# Oracle® Virtual Assembly Builder

Installation Guide 11*g* Release 1 (11.1.1.6) **E18705-03** 

September 2012



Oracle Virtual Assembly Builder Installation Guide, 11g Release 1 (11.1.1.6)

E18705-03

Copyright © 2011, 2012 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

# Contents

Pref	face	v
	Audience	v
	Documentation Accessibility	v
	Related Documents	v
	Conventions	v

## **1** Installation Overview

# 2 Installing Oracle Virtual Assembly Builder

2.1	Installing Oracle Virtual Assembly Builder	. 2-1
2.1.1	Install and Configure	. 2-1
2.1.2	Install Only	2-14
2.1.3	Configure Only	2-20
2.1.4	Silent Installation	2-26
2.2	Deinstalling	2-27

# 3 Configuring Oracle Virtual Assembly Builder Deployer

3.1	Starting the Oracle Fusion Middleware Configuration Wizard	3-1
3.2	Creating a New Domain with Deployer	3-1
3.3	Manual Configuration for Oracle Virtual Assembly Builder Deployer	3-5
3.4	Configuring Security for the Deployer	3-5

# Preface

This book details the requirements and steps needed to install Oracle Virtual Assembly Builder. This Preface includes the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

# Audience

The intended audience is users who will install Oracle Virtual Assembly Builder for their organization.

## **Documentation Accessibility**

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

#### Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are
hearing impaired.

# **Related Documents**

For more information, see the following documents in the documentation set:

- Oracle Virtual Assembly Builder User's Guide
- Oracle Virtual Assembly Builder Developer's Guide
- Oracle Virtual Assembly Builder Release Notes

## Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# **Installation Overview**

Oracle Virtual Assembly Builder. This chapter includes the following sections:

- Section 1.1, "Oracle Virtual Assembly Builder Installation Roadmap"
- Section 1.2, "Security Precautions"
- Section 1.3, "Preferred Topology"
- Section 1.4, "Environment Considerations"
- Section 1.5, "Certification and System Requirements"

## 1.1 Oracle Virtual Assembly Builder Installation Roadmap

The steps you need to take to install Oracle Virtual Assembly Builder are described in Table 1–1.

Tasks	Details and Documentation	
Prepare your system environment for	Ensure that your system environment meets the general installation requirements for Oracle Virtual Assembly Builder.	
installation.	See the following sections:	
	<ul> <li>Section 1.2, "Security Precautions"</li> </ul>	
	<ul> <li>Section 1.3, "Preferred Topology"</li> </ul>	
	<ul> <li>Section 1.4, "Environment Considerations"</li> </ul>	
	<ul> <li>Section 1.5, "Certification and System Requirements"</li> </ul>	
Ensure that reference systems are set up.	To create appliances using Oracle Virtual Assembly Builder Introspection functionality, you must have appropriate reference systems set up. Refer to product specific documentation for those system requirements and set up.	
Install and configure your deployment environment.	An Oracle VM environment must be installed and configured to deploy your assemblies. See Oracle VM (http://www.oracle.com/technetwork/server-storage/vm) for more information.	
Install an Application Server.	Oracle Virtual Assembly Builder Deployer requires Oracle WebLogic Server to be installed in an Oracle Middleware Home.	
	Installing Oracle WebLogic Server creates the Middleware home and WebLogic home directories, which are required for an Oracle Virtual Assembly Builder Deployer installation. For more information, see "Middleware Home and WebLogic Home Directories" in <i>Oracle Fusion Middleware Installation Planning Guide</i> . Also see the following sections in <i>Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server</i> :	
	<ul> <li>"Product Distribution" for instructions on how to download the latest version.</li> </ul>	
	"Running the Installation Program in Graphical Mode" for installation instructions.	

Table 1–1 Tasks in the Oracle Virtual Assembly Builder Installation Procedure

Tasks	Details and Documentation
Install Oracle Virtual Assembly Builder.	Use this installer to install Oracle Virtual Assembly Builder Studio and Deployer and configure an Studio instance.
	This creates the following directories:
	<ul> <li>Oracle Virtual Assembly Builder home inside the Middleware home.</li> </ul>
	<ul> <li>Oracle Virtual Assembly Builder Studio Instance home. You will be asked for the location of Studio instance home directory, which can be located anywhere on your system.</li> </ul>
	See Chapter 2, "Installing Oracle Virtual Assembly Builder" for installation instructions.
Create and configure your Oracle WebLogic	Use the Oracle Fusion Middleware Configuration Wizard to create your WebLogic domain and configure Oracle Virtual Assembly Builder Deployer.
Server Domain for the Oracle Virtual Assembly Builder	You will be asked for the location of the Domain home directory, which is where the Administration Server resides. This directory can be located anywhere on your system.
Deployer.	See Chapter 3, "Configuring Oracle Virtual Assembly Builder Deployer" for instructions on starting the Configuration Wizard and creating your WebLogic Domain, performing manual configuration, and configuring security.
Start the servers.	Start the Administration Server.
	See "Starting and Stopping Servers" in <i>Oracle</i> ® <i>Fusion Middleware Managing Server Startup and Shutdown for Oracle WebLogic Server</i> for instructions on how to start the Administration Server.

 Table 1–1 (Cont.) Tasks in the Oracle Virtual Assembly Builder Installation Procedure

## 1.1.1 Installation and Configuration Options

The Oracle Virtual Assembly Builder Deployer component runs inside Oracle WebLogic Server. The CLI and the Studio graphical user interface interact with the Oracle Virtual Assembly Builder Deployer through a Web service exposed in Oracle WebLogic Server. You must configure Oracle WebLogic Server as part of the installation and configuration process.

You can select one of the following installation options:

#### 1.1.1.1 Studio-only Installation

This option installs only Oracle Virtual Assembly Builder Studio. It contains the capabilities to create appliances and assemblies, create appliance templates and assembly archives and creating deployment plans.

This option gets installed in a new Oracle Home under a new or an existing Middleware Home.

This option exposes abctl command line and Studio graphical user interfaces.

#### 1.1.1.2 Deployer-only Installation

This option installs only Oracle Virtual Assembly Builder Deployer. It contains the capabilities to configure deployment targets, upload assembly archives to Deployer, create assembly instances, deploy/undeploy/start/stop assembly instances and scale appliance instances.

Oracle WebLogic Server should be pre-installed under a Middleware Home.

Oracle Virtual Assembly Builder Deployer gets installed in a new Oracle Home under the same Middleware Home where you have Oracle WebLogic Server installed.

This option exposes abctl command line and Web Services interfaces.

#### 1.1.1.3 Studio and Deployer Installation (Default Installation Option)

The default installation option installs both Oracle Virtual Assembly Builder Studio and Deployer. It contains the capabilities described for Oracle Virtual Assembly Builder Studio and Oracle Virtual Assembly Builder Deployer install options.

Oracle WebLogic Server should be pre-installed under a Middleware Home.

Both Oracle Virtual Assembly Builder Studio and Deployer get installed in a new Oracle Home under the same Middleware Home where you have Oracle WebLogic Server installed.

This option exposes abctl command line, Studio graphical user interface and Web Services interfaces.

## **1.2 Security Precautions**

Read this section before proceeding. It contains vital security information and precautions. Failure to read and understand these items may cause security vulnerabilities.

- The user who installs should be a trusted user, and a member of a trusted OS group.
- The template creation process does a security check to see that the Operating System (OS) user attempting to create the template is the same OS user who owns the Oracle Virtual Assembly Builder bin directory. Having the OS user who installs the product be the same OS user who creates templates ensures that the security check will succeed.
- Oracle WebLogic Server must be installed in a secure configuration prior to deploying the Oracle Virtual Assembly Builder Deployer to it.

## 1.3 Preferred Topology

Oracle Virtual Assembly Builder uses the Oracle VM product set as the virtualization infrastructure.

Oracle Virtual Assembly Builder and Oracle VM Manager are network and storageintensive products. The Oracle VM servers, the Oracle VM Manager and Oracle Virtual Assembly Builder communicate over the network during the course of introspection, registration and deployment of VMs.

