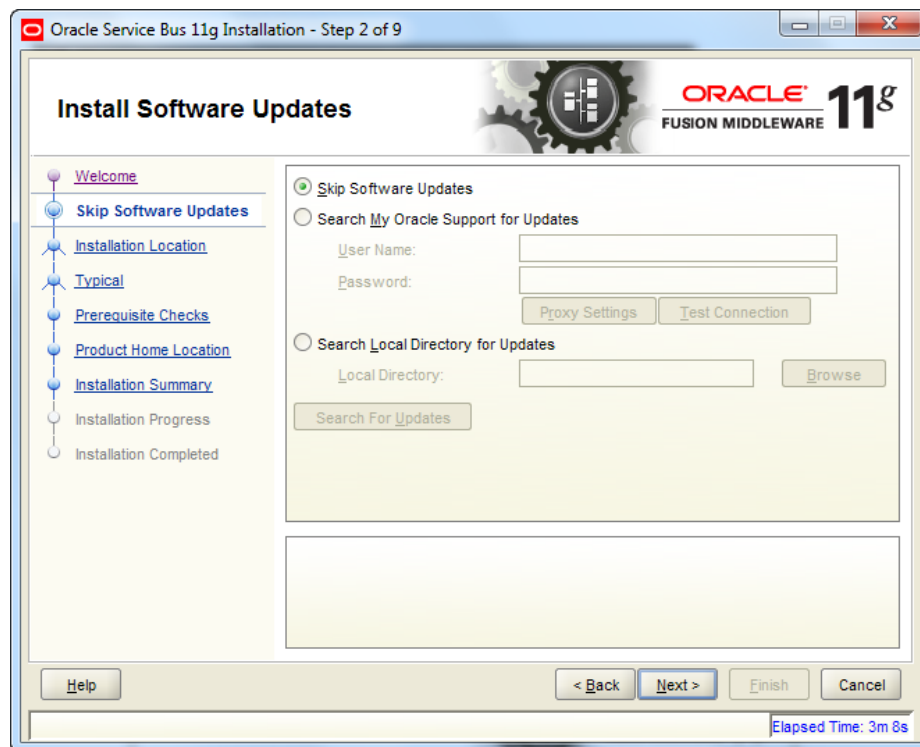
Locate the JDK directory path within the installed middleware home. You use this path in the next command. The JDK location is *jdk160\_21*.

- ❑ In a command window enter

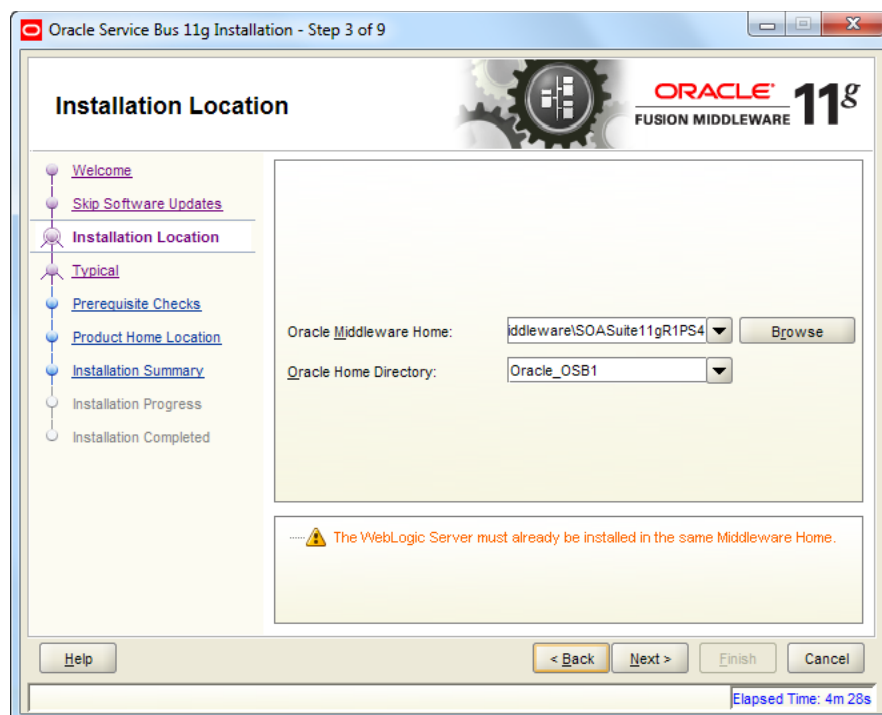
```
cd c:\stageFMW\OSB\Disk1
setup -jreLoc D:\Middleware\SOASuite11gR1PS4\jdk160_24
```
- ❑ When the install wizard comes up, click **Next**



- ❑ Select “Skip Software Updates” and click **Next**



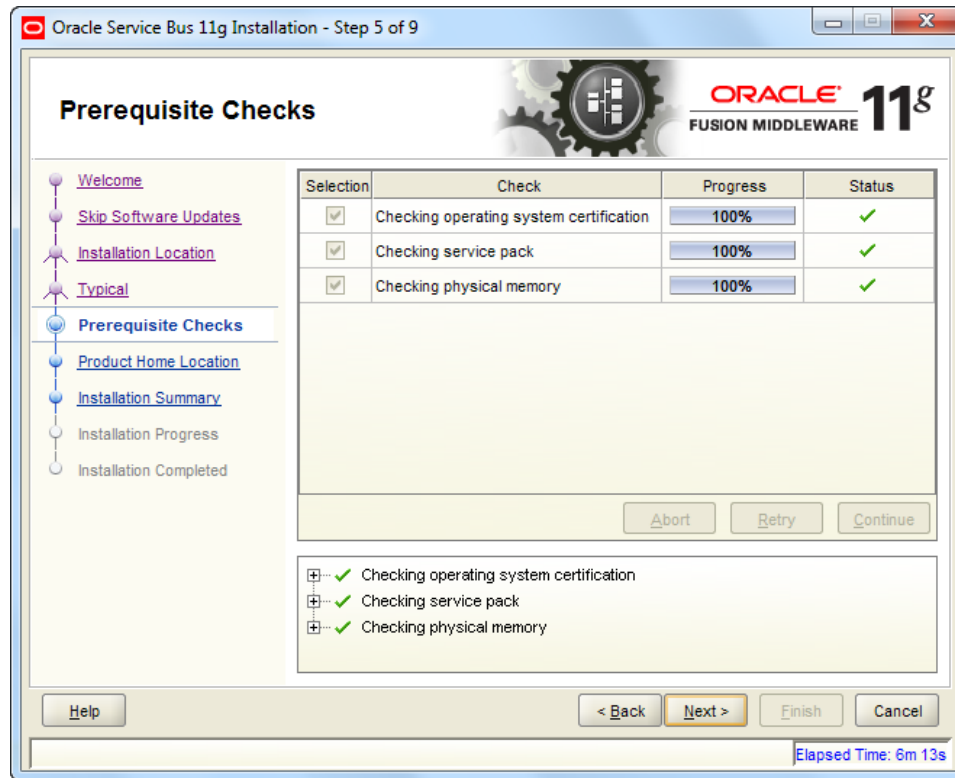
- ☐ The default locations and names on the *Installation Location* step should be fine. Press the **Next** button.



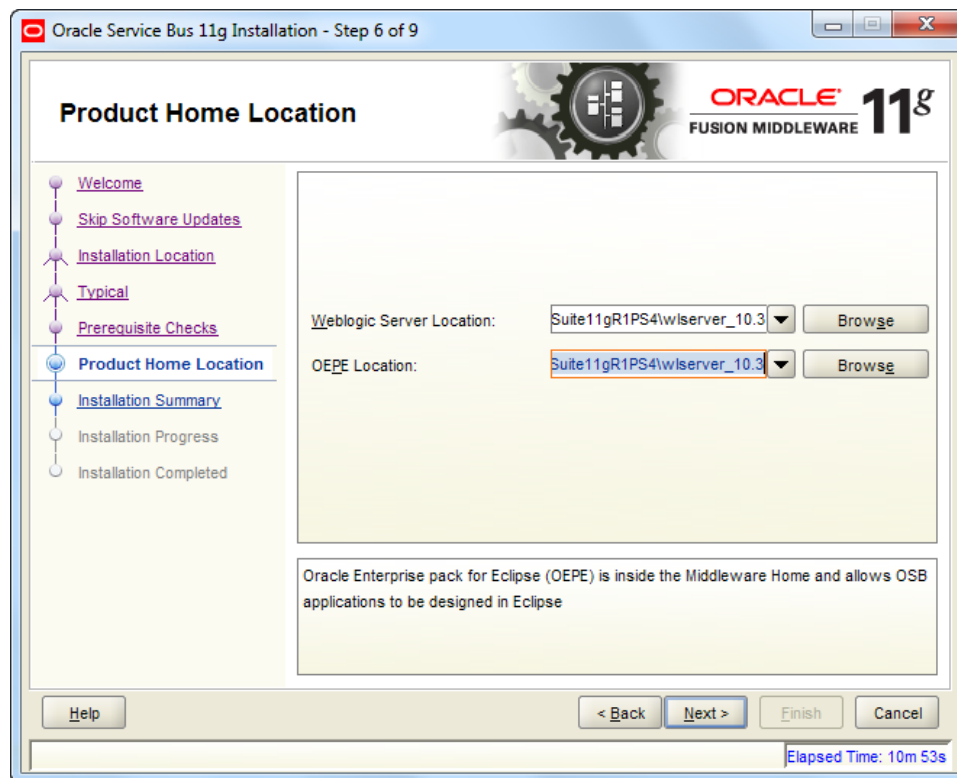
- ☐ For the installation type, select *Typical* and press **Next**.



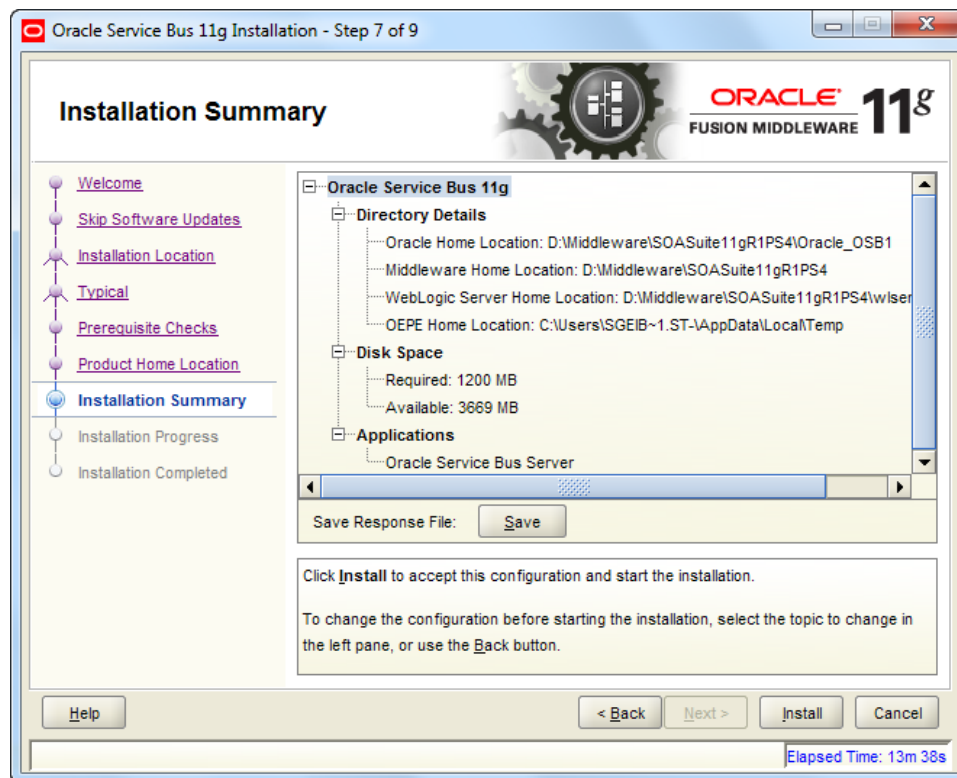
- ❑ The prerequisites of the system will be checked. This should come up with all green check boxes to indicate that all checks were successful. Press the **Next** button if all checks succeeded.



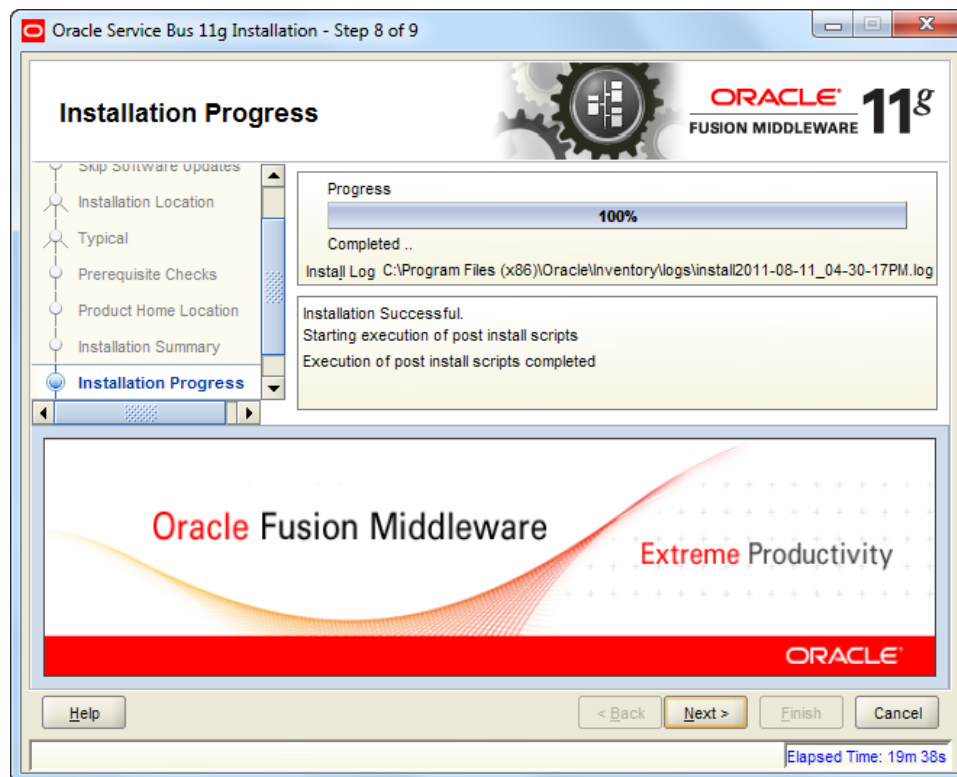
- ❑ Accept the default locations for the Product Home settings. Press the **Next** button.