The setup should have the following characteristics:

- Oracle VM server pools machine with at least 16GB of total physical memory, gigabit networking facility, high capacity and high speed storage space for various tests and configuration, and acceptable processing power. The best performance will come from server-class machines with fast processors, memory and a high performance storage subsystem.
- Oracle VM Manager machine which is hosted on another machine. This machine will run OEL x86\_64 Linux and must be connected to the Oracle VM server pool by a Gigabit network switch.
- Reference systems (products you plan to introspect) may also be installed on this machine to help speed up introspection and file set capture. Oracle Virtual Assembly Builder also supports remote introspection, so reference systems do not have to be co-located with Oracle Virtual Assembly Builder. Due to the large size of various Oracle Virtual Assembly Builder artifacts that will be created for your components you should make sure to have plenty of disk space on this machine.

 If you going to use static IP addresses for your appliances of an assembly for deployment, you should have one static IP address per appliance instance.

## 1.4 Environment Considerations

Before using Oracle Virtual Assembly Builder, ensure that your environment meets the following prerequisites. These items are not required for installation, but are necessary environmental components for the use of Oracle Virtual Assembly Builder.

## 1.4.1 Unzip Utility on Reference Systems

Oracle Virtual Assembly Builder requires that the Unzip utility be present on reference systems in order for remote introspection to work properly.

### 1.4.2 SSH Port Forwarding Must be Enabled

Oracle Virtual Assembly Builder requires that SSH port forwarding be enabled on reference systems in order for remote operations (such as introspection and packaging) to work properly.

# **1.5 Certification and System Requirements**

Ensure your environment meets all requirements before starting the installation.

## 1.5.1 Certification

This certification document details supported installation types, platforms, operating systems, databases, and JDKs. See *Virtual Assembly Builder* in Oracle Fusion Middleware 11g Release 1 (at <a href="http://www.oracle.com/technology/software/products/ias/files/fus">http://www.oracle.com/technology/software/products/ias/files/fus</a>

ion\_certification.html).

### 1.5.2 System Requirements

Please ensure you meet the following requirements.

### 1.5.2.1 Operating Systems

The following operating systems are supported:

- Oracle Enterprise Linux 5 (UL3+) (32-bit. 64 bit supported in 32-bit mode)
- Red Hat Enterprise Linux 5 (UL3+) (32-bit. 64 bit supported in 32-bit mode)

You can verify your operating system version using the commands listed here.

Oracle Enterprise Linux:

# cat /etc/enterprise-release

- Red Hat Enterprise Linux:
  - # cat /etc/redhat-release

### 1.5.2.2 Java Development Kit

Oracle Universal Installer includes Sun JDK for Linux. You can choose to install it (the JDK) during installation and use it with Oracle Virtual Assembly Builder. You can also choose to us your own JDK installation.

#### 1.5.2.3 Oracle Enterprise Linux JeOS

Download and install Oracle Enterprise Linux JeOS from: http://edelivery.oracle.com/oraclevm. If this is your first time using eDelivery, you will be required to register. Register, then continue.

- 1. On the *Welcome* screen, click **Continue**. The Media Pack Search screen appears.
- **2.** Select a **Product Pack** (*Oracle Linux*), and **Platform** (*x86 32 bit*). Click **Go**. The Results are displayed.
- **3.** Select **Oracle Linux JeOS for Building Oracle VM templates for x86 (32 bit)**. Click **Continue**. Available downloads appear.
- Download JeOS Base x86 and x86\_64, by clicking Download. The file is downloaded.
- 5. Unzip the downloaded zip file.
- 6. (As root) install the "ovm-modify-jeos" package using the rpm command with the -i option.

#### 1.5.2.4 Oracle Open-OVF

Download and install Oracle Open-OVF package from the OVM 3.0 channels of a yum repository. For information on setting up a yum repository see

http://www.oracle.com/technetwork/topics/linux/yum-repository-se
tup-085606.html

See also the following whitepaper on the Unbreakable Linux Network, a comprehensive resource for Oracle Linux and Oracle VM support subscribers, offering access to Linux software patches, updates and fixes, along with information on yum program and support policies:

http://www.oracle.com/us/technologies/027615.pdf

#### 1.5.2.5 System Base Images

The supported Guest OS is an Oracle Enterprise Linux Base Image.

**Note:** You have a choice of downloading an Oracle provided *sample* Oracle Enterprise Linux Base Image, or creating your own. The sample image is available on Oracle Technology Network: http://www.oracle.com/technology/products/ovab

Ensure that the base image architecture matches your component software. That is, use a 32-bit base image if your component software is 32-bit; 64-bit base image for 64-bit component software.

To create the appropriate Base Image(s):

Oracle Enterprise Linux Base Image, see: http://www.oracle.com/technetwork/server-storage/vm/overview/ templates-101937.htmlThe information on this, and referenced pages, will provide the information you need to create your own System Base Image.

When specifying a base image, the image must meet the following requirements:

- Oracle Enterprise Linux 5 (UL3+)
- At least 250MB of free space for /tmp. (depending on the type of product your are creating appliance for and deploying, you may need more free space. Refer to appropriate product install guide for the specific free space requirement).

- At least 500MB of swap space
- You must have installed the following packages (RPMs):
  - nc
  - libaio
  - zip
  - unzip
  - nfs-utils
  - xen-tool
  - ovmapi-lib
  - ovmapi-xenstoreprovider
  - kmod-ovmapi-xen
- Install the following kernal modules:
  - ovmapi\_5.5.ko (32 bit)
  - ovmapi\_5.3\_64bit.ko (64 bit)
- In addition, for deploying virtual machines for FMW components, you must have installed:
  - \* gcc
  - \* gcc-c++
  - \* setarch
  - \* sysstat
  - \* libaio
  - \* libaio-devel
  - \* libstdc++
  - \* libstdc++-devel
  - \* compat-libstdc++
  - \* compat-db
  - \* control-center
  - \* glibc-common
  - \* binutils
  - \* make
  - \* openmotif22 (only required for Oracle Forms and Oracle Reports servers)
- For deploying virtual machines for Oracle Database, you must have installed:
  - \* binutils
  - \* compat-libstdc++
  - \* elfutils-libelf
  - \* elfutils-libelf-devel
  - \* gcc

- \* gcc-c++
- \* glibc
- \* glibc-common
- \* glibc-devel
- \* glibc-headers
- \* libaio
- \* libaio-devel
- \* libgcc
- \* libstdc++
- \* libstdc++-devel
- \* make
- numactl-devel
- \* sysstat
- \* ksh
- For FMW components, the following shell parameters must be set:
  - \* soft=4096
  - \* hard=4096
- For Oracle database, the following shell parameters must be set
  - \* nproc-soft=2047
  - \* nproc=hard=16384
  - nofile-soft=1024
  - \* nofile-hard=65536
  - \* maxproc(ulimit -p)=16384
  - \* descriptors(ulimit -n)=65536
- For Oracle database, the following kernel parameters must be set:
  - \* Semaphore Limits

```
semmni=128 # max number of arrays; default is 128
semmsl=250 # max semaphores per array. default is 250
semmns=32000 # max semaphores system wide; default is 32000
semopm=100 # max ops per semop call; default is 32
```

\* Shared Memory Limits

```
shmmni=4096 # max number of segments; default is 4096
shmmax=0.5GB # max seg size (kbytes); default is 4194303, which is 3GB
shmall=2097152 # max total shared memory (kbytes); default is
1073741824
```

File Descriptors

file-max=6815744 # system wide file descriptors; default is 204573; aio-max-nr=Maximum:1048576 # default is 65536; ip\_local\_port\_range=9000 65500 # default is 32768 61000; rmem\_default=262144 # default is 109568;

```
rmem_max=4194304 # default is 131071;
wmem_default=262144 # default is 105968
wmem_max=1048576 # default is 131071
```

- Additional database requirements:
  - \* Name Resolution: Ensure that host names are resolved through the /etc/hosts file.
  - \* The /tmp directory should have a minimum of 1GB of space.
  - \* Add the following line in the /etc/pam.d/login file:

session required pam\_limits.so

- You must turn on oraclevm-templates while creating the image.
- Oracle recommends that you turn off iptables while creating the image.
- You must turn off requiretty in the base image for sudo operations to work. This is a requirement to deploy the assembly archive through Enterprise Manager.
- The base image must have the user *oracle*. One way to add a user to the base image is to boot the base image, log on to it as root, and call /usr/sbin/useradd oracle.