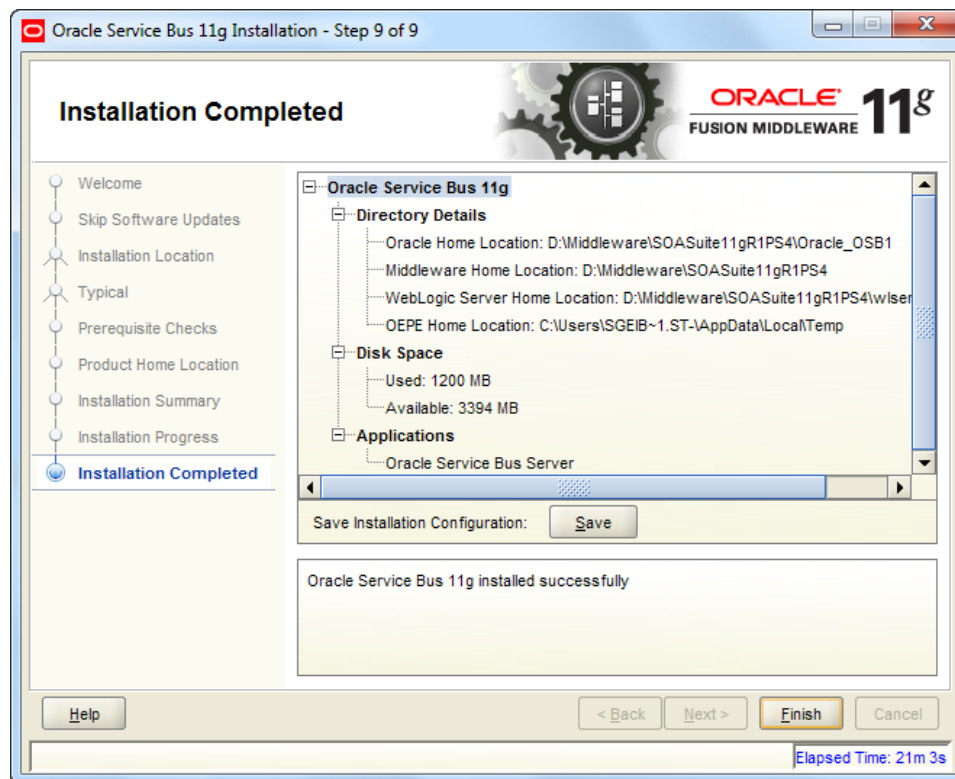
- ☐ Review the Installation Summary screen. Press *Install* when you are ready to install the Oracle Service Bus.



- ☐ Allow the installation process to finish.



- ☑ Once the installation process has finished, press the *Next* button



- ☑ The installation is now complete. Press the *Finish* button to exit the installer.



## Create a SOA Developer Domain

Now that you have the software installed, you can create the WebLogic domain for the server.

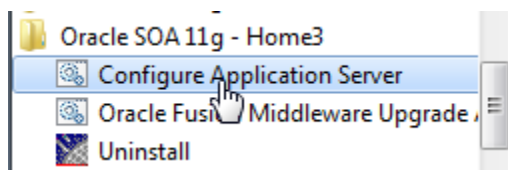
We will set up a so called “developer” domain, which means that the domain only includes one administration server for SOA/OSB and one managed server for BAM (if BAM is chosen). This configuration is NOT supported in production.

You will see that we choose “Oracle SOA Suite for developers” instead of “Oracle SOA Suite” in the domain configuration wizard. If you choose “Oracle SOA Suite”, the configuration wizard will setup an administration server and a managed server for SOA (and a separate managed server for BAM).

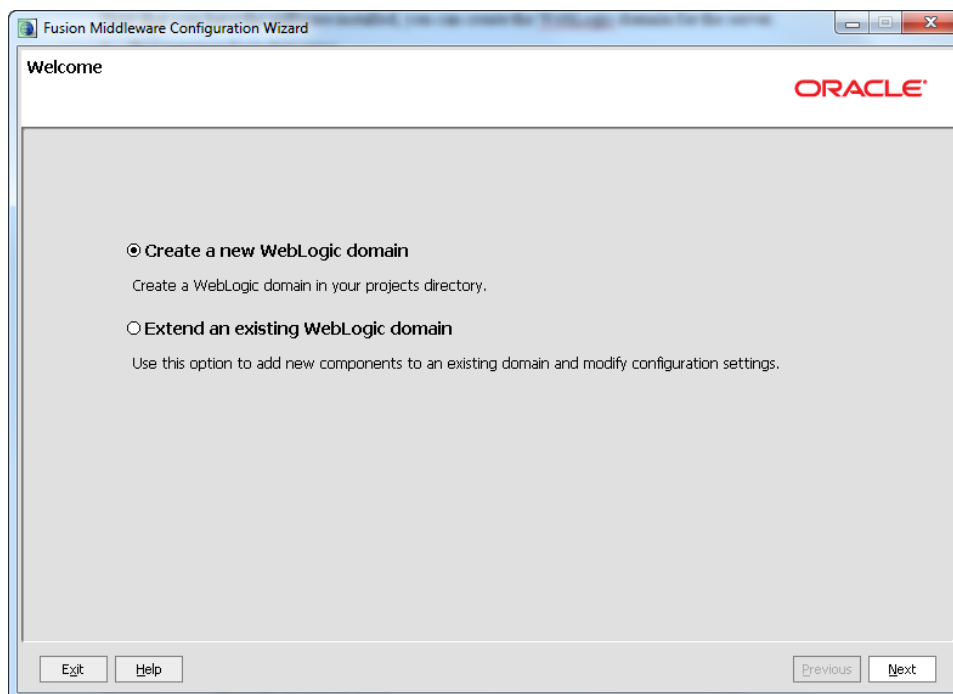
- ☐ In a command window enter

```
cd D:\Middleware\SOASuite11gR1PS4\oracle_SOA1\common\bin  
config.cmd
```

- ☐ or open the *Fusion Middleware Configuration Wizard* from the Start menu under:  
**Oracle SOA 11g – Homex -> Configure Application Server**

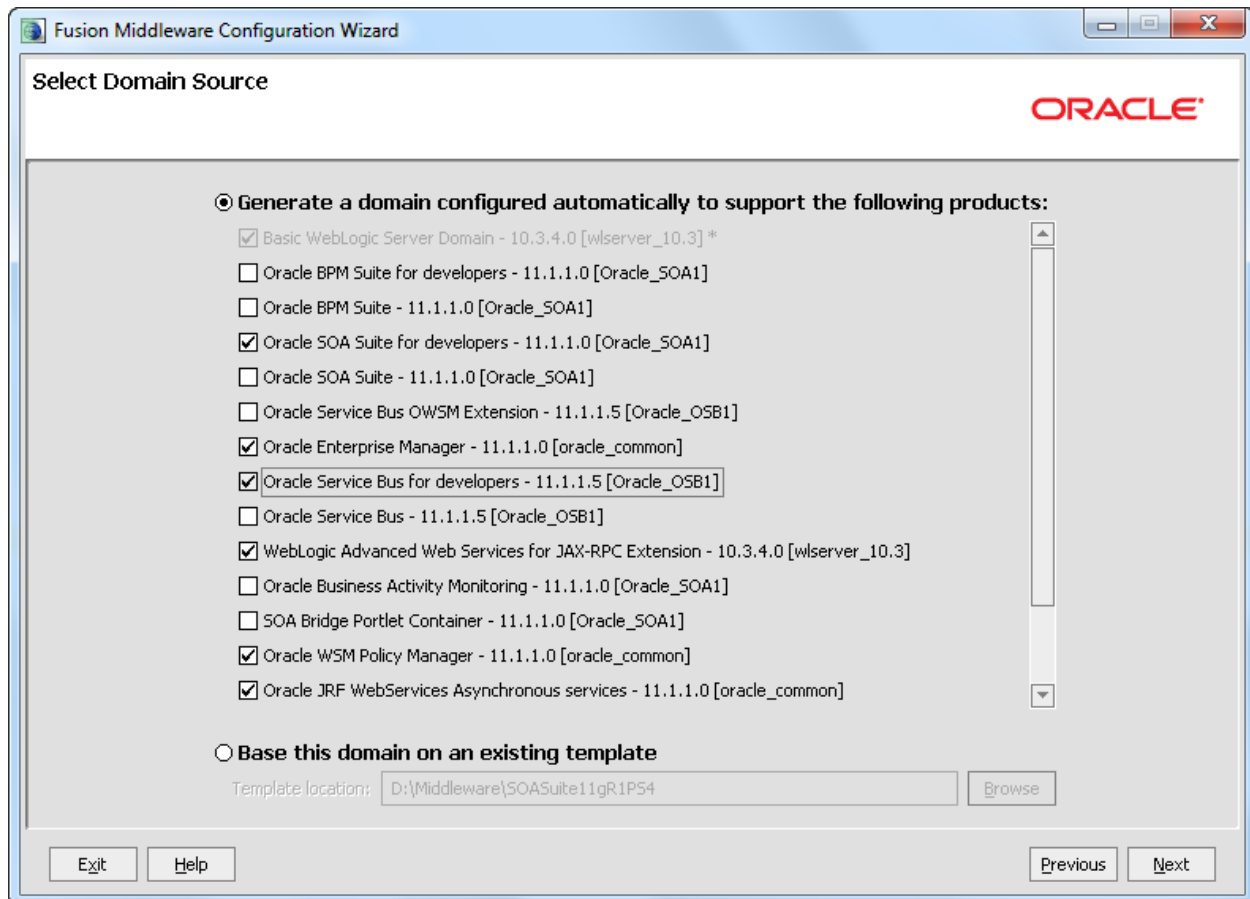


- ☐ When the configuration wizard welcome screen comes up, select **Create a new WebLogic domain**, click **Next**

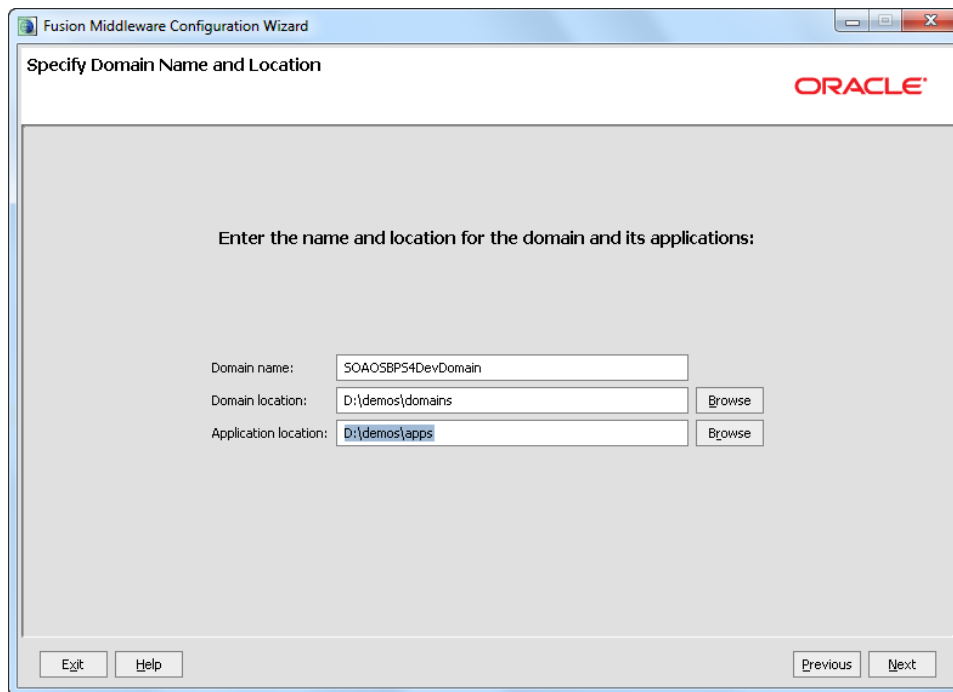


- ❑ Select “*Generate a domain....*” and select
  - a) Oracle SOA Suite for developers – 11.1.1.0 [Oracle\_SOA1]: This automatically selects Oracle WSM Policy Manager – 11.1.1.0 [oracle\_common]
  - b) Oracle Enterprise Manager – 11.1.1.0 [oracle\_common]
- ❑ Optional (dependant on the components you want to use):
  - c) Oracle Service Bus for developers – 11.1.1.5 [Oracle\_OSB1]: This automatically selects WebLogic Advanced Web Services for JAX-RPC Extension – 10.3.4.0 [wlserver\_10.3]
  - d) Oracle Business Activity Monitoring – 11.1.1.0 [Oracle\_SOA1]
  - e) Oracle BPM Suite for developers – 11.1.1.0 [Oracle\_SOA1]
  - f) Oracle JRF WebServices Asynchronous services – 11.1.1.0 [oracle\_common]

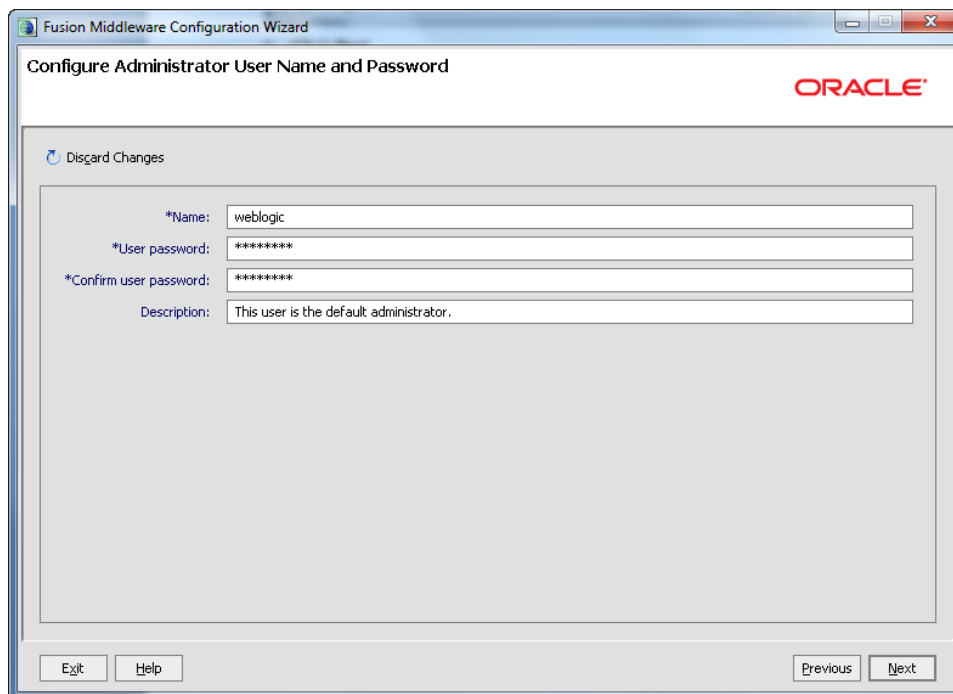
The screenshot below shows the options for base SOA Suite and OSB. All following screenshots assume this selection, but it's easy to adapt if you made a different selection.



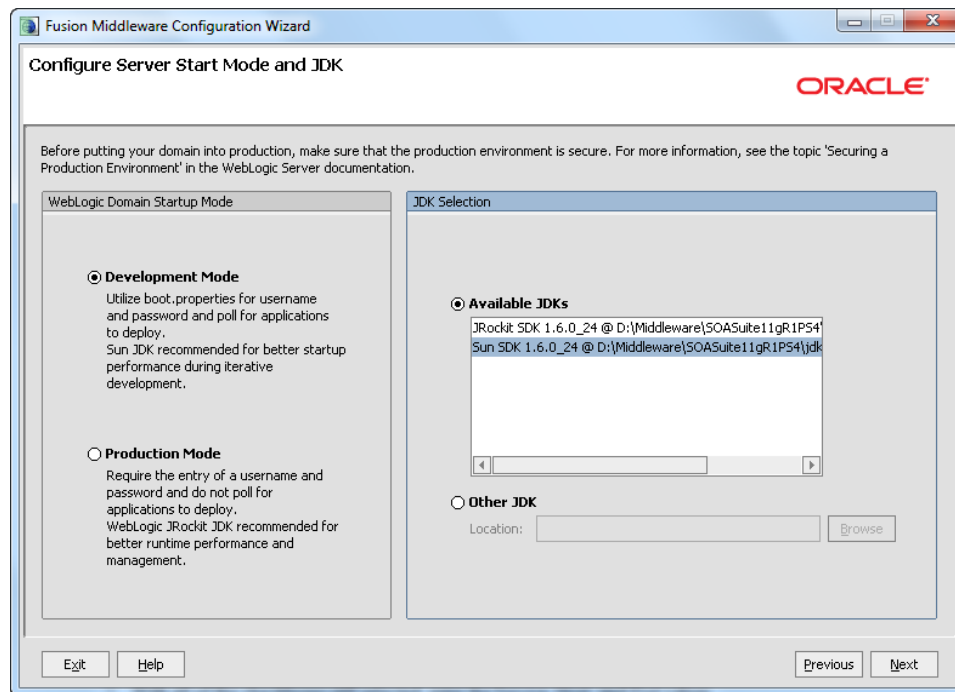
- ❑ Click **Next**
- ❑ Enter the domain name, e.g. SOA0SBPS4DevDomain and choose a location of your choice



- ☒ Click **Next**
- ☒ Enter user name **weblogic** and a password. The password **welcome1** is assumed in this document, but you should choose your own secure password and remember it for later in the document when the password is referenced.



- ❏ Click **Next**
- ❏ Select the **Sun SDK** and leave *Development Mode* checked (we recommend the Sun SDK for development on Windows as it provides faster startup times).



- ❏ Click **Next**
- ❏ On the Configure JDBC Component Schema screen, you select the components that you want to change, and then enter the property value for those components.
- ❏ First, select all of the components and enter **welcome1** for the password in the Schema Password field. Or, if you used a different password when you created the schema with RCU, enter that password.
- ❏ With all of the checkboxes still selected, enter the Service, Host, and Port values.

Fusion Middleware Configuration Wizard

### Configure JDBC Component Schema

ORACLE

**Note:** Change only the input fields below that you wish to modify and values will be applied to all selected rows.

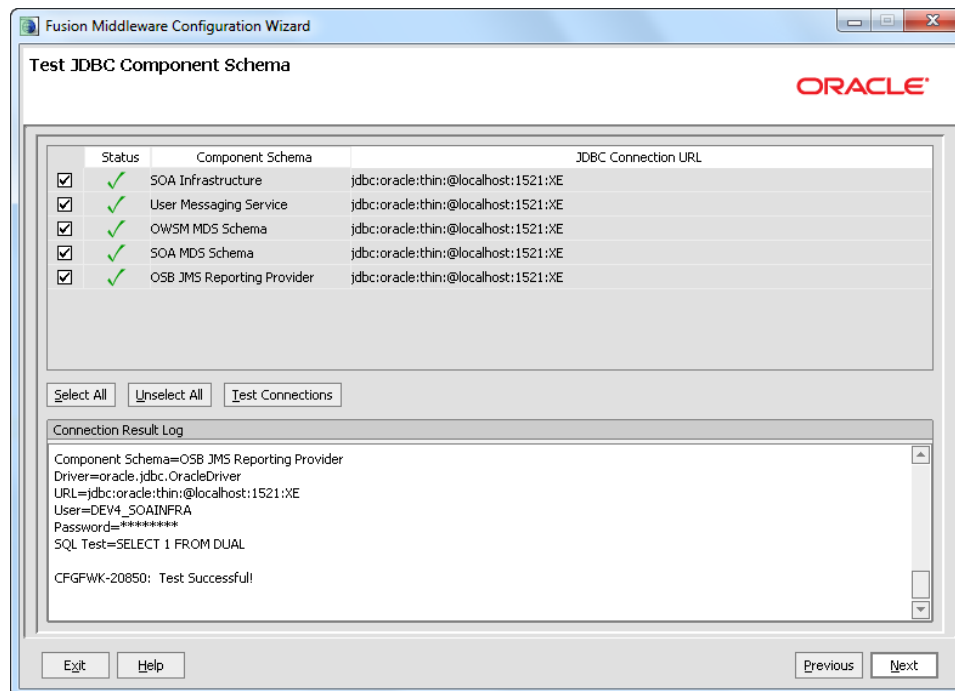
Vendor: Oracle DBMS/Service: XE  
 Driver: \*Oracle's Driver (Thin) for Instance connections; Versions:9.0.1 and Host Name: localhost  
 Schema Owners: Varies among component schemas Port: 1521  
 Schema Password: \*\*\*\*\*

☐ Configure selected component schemas as RAC multi data source schemas in the next panel.

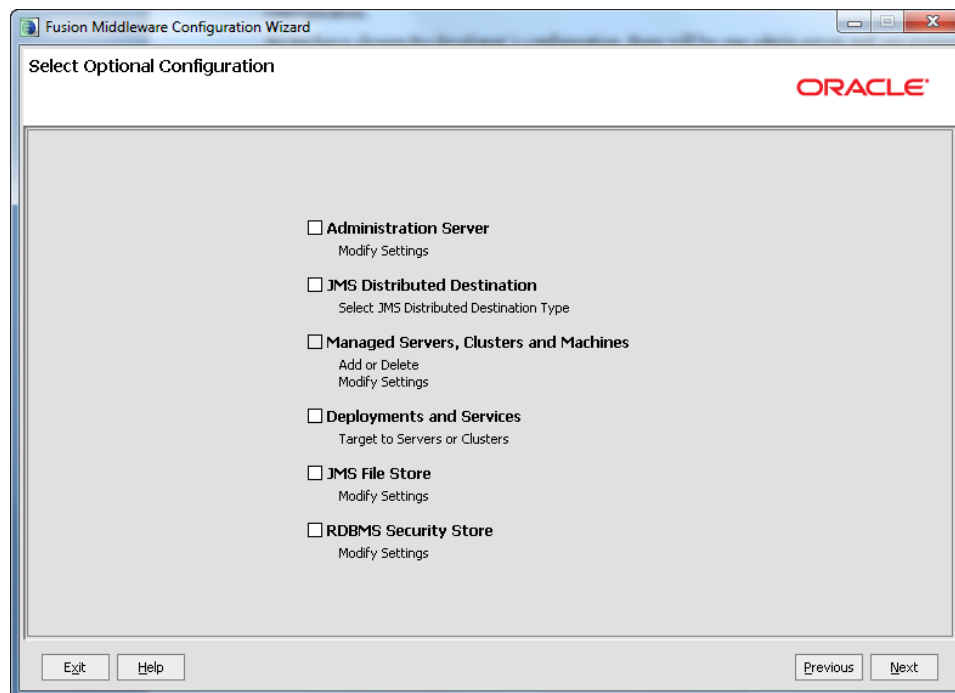
	Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Password
<input checked="" type="checkbox"/>	SOA Infrastructure	XE	localhost	1521	DEV_SOAINFRA	*****
<input checked="" type="checkbox"/>	User Messaging Service	XE	localhost	1521	DEV_ORASDPM	*****
<input checked="" type="checkbox"/>	OWSM MDS Schema	XE	localhost	1521	DEV_MDS	*****
<input checked="" type="checkbox"/>	SOA MDS Schema	XE	localhost	1521	DEV_MDS	*****
<input checked="" type="checkbox"/>	OSB JMS Reporting Provider	XE	localhost	1521	DEV_SOAINFRA	*****

Exit Help Previous Next

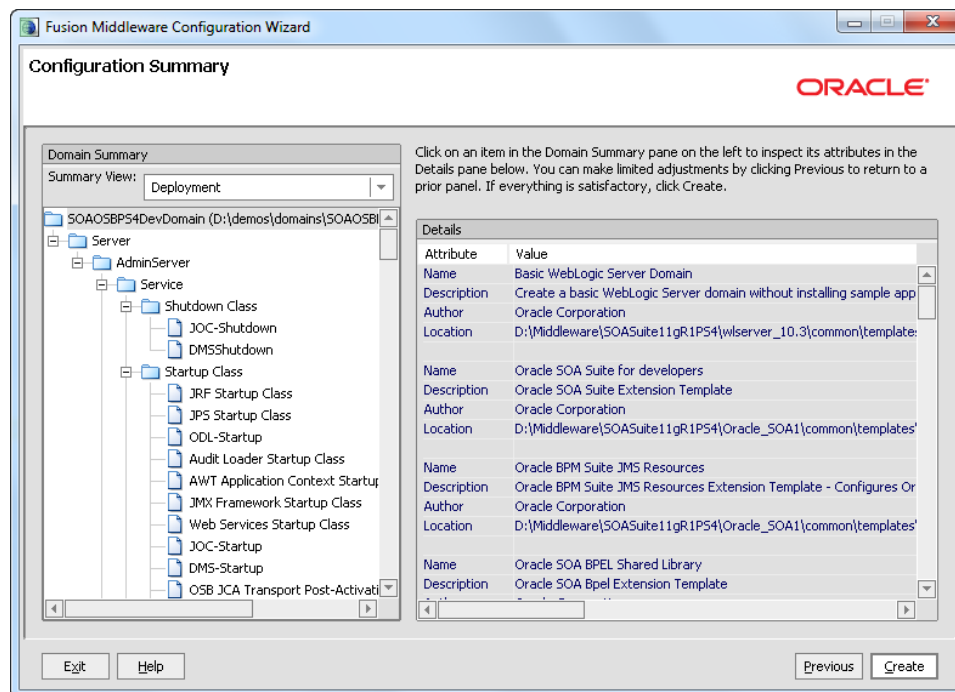
- ☒ Now, look at the table. Review the Schema Owner column and confirm that the values are the same as what you configured in the *Configure Schema* section of this document when you ran the RCU. Go back and review the screen shots in that section of this document for the schema owners if you do not remember them.
- ☒ Complete the following steps if the schema owners need to be updated, e.g, MDS:
  - a. Deselect all the component checkboxes
  - b. Select MDS Schema only.
  - c. Enter the Schema Owner, **MY\_ORAMDS** (or as appropriate)
  - d. Next, deselect MDS Schema and select the next one.
  - e. Enter the schema owners one-by-one by pre-pending the correct prefix to the defaulted value.
  - f. Continue until all schema owners are entered.
- ☒ Click **Next**.
- ☒ The data source connections are all tested.