**Note:** The primary group for *oracle* user must be *oracle*. By default, when you create the *oracle* user, it is automatically set. To set it manually, create the group and assign it to *oracle* user by executing:

/usr/sbin/groupadd oracle /usr/sbin/usermod -g oracle -a -G oracle oracle Refer to your modifyjeos documentation for instructions on creating a base image.

# **Installing Oracle Virtual Assembly Builder**

The following sections describe how to do a complete installation of Oracle Virtual Assembly Builder.

- Section 2.1, "Installing Oracle Virtual Assembly Builder"
- Section 2.2, "Deinstalling"

## 2.1 Installing Oracle Virtual Assembly Builder

Follow these steps to install and configure Oracle Virtual Assembly Builder.

**Note:** These installation instructions are limited to installing Oracle Virtual Assembly Builder on Oracle Enterprise Linux 5 (UL3+). You can adapt them for your local environment.

You can install and configure all at once (recommended) using Oracle Universal Installer, or you can choose to install only and configure at another time.

- Section 2.1.1, "Install and Configure"
- Section 2.1.2, "Install Only"
- Section 2.1.3, "Configure Only"
- Section 2.1.4, "Silent Installation"

To start installation, launch Oracle Universal Installer (Disk1/runInstaller).

### 2.1.1 Install and Configure

You can choose to install Oracle Virtual Assembly Builder software in an Oracle Home as well as configure an Oracle Virtual Assembly Builder instance Home with various details provided. To install and configure Oracle Virtual Assembly Builder, start the installer, then follow these steps:

1. Specify Inventory Directory. This page allows you to specify a directory for installer files. This is called the *inventory directory*. Within the inventory directory, the installer automatically sets up subdirectories for each product to contain inventory data and will consume typically 150 Kilobytes per product.

Enter the full path of the inventory directory.

You can specify an Operating System group that has write permissions to the above directory.

<b>3</b> - <b>1</b> - <b>1</b> - <b>1</b> - <b>1</b> - <b>1</b>	, =, , , , , , , , , , , , , , ,
🛓 🛛 Oracle Fusi	on Middleware 11g Installation 🛛 🗙
Specify Inventory direct	ory ORACLE 118
You are starting your first installation on thi installer files. This is called the "inventory di sets up subdirectories for each product to o product.	is host. As part of this install, you need to specify a directory for rectory". Within the inventory directory, the installer automatically contain inventory data and will consume typically 150 Kilobytes per
Enter the full path of the inventory directory You can specify an Operating System group	r. that has write permissions to the above directory
Inventory <u>D</u> irectory:	/home/user//oralnventory <u>B</u> rowse
Operating <u>S</u> ystem Group name:	svrtech
Help	<u>Qk</u> Cancel

Figure 2–1 Specify Inventory Directory page

When you are ready to continue, click **OK**. A dialog appears warning you that you perform certain actions with root privileges before the installation can continue.

If you have root privileges, use another window to execute the script createCentralInventory.sh from the inventory directory you specified. When finished, click **OK**.

If you do not have root privileges, and want to continue the installation, check the **Continue installation with local inventory** box and click **OK**.

**2.** Welcome. This page introduces the installation. The flow of installation appears in the left panel, and control buttons appear along the bottom.

Oracle Virtual Welcome	Assembly Builder 11g Installation - Step 1 of 13
🥥 Welcome	
<ul> <li>Install Software Updates</li> </ul>	Welcome to Oracle Virtual Assembly Builder 11g Installer.
Prerequisite Checks	This installer can be used to install and configure a new Oracle Virtual
Installation Location	Assembly builder Oracle nome.
Installation Type	If you are installing a new Oracle Home for Studio: Make sure you have the following already installed:
Instance Configuration	Oracle Enterprise Linux JeOS
Template Creation Configu	Oracle Open-OVF
Deployer Trust Configurat	For more information, see the Oracle Virtual Assembly Builder
Deployer Connection Conf	Installation Guide.
Installation Summary	Context Sensitive Help is available by clicking <u>H</u> elp.
Installation Progress	Click <u>N</u> ext to begin the installation.
Configuration Progress	
<ul> <li>Installation Complete</li> </ul>	
	Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.
Help	< <u>Back</u> Next > Einish Cancel

Figure 2–2 Welcome page

When you are ready to begin installation, click **Next**. The *Install Software Updates* page appears.

**Note:** Help is available on all of the pages. Use it to learn about what you can do in that page, field descriptions, possible values, and other information.

**3. Software Updates.** Before continuing with installation, you should ensure that your Oracle software is up to date. You have the option to skip this step by selecting the **Skip Software Updates** radio button, but only skip updates if you are sure that all of your software is up to date.

Oracle Virtual Assembly Builder 11g Installation - Step 2 of 13         Install Software Updates				
φ	Welcome	Skip Software Updates		
0	My Oracle Support Update	Search My Oracle Support for Updates		
0	Prerequisite Checks	Us <u>e</u> r Name:		
ļ	Installation Location	Password:		
Å	Installation Type	Proxy Settings Test Connection		
ļ	Instance Configuration	Search Local Directory for Updates		
ļ	Template Creation Configu	Search For Updates		
Ļ	Deployer Trust Configurati			
ģ	Deployer Connection Conf			
ļ	Installation Summary			
ļ	Installation Progress			
	Configuration Progress Installation Complete	Allows user to search for and download software updates from My Oracle Support using My Oracle Support Account user name and password.Click "Test Connection" to test the credentials.		
	<u>H</u> elp	< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel		

Figure 2–3 Install Software Updates page

Enter your Oracle Support user name and password, then click **Test Connection** to test your credentials.

Click **Proxy Settings** (optional) if your computer is behind a firewall or a proxy and not in direct contact with the Internet.

Figure 2–4 Proxy Settings page

0	Proxy Settings	×
	The following fields enable communication with My Oracle Support via a secure internet connection.	
	Proxy Ser <u>v</u> er:	
	Proxy Port:	
	P <u>r</u> oxy User name:	
	Password:	
	Leave user name and password blank if your proxy server requires no authentication.	
	Test Connection Qk Cancel	

Enter proxy information and test the connection and/or click **OK**.

Click **Skip Software Updates** if you do not want to search for any software updates.

Click **Next**. Updates are installed, and the *Prerequisite Check* page appears showing the progress of the checks, and listing any deficiencies.

Prerequisite Che	ecks	-0-		. <u>€'</u> 118 ware 118
Welcome	Selection	Check	Progress	Status
Skip Software Updates	v	Checking operating system certific	100%	<ul> <li>Image: A second s</li></ul>
Prerequisite Checks	1	Checking recommended operating	100%	1
Installation Location	4	Checking kernel parameters	100%	1
Installation Type	1	Checking Recommended glibc ver	100%	1
Installation Summary	4	Checking physical memory	100%	1
Installation Progress				
	4			•
		Abort	<u>R</u> etry	<u>C</u> ontinue

Figure 2–5 Prerequisite Checks page

**4. Prerequisites Checks.** Checks begin automatically. Progress notes inform you about what is being checked, and what the outcome of the check is. You can abort, retry, or continue checks using the buttons on the page. For example, if a physical memory check fails, you can go and correct the problem, then click **Retry** to direct Oracle Universal Installer to recheck the item.

Click **Next** when the prerequisite checks are complete. The *Specify Installation Location* page appears.