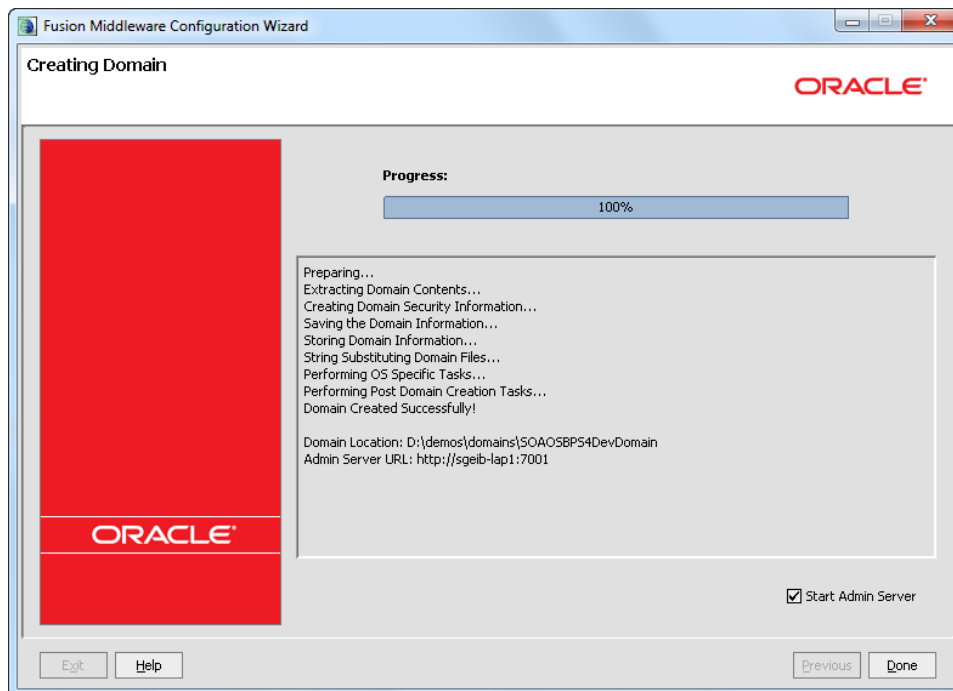
- ☒ If all are successful, click **Next**, otherwise click **Previous** and correct any errors.
- ☒ Now you must choose whether to have your server run as a **managed server** or in a **single server** configuration.
- ☒ As we have chosen the developer's configuration, there will be one admin server and one (optional) managed server for BAM.
- ☒ Don't check any of the boxes here and click **Next**, unless you want to make changes to the default configuration



- ☒ Click **Next**



- ☒ This is the summary page for the Configuration. Click **Create** to create the domain.
- ☒ Wait for the create to finish – takes just a minute



- ☐ Check the box to start the admin server and Click **Done**.

Your server is now installed. Next, you will install JDeveloper.

## Install JDeveloper

Database		WebLogic Server	RCU
SOA	OSB	JDeveloper	SOA Extension

If you are installing JDeveloper on a machine that is not the same as your WebLogic server installation, you must have installed the Sun JDK 6 update 24 first. JDeveloper uses the 32bit version of the Oracle Sun JDK. See the section called [Check your JDK](#). The Oracle JRockit JDK is not available as an independent install. JDeveloper does not use a 64bit JDK.

If you want to uninstall an existing JDeveloper first, see section [Uninstalling SOA Suite](#). Do not install into an existing install directory!

- ☐ Open a command window and enter the following. Make sure there is no space after the = sign and eliminate trailing spaces.

```
| cd c: \stageFMW
```

Page **40** of **65**

Quick Start Guide for SOA Suite 11.1.1.5



```
jdevstudio11115install.exe
```

or

```
set JAVA_HOME=D:\Middleware\SOASuite11gR1PS4\jdk160_24
%JAVA_HOME%\bin\java.exe -jar jdevstudio11115install.jar
```

You will see a message that the jar is extracting:

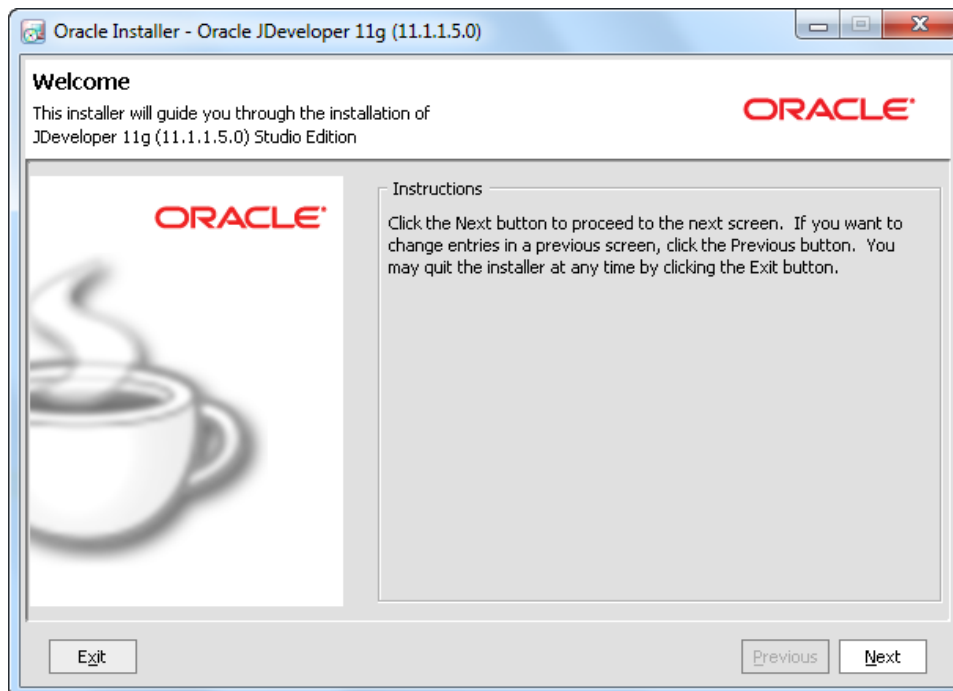
```
>%JAVA_HOME%\bin\java.exe -jar jdevstudio11115install.jar
Extracting 0%.....
```

When it reaches 100% the installation wizard opens. This takes a few minutes.

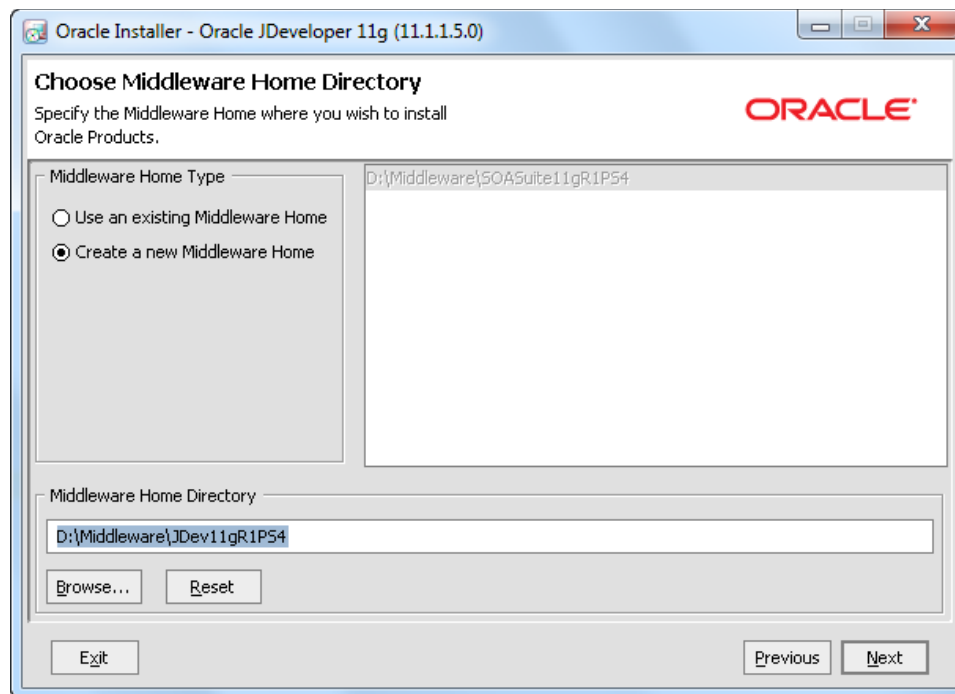
If you see the splash screen briefly but then you do not see the **Extracting** message and the installation wizard does not open, it's probably because the Java JDK is the wrong version. Enter %JAVA\_HOME%\bin\java.exe -version to see the version. It must be version 1.6\_24.

Complete the installation wizard as follows. Note that this does install an embedded WebLogic Server that you can use for testing Java applications. You won't use it if you are creating only SOA applications. Although you can deselect the WebLogic Server using the custom install option, most of the subcomponents are still required by JDeveloper anyway. It's your choice.

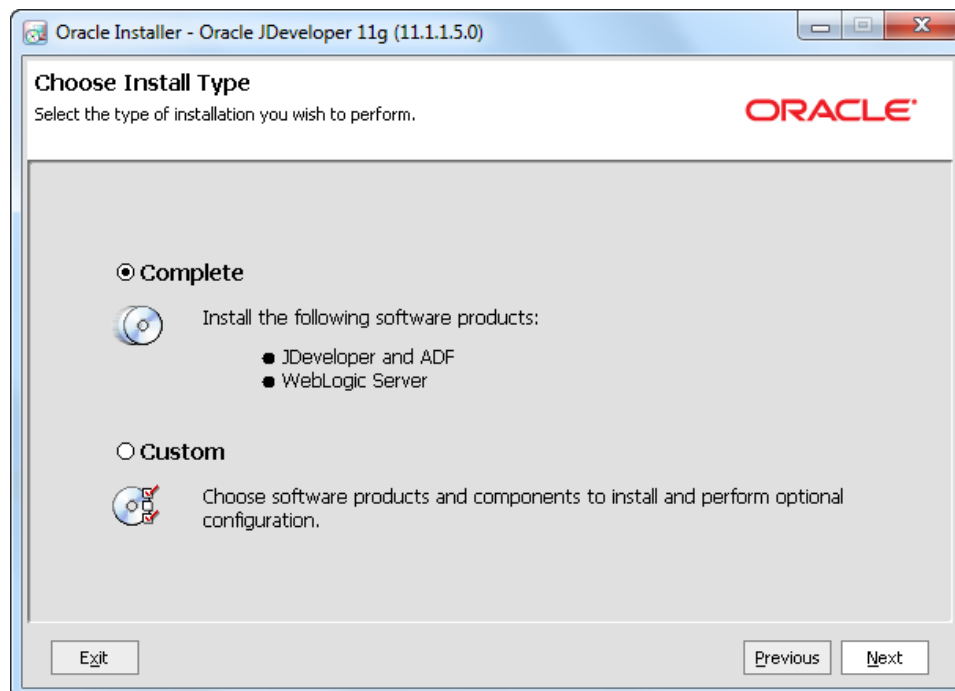
#### ☐ Welcome Screen – Click **Next**



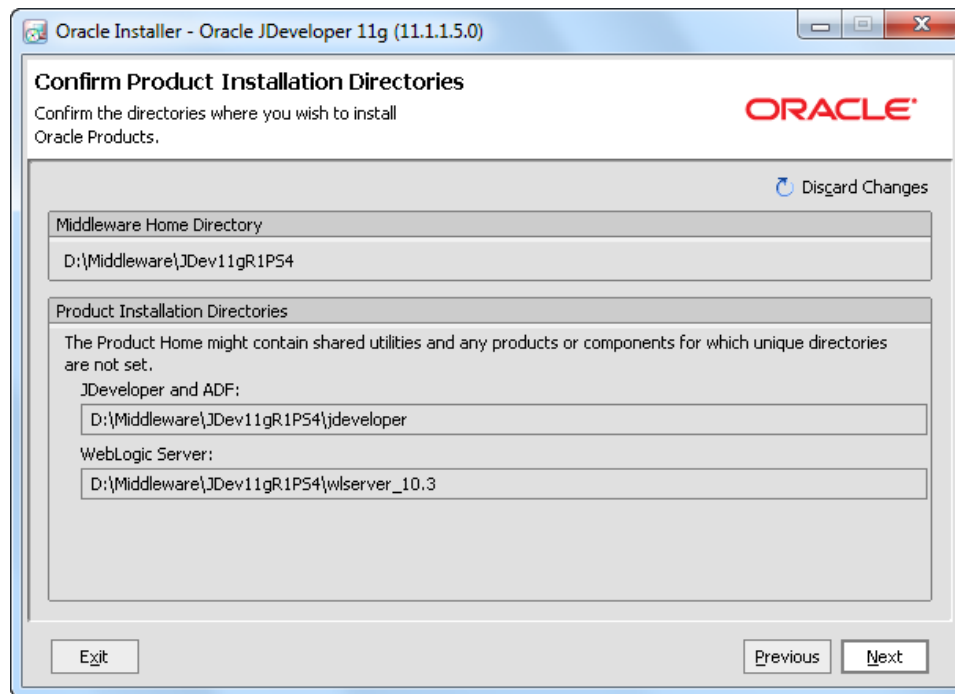
- ☐ Choose Middleware Home Directory: select *Create a new Middleware Home* and enter **D: \Mi ddl eware\JDev11gR1PS4**. This document assumes that path. If you enter something else then adjust accordingly when **D: \Mi ddl eware\JDev11gR1PS4** is referenced.