Oracle Virtual	Assembly Builder 11	g Installation - Step 4 of 8
Specify Installation	on Location	
	Oracle <u>M</u> iddleware Home: <u>O</u> racle Home Directory:	Middleware/Oracle_OVA81  Browse Oracle_OVA81
Configuration Progress Configuration Progress	If installing Studio and Deplo Server is already installed in t the Middleware Home directo	/er or just the Deployer, ensure that the WebLogic he same Middleware Home. If installing Studio only, ry will be created based on the specified location.
Help		< <u>B</u> ack <u>N</u> ext > Einish Cancel

Figure 2–6 Specify Installation Location page

**5. Specify Installation Location.** Specify the Oracle Middleware Home and Oracle Home directories.

If installing Oracle Virtual Assembly Builder Studio and Oracle Virtual Assembly Builder Deployer, or only Oracle Virtual Assembly Builder Deployer, ensure that the Oracle WebLogic Server is already installed in the same Middleware Home.

If you are installing only Oracle Virtual Assembly Builder Studio, you can select any Middleware Home (including a new non-existing directory location).

You can select an existing Oracle Home location, or you can specify a new one. If you want to use a new directory, ensure that the directory is empty.

**Note:** Existing Oracle Homes:

- Installing into an existing Oracle Home is typically done to reinstall binaries, and in some cases, to upgrade an Oracle Home from one release to another.
- Oracle Universal Installer checks non-empty Oracle Homes to verify that the selected Oracle Home is valid.

Click Next. The Installation Type page appears.

Figure 2–7 Installation Type page

Oracle Virtual	Assembly Builder 11g Installation - Step 5 of 13
Select Installation	Type
Welcome	
Skip Software Updates	Studio Install
Prerequisite Checks	
Installation Location	✓ Deployer Install
Installation Type	
Instance Configuration	
Template Creation Configu	
Deployer Trust Configurat	
Deployer Connection Conf	✓ Configure Studio
Installation Summary	
Unstallation Progress	
Configuration Progress	Installs Oracle Virtual Assembly Builder Studio and Deployer binaries in
Unstallation Complete	components must be configured. To configure the Studies of these
	in Oracle Home. To configure the Deployer instance use config.sh from the
Help	Sack Next > Finish Cancel

- 6. Installation Type. Select the installation type as follows:
  - Studio install: install only Oracle Virtual Assembly Builder Studio, which
    provides you the ability to create appliances and assemblies, create appliance
    templates and assembly archives and create deployment plans.
  - Deployer install: install only Oracle Virtual Assembly Builder Deployer, which
    provides the ability to configure deployment targets, upload assembly
    archives to Deployer, create assembly instances, deploy/undeploy/start/stop
    assembly instances and scale appliance instances.

 Configure Studio: configure the Oracle Virtual Assembly Builder Studio instance. Before installed components can work, you must configure instances of these components.

To configure the Oracle Virtual Assembly Builder Studio instance after the installation, select the "Configure Studio" option, or run config.sh from the bin directory in Oracle home.

To configure the Oracle Virtual Assembly Builder Deployer instance after the installation, run config.sh from the bin directory in Oracle WebLogic Server Home.

Click Next. The Instance Configuration page appears.

Oracle Virtual	Assembly Builder 11g Installation - Step 6 of 13
Instance Configu	ration CRACLE 118
Welcome	
Skip Software Updates	
Prerequisite Checks	
Installation Location	Oracle Virtual Assembly Builder Instance Home:
Installation Type	/scratch/oracle/Middleware/Oracle_OVAB1/ab_instance1 Browse
Instance Configuration	
Template Creation Configu	Oracle Virtual Assembly Builder Java Home:
Deployer Trust Configurat	ratch/oracle/Middleware/Oracle_OVAB1/Oracle_OVAB1/jdk Browse
Deployer Connection Conf	
Installation Summary	
Installation Progress	
Configuration Progress	Configuration and instance information will be stored in the Oracle Virtual
Installation Complete	Assembly builder Instance Home.
Help	< <u>B</u> ack <u>N</u> ext > <u>Finish</u> Cancel

Figure 2–8 Instance Configuration page

**7. Instance Configuration.** Enter, or choose, the *Oracle Virtual Assembly Builder Instance Home*, and the *Oracle Virtual Assembly Builder Java Home*.

*Oracle Virtual Assembly Builder Instance Home*: The home of an Oracle Virtual Assembly Builder instance.

*Oracle Virtual Assembly Builder Java Home*: The Java Home for Oracle Virtual Assembly Builder.

**Note:** If you start installation without an explicit JRE location, the JAVA\_HOME location will default to \$ORACLE\_HOME/jdk (the location where JDK will be installed). You can change to another JDK location, in which case the JDK will NOT be installed.

Click Next. The Template Creation Configuration page appears.

Oracle Virtual	Assembly Builder 11g Installation - Step 7 of 13
Template Creatio Configuration	n CRACLE' 118
	<ul> <li>✓ Copy Oracle Linux Base Image for Oracle ⊻M</li> <li>URI F<u>or</u> Oracle Linux Base Image:         <ul> <li>/scratch/oracle/Middleware/ab_instance1/te</li> <li>Browse</li> <li>Default OEL Base Image for Oracle VM Location:             \$AB_INSTANCE/templates/baseImage/OVM/OEL             </li> <li>✓ Copy Oracle Linux Base Image for Oracle Exalogic</li> <li>URI For Oracle Linux Base Image for Oracle Exalogic</li> <li>URI For Oracle Linux Base Image</li> <li>■ Browse</li> <li>■ Default OEL Base Image for Exalogic Location:             \$AB_INSTANCE/templates/baseImage/Exalogic/OEL         </li> </ul> </li> <li>Base Images are used to create appliance templates. If you choose these</li> </ul>
i O Installation Complete	default directories. These base images will be available as the default base images for this OVAB instance.
▲ ▲ ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ►	< <u>Back</u> <u>N</u> ext> <u>Finish</u> Cancel

Figure 2–9 Template Creation Configuration page

**8. Template Creation Configuration.** This page enables you to define base images that you will use to create new appliances. On this page, you provide the location for the *OEL Base Images* for Oracle VM and for Oracle Exalogic.

**Note:** When you choose to configure an OEL base image, Oracle Installer copies a user-provided OEL base image in the \$AB\_INSTANCE/templates/baseImage/OVM/OEL directory (for Oracle VM), or \$AB\_INSTANCE/templates/baseImage/Exalogic/OEL directory (for Exalogic). This base image will be available as the default base images for this Oracle Virtual Assembly Builder instance.

If you want to have base images shared across all Oracle Virtual Assembly Builder instances, do not select to configure the OEL base image here and do this after install completes:

Create the appropriate directories inside the \$ORACLE\_HOME directory:

\$ORACLE\_HOME/templates/baseImage/OVM/OEL, or

\$ORACLE\_HOME/templates/baseImage/Exalogic/OEL

 Copy the OEL base image files (System.img and vm.cfg) into the \$ORACLE\_HOME/templates/baseImage/OVM/OEL or \$AB\_ INSTANCE/templates/baseImage/Exalogic/OEL directories **Note:** Base images are stored in either \$AB\_INSTANCE, or in \$ORACLE\_HOME. Here is the order of precedence for base image detection:

- location specified by -baseImage flag
- \$AB\_INSTANCE/templates/baseImage/OVM/OEL
- \$ORACLE\_HOME/templates/baseImage/OVM/IOEL

After entering (or selecting) the locations, click **Next**. The *Deployer Trust Configuration* page appears.