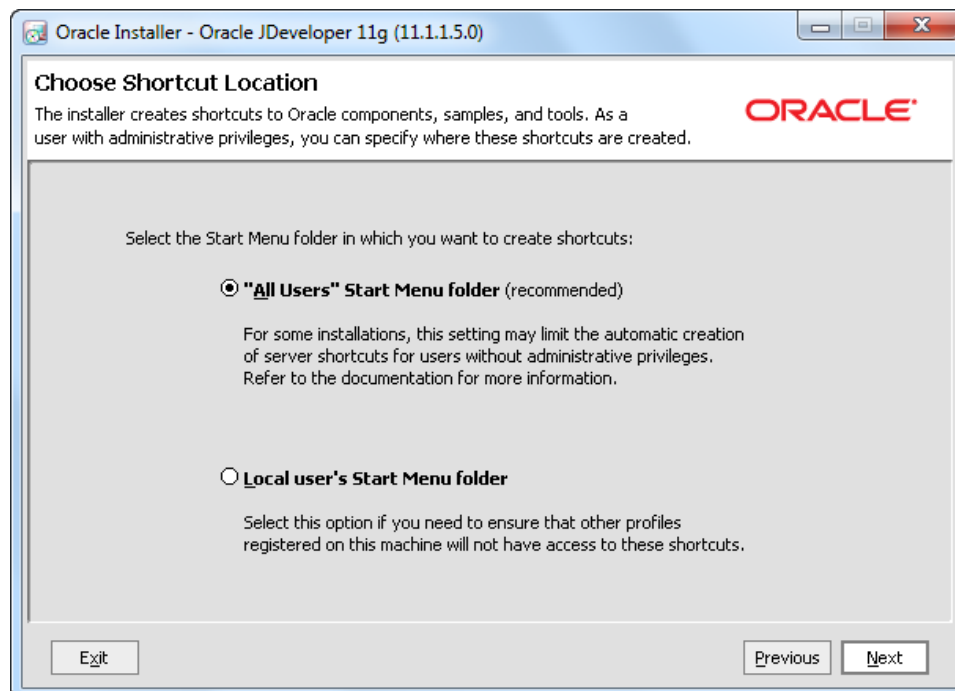
- ☐ Click **Next**



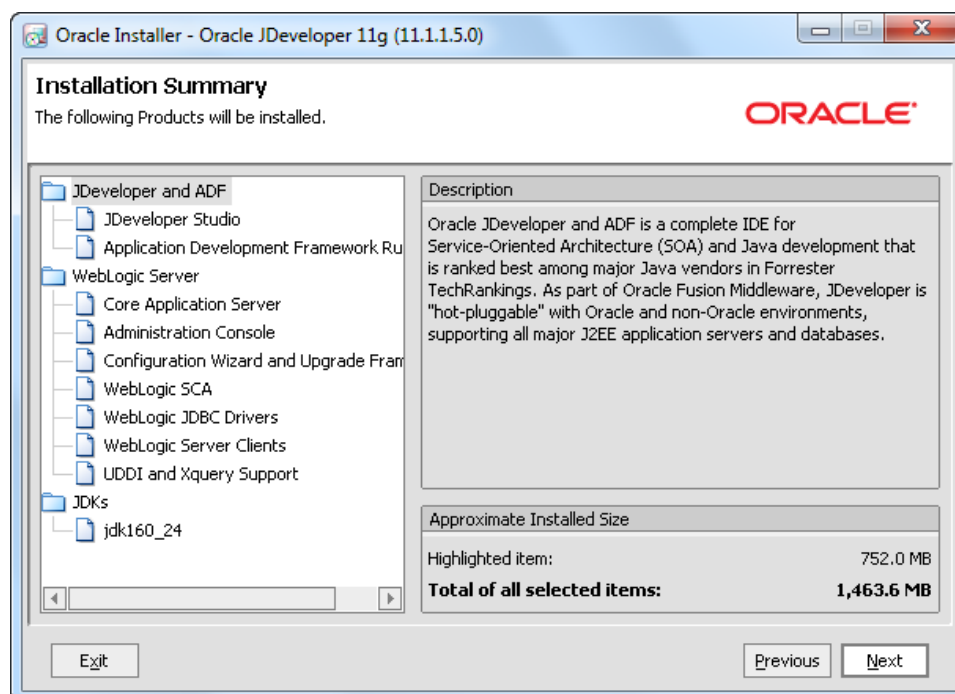
- ☒ Choose Install Type: Complete, click **Next**



- ☒ Confirm **Product Installation Directories**. You should see:
  - Middleware Home Directory: D:\Middleware\JDev11gR1PS4
  - JDeveloper and ADF: D:\Middleware\JDev11gR1PS4\jdeveloper
  - WebLogic Server: D:\Middleware\JDev11gR1PS4\wlserver\_10.3
- ☒ click **Next**
- ☒ Choose Shortcut location: "All Users" and click **Next**

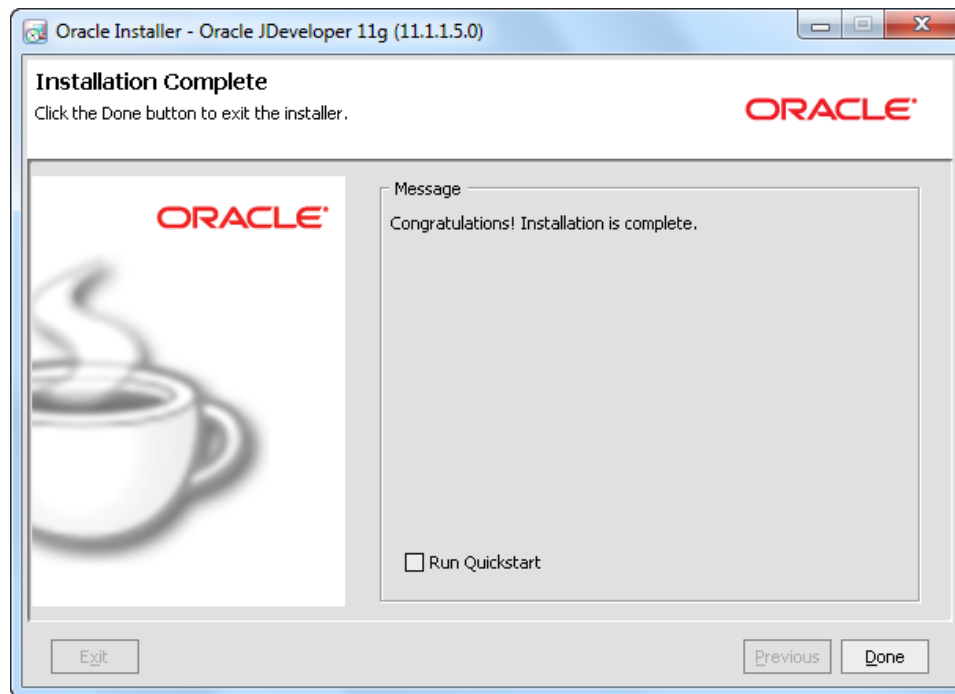


- ☒ Click **Next**
- ☒ Review Installation Summary

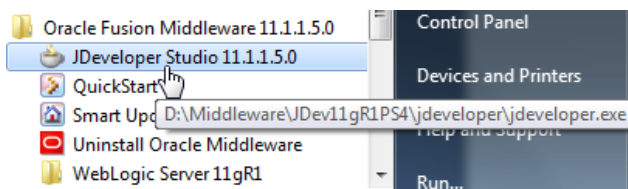


- ☒ Click **Next** and the installation starts.

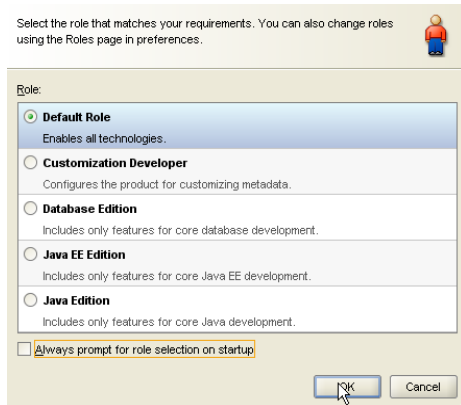
- ☐ Wait for the installation to complete – a few minutes.



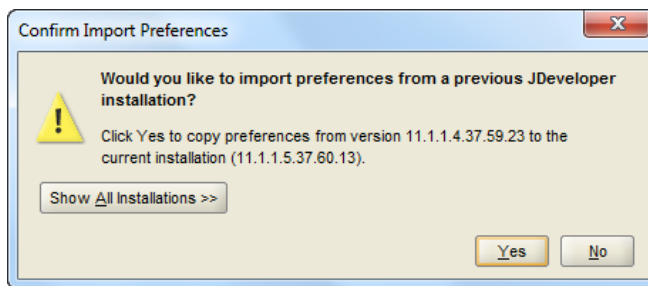
- ☐ When installation completes, deselect **Run Quickstart** and click **Done**.
- ☐ Start JDeveloper Studio 11.1.1.5.0 from the Windows Programs menu: Oracle Fusion Middleware 11.1.1.5.0  
or run  
D: \Mi ddleware\JDev11gR1PS4\j devel oper\j devel oper. exe



- ☐ During startup, select “Default Role” when prompted:

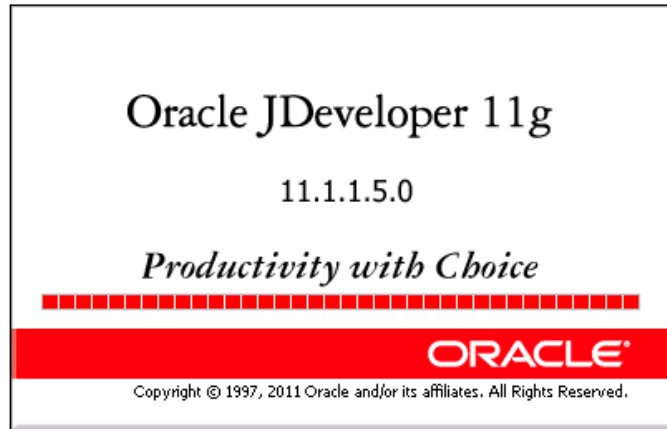


- ☒ Select **Default Role**, de-select **Always prompt for role selection on startup**, and click **OK**
- ☒ If you see the Confirm Import Preferences dialog click **Yes** or **No** as desired, usually **No** is appropriate.



If you are prompted to select file extensions to associate with JDeveloper, deselect everything or select whichever ones you would like for your machine and continue.

When the file extension is associated with JDeveloper, double-clicking on that file type opens the file in JDeveloper, starting up JDeveloper if necessary. Usually only the jws extension (JDeveloper workspace file) is appropriate but select whichever ones for which you would like this behavior.



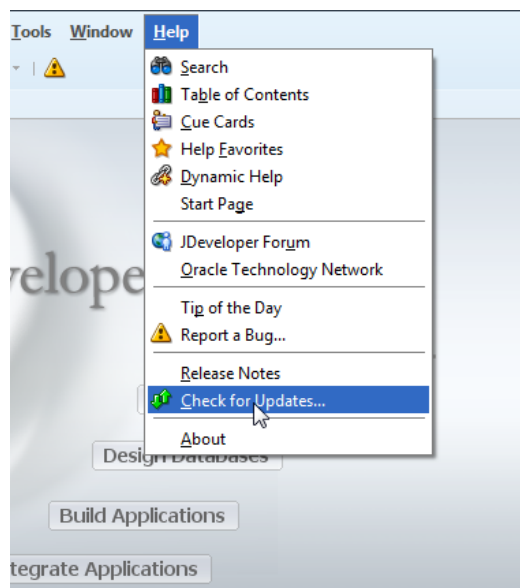
Now you must update JDeveloper with the SOA design editor, a JDeveloper extension.

## Update JDeveloper with latest SOA extension

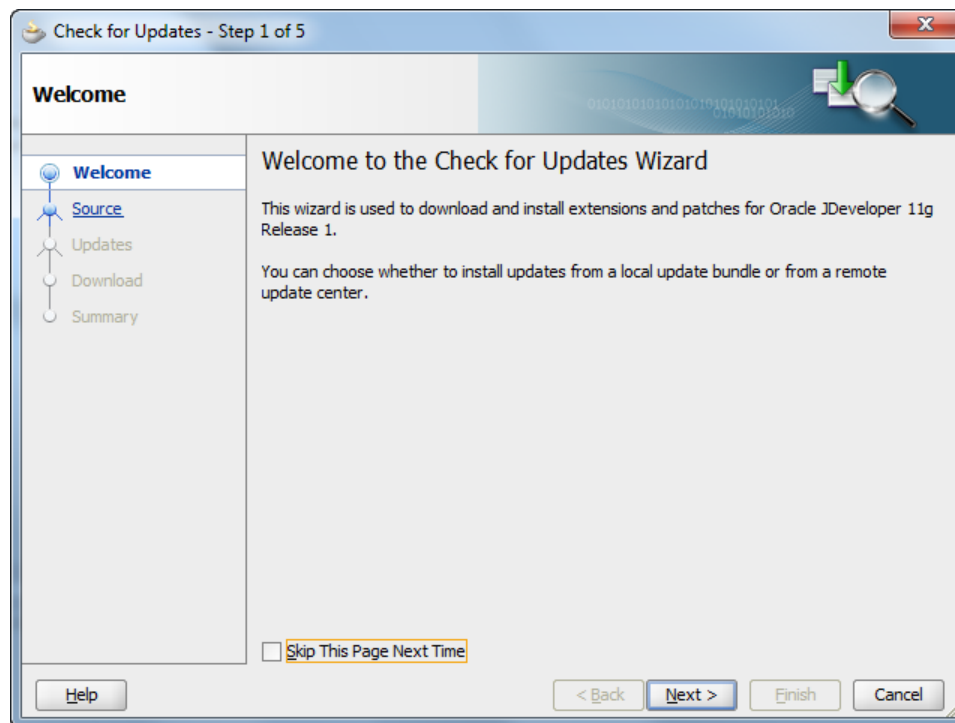
Database		WebLogic Server	RCU
SOA	OSB	JDeveloper	SOA Extension

SOA design time in JDeveloper requires a JDeveloper extension called **SOA Composite Editor**. While this is normally updated over the network, you can update from a local file if you have the extension file. The extension is about 200MB and can take some time to download.

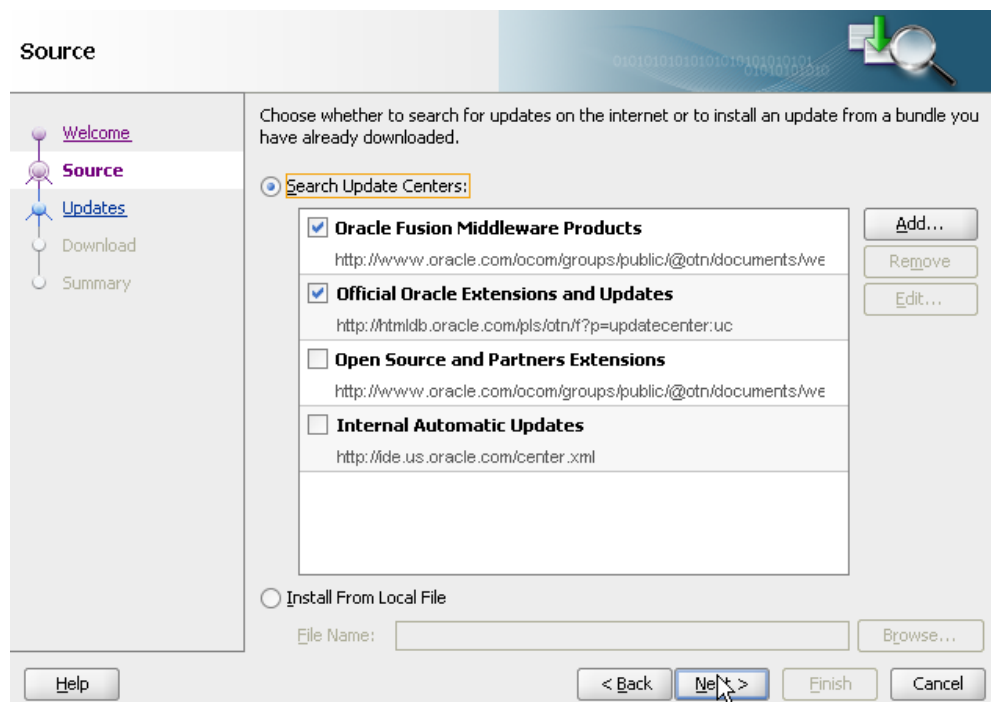
- ☒ Start JDeveloper if it is not already started.
- ☒ Select **Help/Check For Updates**





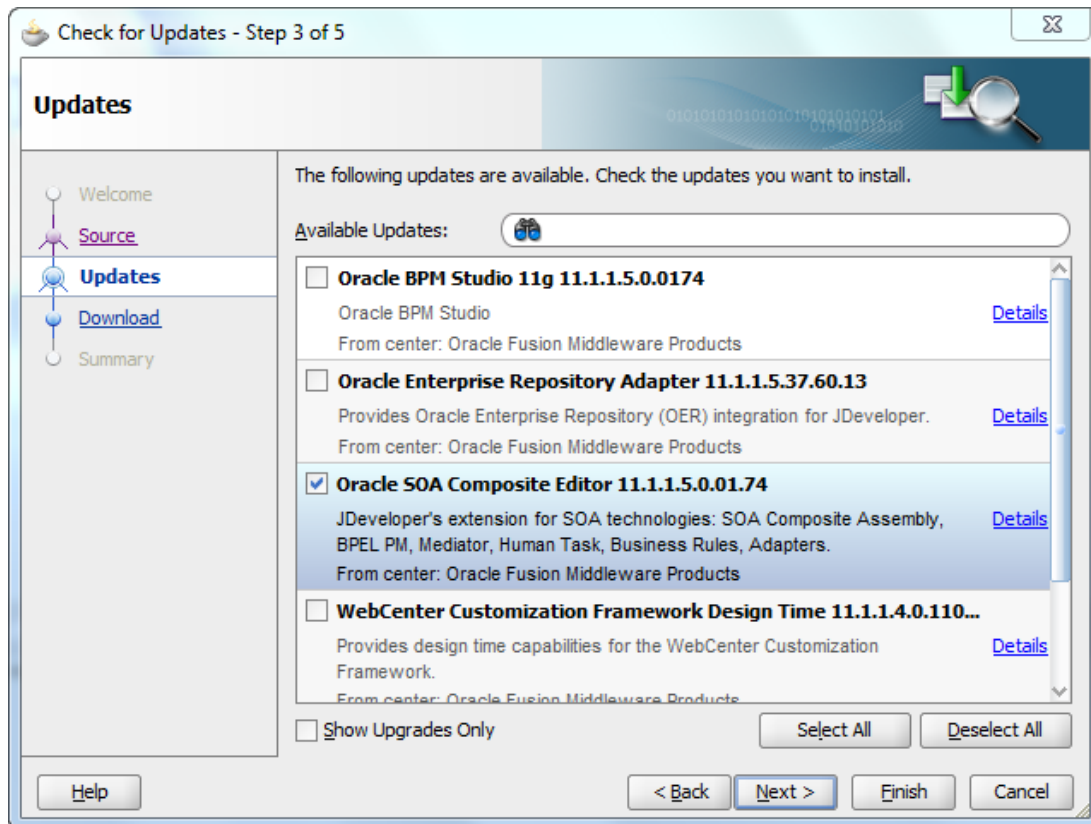


- ☒ Click **Next** (best if you don't use VPN while doing this)
- ☒ Select **Oracle Fusion Middleware Products** and **Official Oracle Extensions and Updates**.

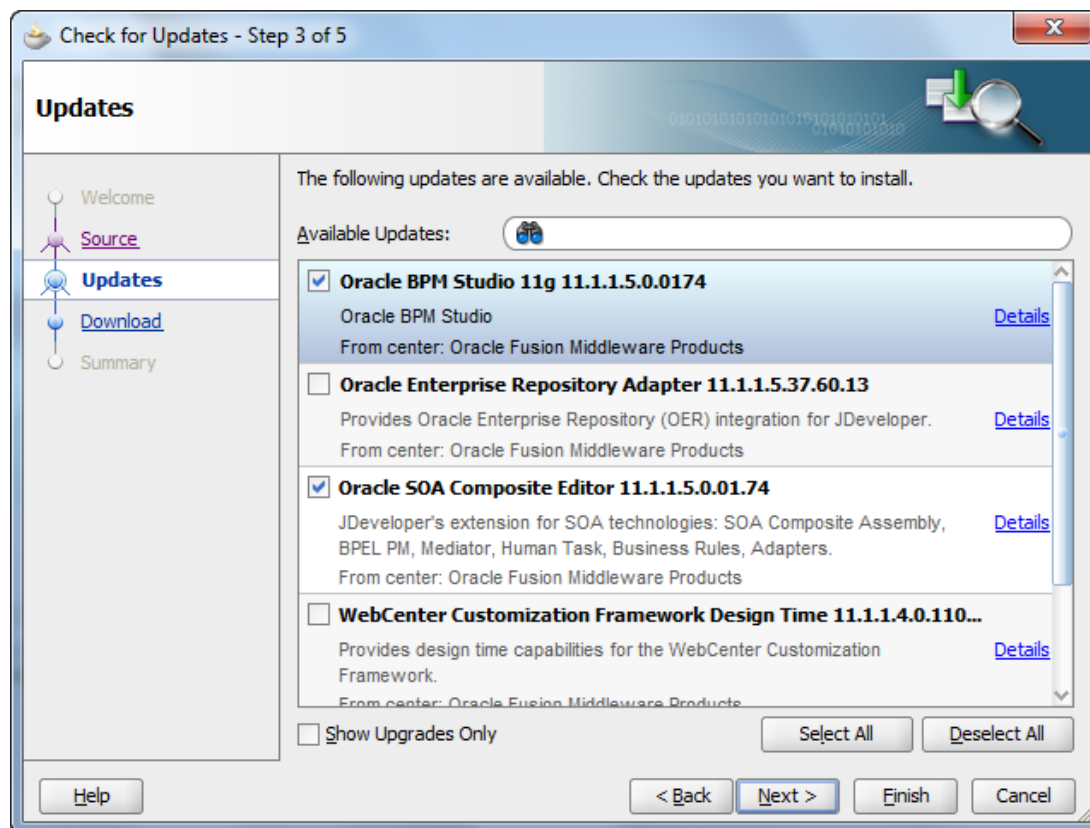


If there is a problem connecting to the Update Center it may be caused by a proxy setting. You are prompted to set the proxy server and proxy exclusions to appropriate values for your environment.

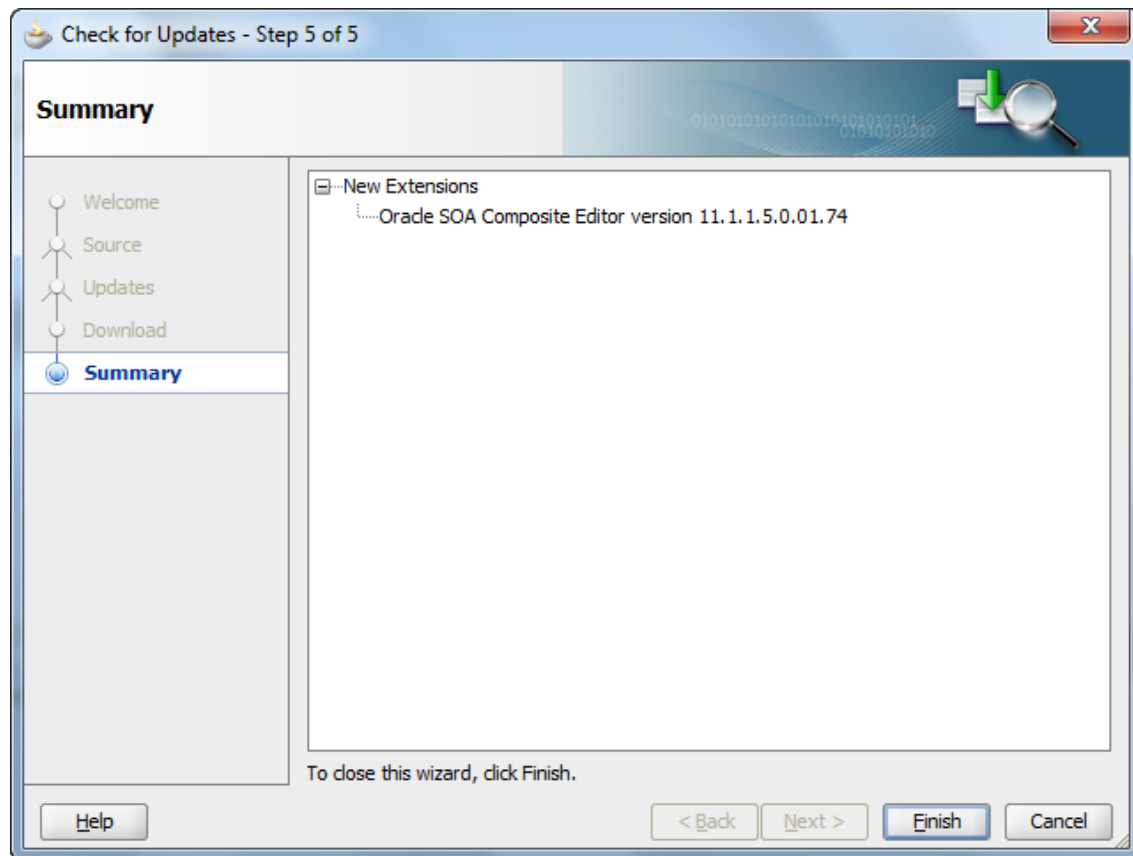
- ❑ Click **Next**
- ❑ In the Updates list scroll down to **SOA Composite Editor** or type SOA in the Available Updates search box and check the check box for the SOA Composite Editor.  
**Note: the version number of the latest Oracle SOA Composite Editor might be different than the one in the screenshot below**



- ❑ If you also want to be able to use BPM Suite, check the box for **Oracle BPM Studio 11g 11.1.1.x.x.x**



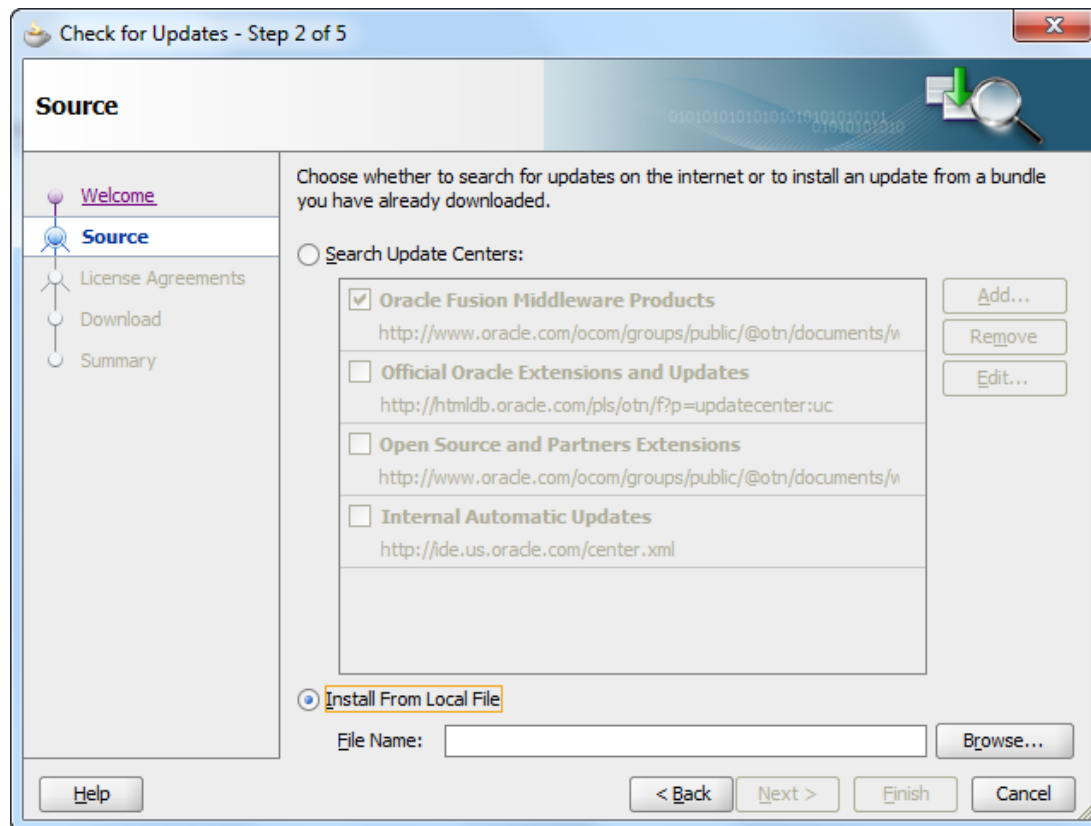
- ☐ Click **Next**
- ☐ Check that the update has finished downloading successfully.