Figure 2–10 Deployer Trust Configuration page

Oracle Virtual	Assembly Builder 11g Installation - Step 8 of 13
Deployer Trust C	onfiguration
Welcome	
Skip Software Updates	
Prerequisite Checks	
Installation Location	Password for Deployer Trust Keystore:
Installation Type	•••••
Instance Configuration	Password <u>C</u> onfirmation:
Template Creation Configu	••••••
Deployer Trust Configura	
Deployer Connection Conf	
Installation Summary	
Installation Progress	
Configuration Progress	This keystore is used by the Studio as a client when connecting to Deployer
O Installation Complete	certificate when a Deployer connection is configured. The password protects
	the keystore from tampering.
Help	< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel

**9. Deployer Trust Configuration.** Oracle Virtual Assembly Builder Studio uses the keystore as a client when connecting to Oracle Virtual Assembly Builder Deployer over HTTPS. This keystore will be populated with the Oracle Virtual Assembly Builder Deployer's WebLogic certificate when you configure an Oracle Virtual Assembly Builder Deployer connection.

The password protects the keystore from tampering.

Enter, and confirm, the password for the *Deployer Trust Keystore*.

Click Next. The Deployer Connection Configuration page appears.

Oracle Virtual	Assembly Builder 11g	Installation - Step 9 of 13
Deployer Connec Configuration	tion	
<u>Welcome</u> <u>Skip Software Updates</u> <u>Prerequisite Checks</u>	Configure Studio to Dep	ployer Connection
Installation Location	Co <u>n</u> nection Name:	connection1
Instance Configuration	<u>D</u> eployer URL: <u>U</u> ser Name:	http:// <hostname>:<port></port></hostname>
<ul> <li><u>Template Creation Configu</u></li> <li><u>Deployer Trust Configurat</u></li> </ul>	Passw <u>o</u> rd:	
Deployer Connection Con		
Installation Progress		
Configuration Progress	Configure a connection to a communicate with the Deploy	remote Deployer that will be used by the Studio to /er.
Help		< <u>Back</u> <u>Next</u> <u>Finish</u> Cancel

Figure 2–11 Deployer Connection Configuration page

- Deployer Connection Configuration. You can configure a connection to Oracle Virtual Assembly Builder Deployer. To do so, check Configure Studio to Deployer Connection and enter the connection information:
  - Connection Name: name of the Deployer connection.
  - Deployer URL: URL of the Deployer Web service.
  - User Name: username to use to authenticate with the Deployer Web service.
  - Password: password to use to authenticate with the Deployer Web service.

#### Click Next.

If you configured a connection, the connection is tested. If you see a connection failure, check that the Oracle Middleware Administration Server is up, and hostname, username, and password are correctly configured.

The Installation Summary page appears.

Oracle Virtual A	Assembly Builder 11g Installation - Step 10 of 13
Installation Sumn	nary ORACLE' 118
Welcome	Type: Install and Confgure
🧯 Skip Software Updates	Directory Details
Prerequisite Checks	—Middleware Home Location: /scratch/oracle/Middleware —Oracle Home Location: /scratch/oracle/Middleware/Oracle_OVAB1
Installation Location	—Assembly Builder Instance Home: /scratch/oracle/Middleware/ab_i
A Installation Type	Assembly Builder Java Home: /scratch/oracle/Middleware/Oracle_d
Instance Configuration	-Oracle Home Location
United Stream St	Required: 350 MB
Deployer Trust Configurat	Available: 70528 MB
Deployer Connection Conf	Required: 20 MB
Installation Summary	Save Response File:
<ul> <li>Installation Progress</li> </ul>	
Configuration Progress	To change this configuration before installing, select the topic you want to change in the pane on the left.
ပ် Installation Complete	To install this configuration, select Install.
Help	Sack Next > Sinstall Cancel

Figure 2–12 Installation Summary page

**11. Summary.** The Installation Summary page lists the components and locations for install. You can save the response file by clicking **Save**.

If you want to change any of your installation or configuration choices, you can select the item from the left pane, make the changes, then return to the *Summary* page.

Click Install to start the installation process.

**12.** Depending on your selections, an *Installation Progress* page appears with relevant information.

Oracle Virtual /	Assembly Builder 11g Installation - Step 11 of 13
Installation Prog	ress CRACLE FUSION MIDDLEWARE 118
Instance Configuration	Progress 97%
Template Creation Cont     Deployer Trust Configu	Executing post install scripts Insta <u>l</u> l Log /home/shgoel/oralnventory/logs/install2011-11-05_05-30-14PM.lo
Deployer Connection C     Installation Summary	Installation Successful. Starting execution of post install scripts
Installation Progress	
Oracle Fusion Middleware Improved Experience	
	ORACLE
Help	<pre><gack next=""> Einish Cancel</gack></pre>

Figure 2–13 Installation Progress page

**13.** As installation progresses, a pop-up message will appear, instructing you to run a configuration script. Follow the instructions in the message.

Figure 2–14 Configuration script pop-up message

oracleRoot.sh confirmation dialog	ים
A configuration script needs to be run as root before installation can proceed. Leaving this window open, open another window and run	
'/scratch/oracle1/product/ab111140/110223/oracle_home2/oracleRoot.s	
h' as root.	
<u>O</u> K	]

14. After you run the script, a Configuration Progress page appears.

Configuration Progress		
Welcome	Configuration Tools	
Skip Software Updates	Name	Progress
Prerequisite Checks	🖻 🖳 🖌 Assembly Builder Configuration	100%
Installation Location	Create Assembly Builder Instance	Success
Installation Type	Deployer Trust Configuration     Instantiating Files	Success 🖉 Success
Instance Configuration		-
Template Creation Configu		
Deployer Trust Configurati		
Deployer Connection Conf	<u>A</u> bort <u>R</u> etry	C <u>o</u> ntinue
Installation Summary	Configuration Log Location: /home/shgoel/oralnventory/logs/install2011-11-05_05	-30-14PM.log
Installation Progress		
Configuration Progress	⊞ ✓ Assembly Builder Configuration	
Installation Complete		

Figure 2–15 Configuration Progress page

**15.** When installation is complete, the *Installation Complete* page appears.

Figure 2–16 Installation Complete page

Oracle Virtual A	Assembly Builder 11g Installation - Step 13 of 13
Installation Com	
Q Welcome	⊡…Type: Install and Confgure
Skip Software Updates	Directory Details
Prerequisite Checks	Middleware Home Location: /scratch/oracle/Middleware/Oracle_OV Oracle Home Location: /scratch/oracle/Middleware/Oracle_OVAB2
Installation Location	Assembly Builder Instance Home: /scratch/oracle/Middleware/Ora
Installation Type	Assembly Builder Java Home: /scratch/oracle/Middleware/Oracle_C
Instance Configuration	⊡Oracle Home Size: 351 MB
O Template Creation Configu	Required: 350 MB
Deployer Trust Configurati	
Deployer Connection Conf	Required: 20 MR
Installation Summary	Save Installation Details:
Installation Progress	
Configuration Progress	Oracle Virtual Assembly Builder installation completed successfully.
Installation Complete	
Help	< <u>Back</u> <u>N</u> ext > <u>Einish</u> Cancel

**16.** If you installed Oracle Virtual Assembly Builder Deployer, you must configure the Deployer using the procedures in Chapter 3, "Configuring Oracle Virtual Assembly Builder Deployer".

## 2.1.2 Install Only

This option is used to install the Oracle Virtual Assembly Builder binaries into an Oracle Home. To install Oracle Virtual Assembly Builder and configure it later, start the installer, then follow these steps:

**1. Welcome.** This page introduces the installation. The flow of installation appears in the left panel, and control buttons appear along the bottom.

Figure 2–17 Welcome page



When you are ready to begin installation, click **Next**. The *Install Software Updates* page appears.

Inst	Oracle Virtual all Software U	pdates
	tome	Skip Software Updates
🧅 Му (	Oracle Support Update	Search My Oracle Support for Updates
Prer	equisite Checks	Us <u>e</u> r Name:
<ul> <li>Insta</li> </ul>	allation Location	Password:
Insta	allation Type	Proxy Settings Test Connection
   Insta	ance Configuration	Search Local Directory for Updates
тет	plate Creation Configu	Search For Updates
O Depl	loyer Trust Configurat	
O Depl	loyer Connection Conf	
   Insta	allation Summary	
   Insta	allation Progress	
Con	figuration Progress	Allows user to search for and download software updates from My Oracle
0 Insta	allation Complete	Support using My Oracle Support Account user name and password.Click "Test Connection" to test the credentials.
4		
Help		< <u>Back</u> <u>N</u> ext > <u>F</u> inish Cancel

Figure 2–18 Software Updates page

**Note:** Help is available on all of the pages. Use it to learn about what you can do in that page, field descriptions, possible values, and other information.

2. Software Updates. Before continuing with installation, you should ensure that your Oracle software is up to date. You have the option to skip this step by selecting the Skip Software Updates radio button, but only skip updates if you are sure that all of your software is up to date.

Enter your Oracle Support user name and password, then click **Test Connection** to test your credentials.

Click **Proxy Settings** (optional) if your computer is behind a firewall or a proxy and not in direct contact with the Internet.

	Proxy Settings
The following fields enab secure internet connecti	le communication with My Oracle Support via a on.
Proxy Ser <u>v</u> er:	
<u>P</u> roxy Port:	
P <u>r</u> oxy User name:	
Pass <u>w</u> ord:	
.eave user name and pas authentication.	sword blank if your proxy server requires no
<u>T</u> est Conr	nection <u>O</u> k <u>C</u> ancel

Figure 2–19 Proxy Settings page

Enter proxy information and test the connection and/or click **OK**.

Click Next. Updates are installed, and the Select Installation Type page appears.

Figure 2–20 Select Installation Type page

Oracle Virtual	Assembly Builder 11g Installation - Step 5 of 13
Select Installatio	n Type
Welcome	
Skip Software Updates	Studio Install
Prerequisite Checks	
Installation Location	✓ Deployer Install
Installation Type	
Installation Summary	
Unstallation Progress	
U Installation Complete	
	Configure Studio
	Installs Oracle Virtual Assembly Builder Studio and Deployer binaries in Oracle Home. Before these installed components will work, instances of these components must be configured. To configure the Studio instance either select the "Configure Studio" option or use config.sh from the bin directory in Oracle Home. To configure the Deployer instance use config.sh from the
Help	<u> </u>

**3. Installation Type.** Use this page to choose whether you want to install and configure at this time, or just to install and configure at a later time. Since this section covers install only, do not select the **Configure Studio** radio button.

A message appears reminding you that you'll need to use manual configuration steps later to configure your software. The *Prerequisite Checks* page appears.

Prerequisite Che	ecks	-0		E 11
Welcome	Selection	Check	Progress	Status
Skip Software Updates	1	Checking operating system certific	100%	×
Prerequisite Checks	V	Checking recommended operating	100%	×
Installation Location	V	Checking kernel parameters	100%	×
LInstallation Type	V	Checking Recommended glibc ver	100%	×
Installation Summary	V	Checking physical memory	100%	<ul> <li>Image: A set of the set of the</li></ul>
) Installation Progress ) Installation Complete				
	•	33333		
		Abort	<u>R</u> etry	<u>C</u> ontinue
		hecking operating system certification hecking recommended operating syst hecking kernel parameters hecking Recommended glibc version	em packages	

Figure 2–21 Prerequisite Checks page

**4. Prerequisites Checks.** Checks begin automatically. Progress notes inform you about what is being checked, and what the outcome of the check is. You can abort, retry, or continue checks using the buttons on the page. For example, if a physical memory check fails, you can go and correct the problem, then click **Retry** to direct Oracle Universal Installer to recheck the item.

Click **Next** when the prerequisite checks are complete. The *Specify Installation Location* page appears.

Figure 2–22	Specify	Installation	Location	page
-------------	---------	--------------	----------	------

Oracle Virtual	Assembly Builder 11	g Installation - Step 4 of 8
Specify Installation	on Location	
🥥 <u>Welcome</u>		
Skip Software Updates		
Prerequisite Checks		
Installation Location		
Installation Type		
Instance Configuration	Oracle <u>M</u> iddleware Home:	Middleware/Oracle_OVAB1  Browse Browse
Template Creation Configu	Oracle Home Directory:	Oracle_OVAB1
🖕 🖕 Deployer Trust Configurati		
Deployer Connection Conf		
Installation Summary		
Installation Progress		
Configuration Progress	If installing Studio and Deplo	yer or just the Deployer, ensure that the WebLogic
0 Installation Complete	the Middleware Home directo	ory will be created based on the specified location.
<u>H</u> elp		< <u>Back Next &gt; Einish</u> Cancel

**5. Specify Installation Location.** You can select an existing Oracle Home location, or you can specify a new one. If you want to use a new directory, ensure that the directory is empty.

Note: Existing Oracle Homes:

- Installing into an existing Oracle Home is limited; that is, users can install only into the same type of Oracle Home (in this case, an OVAB Oracle Home). You cannot install into another type of Oracle Home (such as an Oracle Home for SOA).
- Installing into an existing Oracle Home is typically done to reinstall binaries, and in some cases, to upgrade an Oracle Home from one release to another.
- Oracle Universal Installer checks non-empty Oracle Homes to verify that the selected Oracle Home is valid.

Click Next. The Installation Summary page appears.

Figure 2–23 Installation Summary page

Oracle Virtual Assembly Builder 11g Installation - Step 10 of 13				
Installation Sumn	nary ORACLE fusion middleware 118			
Welcome	Type: Install and Confgure			
Skip Software Updates	Directory Details			
Prerequisite Checks	—Middleware Home Location: /scratch/oracle/Middleware     —Oracle Home Location: /scratch/oracle/Middleware/Oracle_OVAB1			
Installation Location	Assembly Builder Instance Home: /scratch/oracle/Middleware/ab_i			
http://www.communication.com	-Assembly Builder Java Home: /scratch/oracle/Middleware/Oracle_C			
Instance Configuration	Oracle Home Location			
Template Creation Configu	Required: 350 MB			
Deployer Trust Configurat	Available: 70528 MB			
Deployer Connection Conf	Required: 20 MB			
Installation Summary				
U Installation Progress				
↓ Configuration Progress	To change this configuration before installing, select the topic you want to change in the pape on the left			
U Installation Complete	To install this configuration, select <u>I</u> nstall.			
Help	< <u>B</u> ack <u>N</u> ext > <u>Install</u> Cancel			

**6. Summary.** The *Installation Summary* page lists the components and locations for install. You can save the response file by clicking **Save**.

If you want to change any of your installation or configuration choices, you can select the item from the left pane, make the changes, then return to the *Installation Summary* page.

Click **Install** to start the installation process. An *Installation Progress* page appears with relevant information.

Oracle Virtual Assembly Builder 11g In	stallation - Step 11 of 13
Installation Progress	
Installation Progress     Installation Summary     Installation Progress     Installation Progress	97%  ventory/logs/install2011-11-05_05-30-14PM.lo I scripts
Oracle Fusion Middleware	Improved Experience ORACLE < Back Next > Einish Cancel

Figure 2–24 Installation Progress page

**7.** As installation progresses, a pop-up message will appear, instructing you to run a configuration script. Follow the instructions in the message.

Figure 2–25 Configuration script pop-up message



8. When installation is complete, the *Installation Complete* page appears.

Installation Con	nplete
<ul> <li>Welcome</li> <li>Skip Software Updates</li> <li>Install Only</li> <li>Prerequisite Checks</li> <li>Installation Location</li> <li>Installation Summary</li> <li>Installation Progress</li> <li>Installation Complete</li> </ul>	
Help	Oracle Virtual Assembly Builder installation completed successfully

Figure 2–26 Installation Complete page

**9.** If you installed Oracle Virtual Assembly Builder Deployer, you must configure the Deployer using the procedures in Chapter 3, "Configuring Oracle Virtual Assembly Builder Deployer".

### 2.1.3 Configure Only

This Installation option (in which only instance configuration occurs) is available when a user launches the Configuration Wizard after completing a software installation. To begin Configure Only, execute config.sh from the <code>\$ORACLE\_HOME/bin</code> folder. Follow these steps:

**1.** Welcome. This page introduces the installation. The flow of installation appears in the left panel, and control buttons appear along the bottom.