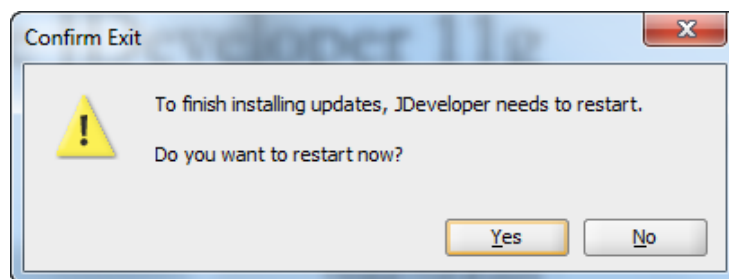
The Update Center provides the most recent version of the SOA Composite Editor that is compatible with your version of JDeveloper and you may have a newer version than the one listed here. The last two numbers, 01.74, refer to the version that was released in July 2011.

☐ Click **Finish**

**Note:** If you chose to manually download the SOA Composite Editor, check '**Install From Local File**' in Step 2 and select the downloaded file.



- ☐ Restart JDeveloper when prompted.



- ☐ During startup, you are asked to select **Yes** or **No** again to the import preferences question. **No** is the appropriate response.

## Additional actions

In the following section, you perform additional configuration that is optional but will greatly improve performance and usability in the context of the development work you are about to start with the tutorial.

### Setting memory limits

**Note:** The memory settings below only apply to Sun JDK on a Windows 32bit machine!

- ❑ Open for editing the SOA domain environment file found here (make sure you have the SOA Domain environment file):
- ❑ `DOMAIN_HOME\bin\setSOADomainEnv.cmd`, where `DOMAIN_HOME` is the root directory of your domain, e.g.  
`D:\Middleware\SOASuite11gR1PS4\user_projects\SOASuitePS4DevDomain`

On Windows 32bit, if you increase the `-Xmx` too much, then you cannot use the `PermSize` parameter. The heap size is calculated as `-Xmx + PermMaxSize`. If these two add up to more than 1408MB then WLS will not start.

```
set DEFAULT_MEM_ARGS=-Xms512m -Xmx768m
set DEFAULT_MEM_ARGS=%DEFAULT_MEM_ARGS% -XX:PermSize=128m -XX:MaxPermSize=512m
```

These values are dependent on your machine resources and may need to be adjusted for your machine. These values are appropriate for a 3GB memory 32bit machine.

For **64bit machines** use the default values and adjust as needed for your configuration.

## Starting and stopping servers

Follow these instructions to start and stop your servers.

Before starting the servers for the first time, exit all unnecessary programs on your machine including JDeveloper. After the first time, the server startup memory requirements are slightly lower.

### Starting servers

In the following section, `%DOMAIN_HOME%` will be referenced for the root directory of your domain, e.g. `D:\Middleware\SOASuite11gR1PS4\user_projects\SOASuitePS4DevDomain`

- ❑ For our single server configuration, we only need to open 1 command window. Start the Admin Server

```
| cd %DOMAIN_HOME%\bin
| startWebLogic.cmd
```

Wait for the Admin Server to finish starting up. It takes a few minutes – watch for status “RUNNING” in log console window and for the message that the “SOA Platform is running and accepting requests”

```
<Feb 2, 2011 12:31:58 PM PST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to ADMIN>
<Feb 2, 2011 12:31:59 PM PST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to RESUMING>
<Feb 2, 2011 12:31:59 PM PST> <Notice> <Server> <BEA-002613> <Channel "Default" is now listening on 144.25.142.218:7001 for
protocols iiop, t3, ldap, snmp, http.>
<Feb 2, 2011 12:31:59 PM PST> <Notice> <Server> <BEA-002613> <Channel "Default[2]" is now listening on 10.151.6.220:7001 fo
r protocols iiop, t3, ldap, snmp, http.>
<Feb 2, 2011 12:31:59 PM PST> <Notice> <Server> <BEA-002613> <Channel "Default[4]" is now listening on 0:0:0:0:0:0:1:7001
for protocols iiop, t3, ldap, snmp, http.>
<Feb 2, 2011 12:31:59 PM PST> <Notice> <Server> <BEA-002613> <Channel "Default[1]" is now listening on 192.168.56.1:7001 fo
r protocols iiop, t3, ldap, snmp, http.>
<Feb 2, 2011 12:31:59 PM PST> <Notice> <Server> <BEA-002613> <Channel "Default[3]" is now listening on 127.0.0.1:7001 for p
rotocols iiop, t3, ldap, snmp, http.>
<Feb 2, 2011 12:31:59 PM PST> <Notice> <WebLogicServer> <BEA-000331> <Started WebLogic Admin Server "AdminServer" for domai
n "SOASuitePS3DevDomain" running in Development Mode>
<Feb 2, 2011 12:31:59 PM PST> <Warning> <Server> <BEA-002611> <Hostname "sgeib-lapl.st-users.us.oracle.com", maps to multip
le IP addresses: 144.25.142.218, 192.168.56.1, 10.151.6.220, 0:0:0:0:0:0:1>
<Feb 2, 2011 12:32:00 PM PST> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to RUNNING>
<Feb 2, 2011 12:32:00 PM PST> <Notice> <WebLogicServer> <BEA-000360> <Server started in RUNNING mode>
INFO: FabricKernelInitializerServlet$1.run Composite Auto Deployment directory set to D:/demos/domains/SOASUI~1/soa/autodep
loy
INFO: FabricProviderServlet.stateChanged SOA Platform is running and accepting requests
looking up version 11.1.1.4.0
```

When needed, start the BAM Managed Server in a second command window

```
| cd %DOMAIN_HOME%\bin
| startManagedWebLogic.cmd bam_server1
```

When prompted, enter the user name `weblogic` and password `welcome1`.

After the first time you start the managed server, create a file called **boot.properties** with the following content

```
| password=welcome1
| username=weblogic
```

and store it to the following directory:

`%DOMAIN_HOME%\servers\soa_server1\security`

This folder does not exist until you have started the server the first time (you have to create the security folder). This file allows your managed server to startup without prompting for a password. The file is encrypted the first time it is accessed.

If you set the **boot.properties** as described above, you are no longer prompted during startup.

Watch for the RUNNING status.

## Console URLs

Please see [Check your browser](#) for supported browsers.

Login with `weblogic/welcome1` for all consoles, unless you chose a different password.

Port 7001 is the default for the admin server, unless you changed it when creating the domain. BAM is by default deployed to port 9001.

- ❑ Weblogic console: `http://localhost:7001/console`
- ❑ Enterprise Manager console: `http://localhost:7001/em`
- ❑ Oracle Service Bus console: `http://localhost:7001/sbconsole`
- ❑ BAM: `http://localhost:9001/Oracl eBAM`

## Stopping servers

Whenever you need to stop the server complete the following:

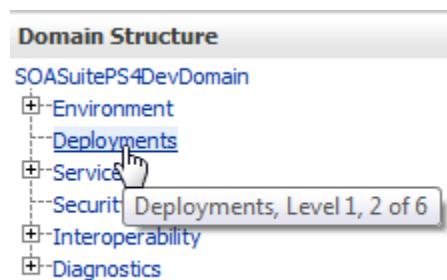
1. Stop the managed servers first by entering CTRL-C in the command window. Wait until stopped.
2. After the managed server stops, stop the admin server by entering CTRL-C in the window.

## WebLogic Server console settings

There are three suggested changes to make in the WebLogic Server console.

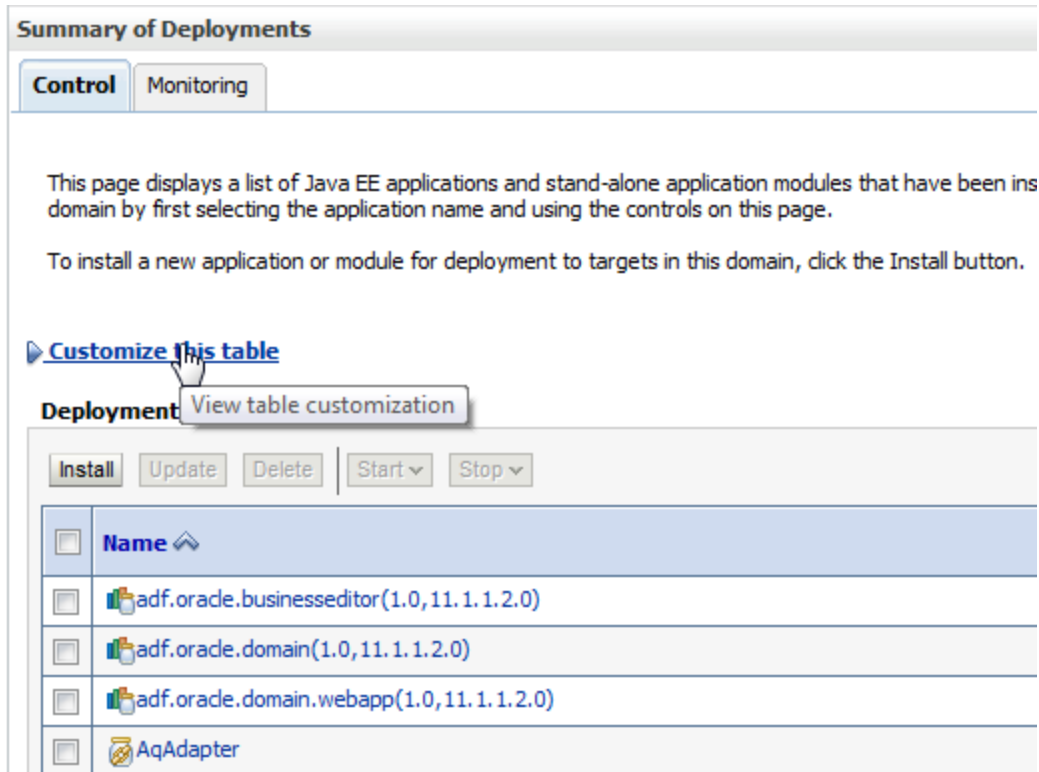
First, you occasionally view the application deployments using the WebLogic server console. This is a lot more convenient if you change the settings not to show libraries as this makes the list a lot shorter and you can find what you need more quickly.

- ❑ Start the WebLogic Admin Server (WLS) if it is not already running.
- ❑ Open a browser and login to the WLS console `http://localhost:7001/console`
- ❑ Click *Deployments* in the left navigation bar

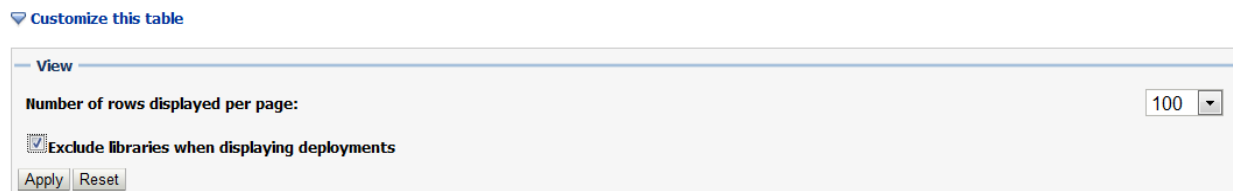


- ❑ Click *Customize this table* at the top of the Deployments table.





- ☒ Change the number of rows per page to *100* (there are only about 30)
- ☒ Select the checkbox to exclude libraries and click **Apply**



Second, there are many applications installed and running by default but you won't need all of these, depending on what you're doing. Turn off as many as you can to save resources on your machine.

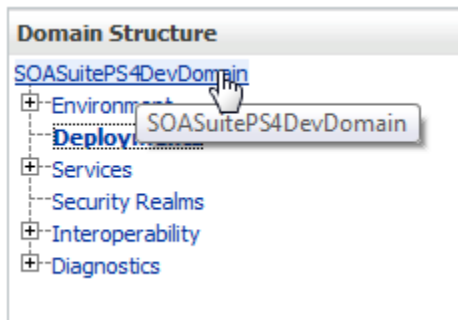
- ☒ Select the checkbox next to as many applications as you think you won't need and then from the Stop menu, select Force Stop Now.

Some examples of applications you can stop are *b2bui* and *OracleAppsAdapter* unless you need them.

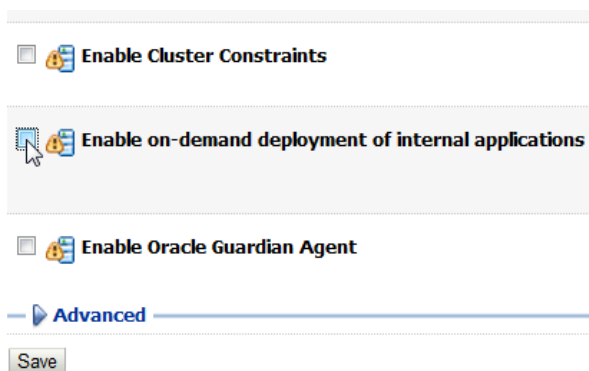
If you are unsure, leave it running as it may be used by the SOA infrastructure.

And third, when the server is started, by default internal applications like the WLS console are not deployed completely and you see a slight delay when you first access the console. You saw this delay just now when you first accessed the console URL. You can change this behavior to deploy internal applications at startup instead and then you don't get the delay when you access the console. This is convenient for demos (if you want to show the console) and also if you tend to use the console.

- ❑ Click on the name of your domain in the left navigation bar in the WLS console.



- ❑ Click *Configuration > General* tab (this will most likely already be selected).
- ❑ De-select *Enable on-demand deployment of internal applications* check box.