D Oracle Virtual J Welcome	Assembly Builder 11g Installation - Step 1 of 13
🥥 Welcome	
Install Software Updates	Welcome to Oracle Virtual Assembly Builder 11g Installer.
Prerequisite Checks	This installer can be used to install and configure a new Oracle Virtual
Installation Location	Assembly builder Oracle Home.
Linstallation Type	If you are installing a new Oracle Home for Studio: Make sure you have the following already installed:
Instance Configuration	Oracle Enterprise Linux IeOS
Template Creation Configu	Oracle Open-OVF
Deployer Trust Configurat	For more information, see the Oracle Virtual Assembly Builder
Deployer Connection Conf	installation Gabe.
Installation Summary	Context Sensitive Help is available by clicking <u>H</u> elp.
<ul> <li>Installation Progress</li> </ul>	Click <u>N</u> ext to begin the installation.
Configuration Progress	
O Installation Complete	
	Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.
Help	< Back Next > Einish Cancel

Figure 2–27 Installation Welcome page

When you are ready to begin installation, click **Next**. The *Instance Configuration* page appears.

**Note:** Help is available on all of the pages. Use it to learn about what you can do in that page, field descriptions, possible values, and other information.

Oracle Virtual Assembly Builder 11g Installation - Step 6 of 13		
Welcome		
Skip Software Updates		
Prerequisite Checks		
Installation Location	Oracle Virtual Assembly Builder Instance Home:	
Installation Type	/scratch/oracle/Middleware/Oracle_OVA81/ab_instance1	
Instance Configuration		
Template Creation Configu	Oracle Virtual Assembly Builder Java Home:	
Deployer Trust Configurat	ratch/oracle/Middleware/Oracle_OVAB1/Oracle_OVAB1/jdk	
Deployer Connection Conf		
Installation Summary		
Installation Progress		
Configuration Progress	Configuration and instance information will be stored in the Oracle Virtual	
<ul> <li>Installation Complete</li> </ul>	Assembly Builder Instance Home.	
Help	<u>     Back Next &gt; Einish Cancel   </u>	

**2.** Instance Configuration. Enter, or choose, the Oracle Virtual Assembly Builder *Instance Home*, and the Oracle Virtual Assembly Builder Java Home.

*Oracle Virtual Assembly Builder Instance Home*: The home of an Oracle Virtual Assembly Builder instance.

*Oracle Virtual Assembly Builder Java Home*: The Java Home for Oracle Virtual Assembly Builder.

**Note:** If you start installation without an explicit JRE location, the JAVA\_HOME location will default to \$ORACLE\_HOME/jdk. You can change to another JDK location.

Click Next. The Template Creation Configuration page appears.

Figure 2–28 Template Creation Configuration page

Oracle Virtual Assembly Builder 11g Installation - Step 7 of 13		
Template Creatio Configuration	n ORACLE 118	
	<ul> <li>✓ Copy Oracle Linux Base Image for Oracle <u>V</u>M</li> <li>URI F<u>o</u>r Oracle Linux Base Image:         <ul> <li>/scratch/oracle/Middleware/ab_instance1/te</li> <li>Browse</li> </ul> </li> <li>Default OEL Base Image for Oracle VM Location:         <ul> <li>\$AB_INSTANCE/templates/baseImage/OVM/OEL</li> </ul> </li> <li>✓ Copy Oracle Linux Base Image for Oracle Exalogic         <ul> <li>URI For Oracle Linux Base Image:             <ul> <li>Browse</li> <li>Browse</li> </ul> </li> </ul></li></ul>	
<ul> <li>Installation Summary</li> <li>Installation Progress</li> <li>Configuration Progress</li> </ul>	Default OEL Base Image for Exalogic Location: \$AB_INSTANCE/templates/baseImage/Exalogic/OEL Base images are used to create appliance templates. If you choose these prints_Oracle Universal Installer will come user-provided base images in	
Installation Complete	default directories. These base images will be available as the default base images for this OVAB instance.	
Help	< <u>Back</u> <u>N</u> ext> <u>F</u> inishCancel	

**3. Template Creation Configuration.** This page enables you to define base images that you will use to create new appliances. On this page, you provide the URIs for the *Oracle Enterprise Linux Base Image* for Oracle VM and Oracle Exalogic.

**Note:** When you choose to configure the OEL base image, Oracle Installer copies a user-provided OEL base image in \$AB\_ INSTANCE/templates/baseImage/OVM/OEL directory. This base image will be available as the default base image for this OVAB instance.

If you want to have base images shared across all Oracle Virtual Assembly Builder instances, do not select to configure the OEL base image here and do this after install completes:

Create following directories inside \$ORACLE\_HOME directory:

\$ORACLE\_HOME/templates/baseImage/OVM/OEL

 Copy OEL base image files (System.img and vm.cfg) into \$ORACLE\_HOME/templates/baseImag/OVM/OEL directory

**Note:** Base images are stored in either \$AB\_INSTANCE, or in \$ORACLE\_HOME. Here is the order of precedence for base image detection:

- location specified by -baseImage flag
- \$AB\_INSTANCE/templates/baseImage/OVM/OEL
- \$ORACLE\_HOME/templates/baseImage/OVM/OEL

*Configure Oracle Enterprise Linux Base Image*: If selected, provide the URIs for the OEL Base Images for Oracle VM and Oracle Exalogic.

After entering (or selecting) the locations, click **Next**. The *Deployer Trust Configuration* page appears.

Figure 2–29 Deployer Trust Configuration page

Oracle Virtual	Assembly Builder 11g Installation - Step 8 of 13
Deployer Trust C	onfiguration
Welcome	
Skip Software Updates	
Prerequisite Checks	
Installation Location	Password for Deployer Trust Keystore:
Installation Type	•••••
Instance Configuration	Password <u>C</u> onfirmation:
Template Creation Configu	••••••
Deployer Trust Configura	
Deployer Connection Conf	
Installation Summary	
Installation Progress	
Configuration Progress	This keystore is used by the Studio as a client when connecting to Deployer
O Installation Complete	certificate when a Deployer connection is configured. The password protects
	the keystore from tampering.
Help	< <u>B</u> ack <u>N</u> ext > <u>Finish</u> Cancel

**4. Deployer Trust Configuration.** The Deployer uses this keystore to identify trusted servers.

Enter, and confirm, the password for the Deployer Trust Keystore.

Click Next. The Deployer Connection Configuration page appears.

Figure 2–30 Deployer Connection Configuration page

Oracle Virtual Assembly Builder 11g Installation - Step 9 of 13		
Deployer Connec Configuration	tion	FUSION MIDDLEWARE 118
<u>Welcome</u> <u>Skip Software Updates</u>	Conf <u>ig</u> ure Studio to De	ployer Connection
	Co <u>n</u> nection Name:	connection1
Instance Configuration     Template Creation Configu	<u>D</u> eployer URL: User Name:	weblogic
Deployer Trust Configurat     Deployer Connection Con	Passw <u>o</u> rd:	
<ul> <li>Installation Summary</li> <li>Installation Progress</li> </ul>		
Configuration Progress	Configure a connection to a communicate with the Deplo	remote Deployer that will be used by the Studio to yer.
Help		<back next=""> Einish Cancel</back>

- Deployer Connection Configuration. You can configure a connection to Oracle Virtual Assembly Builder Deployer. To do so, check Configure Studio to Deployer Connection and enter the connection information:
  - Connection Name: name of the Deployer connection.
  - Deployer URL: URL of the Deployer Web service.
  - User Name: username to use to authenticate with the Deployer Web service.
  - Password: password to use to authenticate with the Deployer Web service.

Click Next.

If you configured a connection, the connection is tested. If you see a connection failure, check that the Oracle Middleware Administration Server is up, and hostname, username, and password are correctly configured.

The Installation Summary page appears.

Installation Summ	
Help	Save Response File: Save

Figure 2–31 Installation Summary page

**6. Summary.** The *Installation Summary* page lists the components and locations for install. You can save the response file by clicking **Save**.