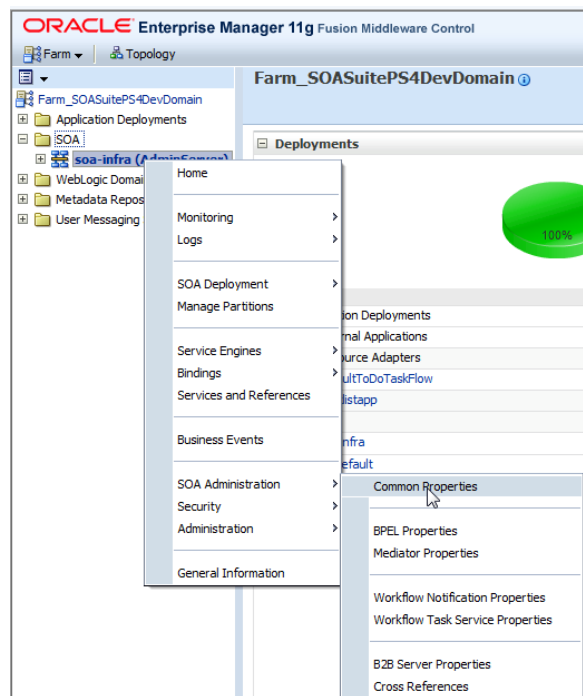


- ❑ Click the *Save* button

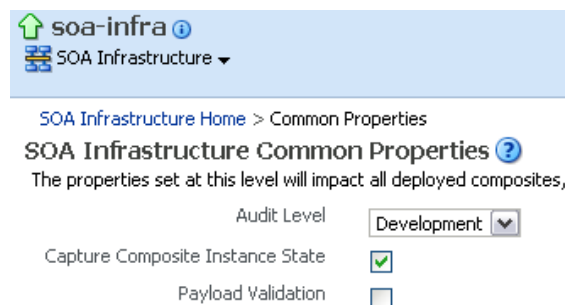
## EM settings for development

The Enterprise Manager Fusion Middleware Control (EM) can provide different levels of information about composite runtime instances based on a property setting. During development it is helpful to have a higher setting to get more information. These settings are not used on production machines except when specifically needed for debugging purposes.

- ☐ Start your servers if they are not already running.
- ☐ Login to the EM console at `http://localhost:7001/em`
- ☐ Expand the *SOA* folder and then right-click on the *soa-infra (AdminServer)* in the left navigation bar to open the SOA menu and select SOA Administration > Common Properties



- ☐ Select *Audit Level: Development* and select the checkbox for *Capture Composite Instance State*.



- ☐ Click **Apply** and click **Yes**

## Summary

Congratulations! You have now installed and configured all the software required for SOA Suite 11.1.1.5.0 (and maybe even BPM Suite 11.1.1.5.0).

In order to get started with SOA Suite, we recommend to work through the [SOA Samples](#) on OTN. You will need an OTN account to be able to access that page.

A good starting point for BPEL Process Manager is for example the [BPEL Hello World sample](#) under the BPEL tab.

# Uninstalling Oracle SOA Suite

## Uninstall Software

If you need to uninstall everything, complete the following.

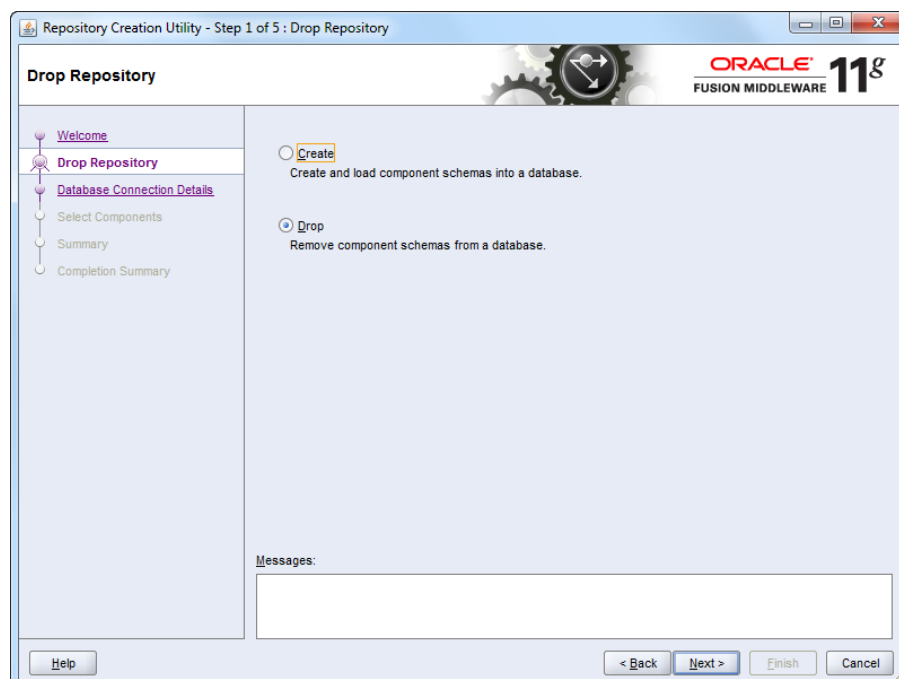
1. First save anything you want to keep from here  
D: \Mi ddl eware\JDev11gR1PS4\j devel oper\mywork
2. Run Uninstall from program menu to completion for both JDeveloper and WLS.
3. Delete D: \Mi ddl eware\JDev11gR1PS4 and D: \Mi ddl eware\SOASui te11gR1PS4.
4. Delete program groups from C: \Documents and Settings\All Users\Start Menu\Programs\
  - ☐ Oracle Fusion Middleware 11.1.1.5.0
  - ☐ Oracle SOA 11g - HomeX
  - ☐ Oracle WebLogic (BEAHOME X)

## Dropping the database schema

- ☐ To drop your existing schema, run the RCU Drop command. Copy the following into a command window.

```
cd c: \stageFMW\RCU\rcuHome\bin  
rcu. bat
```

- ☐ The Repository Creation Utility opens.
- ☐ Click **Next**
- ☐ Select **Drop**



- ❑ Click **Next**
- ❑ Complete the database information

Repository Creation Utility - Step 2 of 5 : Database Connection Details

**Database Connection Details**

Database Type: Oracle Database

Host Name: localhost  
For RAC database, specify VIP name or one of the Node name as Host name.

Port: 1521

Service Name: XE

Username: sys  
User with DBA or SYSDBA privileges. Example: sys

Password: •••••

Role: SYSDBA  
One or more components may require SYSDBA role for the operation to succeed.

Messages:

Help < Back Next > Finish Cancel

- ❑ Click **Next**
- ❑ The pre-requisites are reviewed. When completed, click **OK**. The utility moves to the next page – with a slight delay, just wait for it.

Repository Creation Utility - Checking Prerequisites

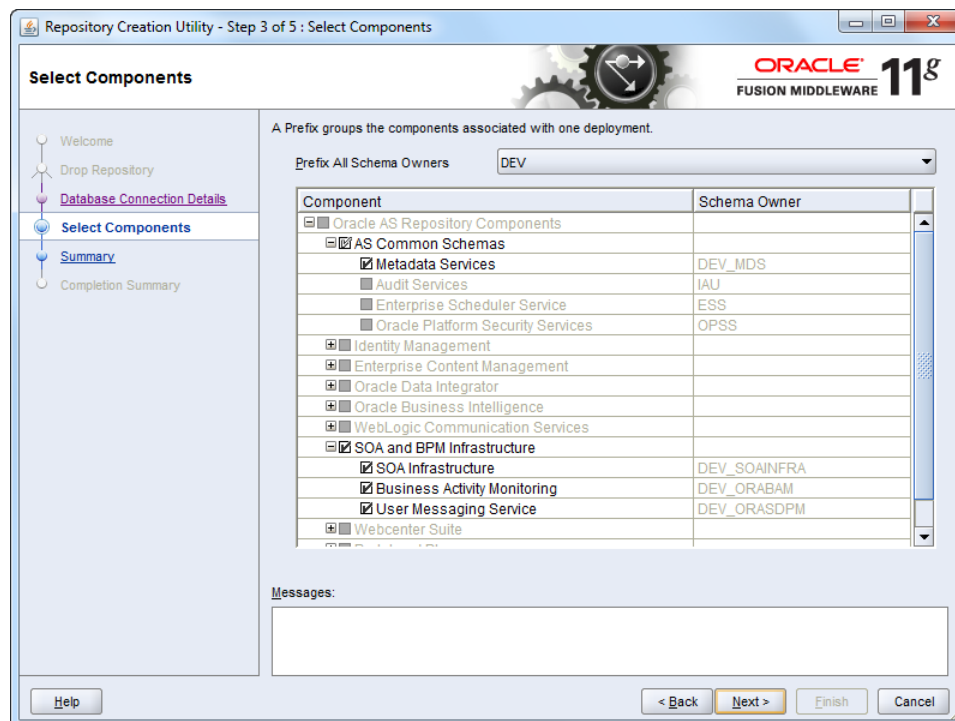
Checking Global Prerequisites

✓ Initializing repository configuration metadata 00:09.994(sec)

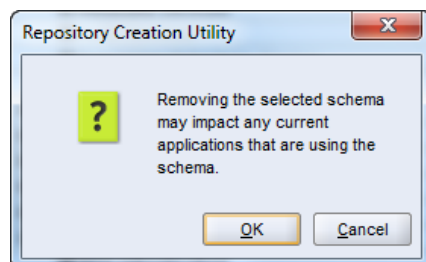
Operation completed. Click OK to continue to next page.

OK

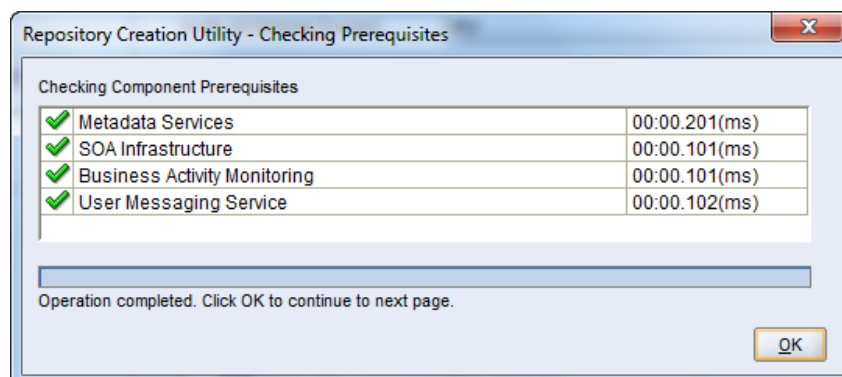
- ❑ The utility finds the existing schemas and offers the dropdown list of all Schema Owner Prefixes. Check that the prefix is correct and review the schema.



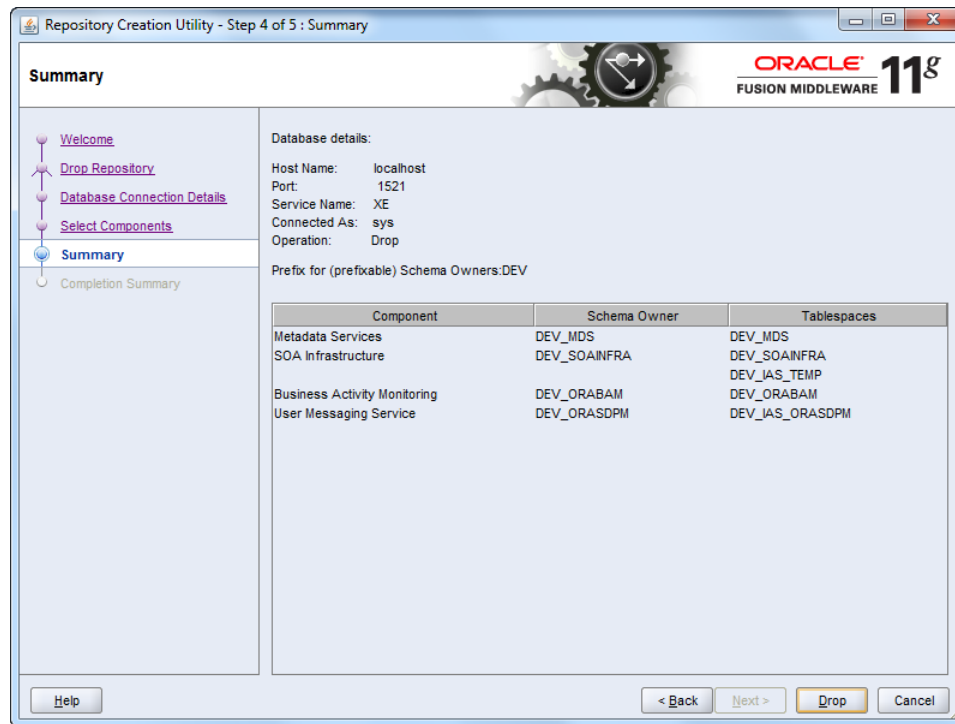
- ❑ Click **Next**.
- ❑ On the drop schema warning, click **OK**.



- ❑ The pre-requisites for this step are reviewed. When completed, click OK to move to the next page – with a slight delay, just wait for it.



- Click **Drop** to drop the schema. This takes only a minute or so.



- When it is finished, click **Close**.



## Useful links and information

The [SOA Suite OTN \(Oracle Technology Network\) Overview page](#) provides general information about SOA Suite, the latest release, links to white papers, the latest news from Product Management and other useful information and links to the components of SOA Suite.

From the overview page, you can also navigate to the following pages, through the tabs at the top:

- ☐ [SOA Suite downloads](#): this page lists all components needed to install the latest release of SOA Suite and a link to previous release downloads
- ☐ [SOA Suite documentation](#): a link to the main documentation library and a list of the most important chapters in the documentation, including a list of new features for the latest release
- ☐ [SOA Suite customers](#): a selected list of SOA Suite Customer Success Stories and a link to the customer references page, together with a list of forums and blogs for SOA Suite
- ☐ [Learn more about SOA Suite](#): a selected list of books, links to virtual machines, samples and demos
- ☐ [Advanced Oracle SOA Suite](#): white papers, presentations, articles, blog entries and more info related to advanced SOA Suite topics from Oracle and our partners

We also recommend monitoring the [SOA Suite team blog](#) for announcements, best practices and other useful information from the SOA Product Management.