If you want to change any of your installation or configuration choices, you can select the item from the left pane, make the changes, then return to the *Summary* page.

Click **Configure** to start the configuration process.

7. A Configuration Progress page appears.

Configuration Pr	ogress	DRACLE 118
• Welcome	<u>C</u> onfiguration Tools	
Skip Software Updates	Name	Progress
Prerequisite Checks	🗸 Assembly Builder Configuration	100%
Installation Location	Create Assembly Builder Instance	Success
Installation Type	Instantiating Files	Success
Instance Configuration	_	•
i Template Creation Configu		
Deployer Trust Configurati		
Deployer Connection Conf	<u>A</u> bort <u>R</u> e	try C <u>o</u> ntinue
i Installation Summary	Configuration Log Location: /home/shgoel/oralnyentory/logs/install2011-11-05	05-30-14PM log
Installation Progress	,,,,,,,,.,,,,,,,,,,,,,,,,,,,,,	
Configuration Progress	E → ✓ Assembly Builder Configuration	
Installation Complete		

Figure 2–32 Configuration Progress page

8. When installation is complete, the *Installation Complete* page appears.

Figure 2–33 Installation Complete page

Oracle Virtual	Assembly Builder 11g Installation - Step 13 of 13 📃 🛛
Installation Comp	lete CRACLE TUSION MIDDLEWARE 118
<ul> <li>Welcome</li> <li>Instance Configuration</li> <li>Template Creation Configu</li> <li>Deployer Trust Configurati</li> <li>Deployer Identity Options</li> <li>Deployer Identity Keys</li> <li>Installation Summary</li> </ul>	Type: Configure Only      -Disk Space     -Oracle Instance Home     -Required: 20 MB     -Applications     -Oracle Home Size: 306 MB
<u>Configuration Progress</u> <u>Installation Complete</u>	Save Installation Details: Save
▲ ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ►	Oracle Virtual Assembly Builder installation completed successfully           < Back

## 2.1.4 Silent Installation

Silent installation is supported with a set of response files covering all user inputs. The templates of silent response files are provided in the Disk1/stage/Response folder.

Silent Installation is launched by executing

/runInstaller -silent -responseFile <absolute path to response file>

# 2.2 Deinstalling

To deinstall Oracle Virtual Assembly Builder, execute this command:

\$ORACLE\_HOME/oui/bin/runInstaller -deinstall

#### In silent mode:

\$ORACLE\_HOME/oui/bin/runInstaller -deinstall -silent -responseFile <absolute path
of response file>

When you execute the deinstall command, Oracle Universal Installer starts. The Welcome page appears.

Oracle Virtual Assembly Builder 11g Deinstallation - Step 1 of 5	
Welcome	
Velcome     Select Deinstall Type     Deinstall Oracle Home     Deinstallation Progress     Deinstallation Complete	Oracle Virtual Assembly Builder 11 <i>g</i> You are about to deinstall the applications contained in Oracle Virtual Assembly Builder Home. At any time during the deinstallation, you can viewthe Release Notes for additional information. Context-sensitive help is available by clicking Help. Click the Next button to begin deinstallation
	Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.
Help	< Back Next > Einish Cancel

Figure 2–34 Deinstall Welcome page

1. Click Next. The Select Deinstallation Type page appears.



Figure 2–35 Select Deinstallation Type page

- 2. Depending on what you want to deinstall, different pages will appear.
  - If you choose to deinstall Oracle Home, the *Deinstall Oracle Home* page appears:

Figure 2–36 Deinstall Oracle Home page

Oracle Virtual Assembly Builder 11g Deinstallation - Step 3 of 5		
Deinstall Oracle	Home ORACLE 118	
Welcome	Oracle Home Details	
Leinstall Oracle Home	/scratch/oracle/Middleware/Oracle_OVAB2/Oracle_OVAB2/	
Deinstall Oracle Home		
O Deinstallation Progress		
Deinstallation Complete		
	Save Deinstallation Configuration:	
	Make sure that no Oracle Virtual Assembly Builder instance is associated with this Oracle Home :	
Help	< <u>Back</u> <u>N</u> ext > <u>D</u> einstall Cancel	

Click **Deinstall**. A warning appears informing you of the consequences of your actions, and giving you the opportunity to deinstall without removing the Oracle Home.

Figure 2–37 Deinstallation Warning Pop-up



Choose Yes or No. The Deinstallation Progress page appears (see Figure 2-40).

• If you choose to deinstall the Oracle Virtual Assembly Builder instance, the *Specify Instance Location* page appears:

Figure 2–38 Specify Instance Location page

Oracle Virtual	Oracle Virtual Assembly Builder 11g Deinstallation - Step 3 of 6	
Specify Instance	Location	
🤍 <u>Welcome</u>		
Leinstall OVAB Instance		
Specify Instance Location		
Deinstallation Summary		
Deinstallation Progress		
U Deinstallation Complete	Specify Instance Location	L140/110317/ab_instance1
<u>H</u> elp		< <u>Back</u> <u>N</u> ext > <u>Finish</u> Cancel

Enter (or browse to and choose) the Oracle Virtual Assembly Builder instance location, then click **Next**. The *Deinstallation Summary* page appears.

Deinstallation Su	mmary
Welcome         Deinstall OVAB Instance         Specify Instance Location         Deinstallation Summary         Deinstallation Progress         Deinstallation Complete	-OVAB Instance selected for deinstallation //scratch/oracle1/product/ab111140/110317/ab_instance1
Help	To change this configuration before deinstalling, select the topic you want to change in the pane on the left. To deinstall this configuration, select <u>D</u> einstall.

Figure 2–39 Oracle Virtual Assembly Builder Deinstallation Summary page

Click **Deinstall**. The *Deinstallation Progress* page appears.

The content of the Deinstallation Progress page varies according to your selections.

Figure 2–40 Deinstallation Progress page



**3.** When the deinstallation progress is complete, click **Finish**. The Deinstallation Complete page appears.

Deinstallation Co	omplete CRACLE FUSION MIDDLEWARE 11
Welcome Deinstall OVAB Instance Specify Instance Location Deinstallation Summary Deinstallation Progress	The Oracle Virtual Assembly Builder 11g Instance Home located at /scratch/oracle1/product/ab111140/110317/ab_instance1 is deinstalled.
The Oracle Grid Runs Faster. Costs Less. And Never Breaks	You have successfully completed the deinstallation of Oracle Virtual Assembly Builder 110
ORACLE oracle.com/grid	

Figure 2–41 Deinstallation Complete page

**4.** When deinstallation is complete, the *Deinstallation Complete* page appears. Click **Finish**.

# Configuring Oracle Virtual Assembly Builder Deployer

This chapter describes how to run the Oracle WebLogic Server configuration wizard to create a new domain using the Oracle Virtual Assembly Builder Deployer domain extension template. This will create a new Oracle WebLogic Server domain and deploy the Oracle Virtual Assembly Builder Deployer Web application.

This chapter contains the following sections:

- Section 3.1, "Starting the Oracle Fusion Middleware Configuration Wizard"
- Section 3.2, "Creating a New Domain with Deployer"
- Section 3.3, "Manual Configuration for Oracle Virtual Assembly Builder Deployer"
- Section 3.4, "Configuring Security for the Deployer"

## 3.1 Starting the Oracle Fusion Middleware Configuration Wizard

The Configuration Wizard is located in the common/bin directory in your WebLogic Server Oracle home.

cd ORACLE\_HOME/common/bin ./config.sh

To create a new WebLogic domain, follow the instructions in Section 3.2, "Creating a New Domain with Deployer".

## 3.2 Creating a New Domain with Deployer

After you have started the Configuration Wizard (Section 3.1, "Starting the Oracle Fusion Middleware Configuration Wizard"), create a domain configured with Oracle Virtual Assembly Builder Deployer.

Select to create a new domain. To create a domain configured with Oracle Virtual Assembly Builder Deployer, select the following on the Select Domain Source screen:

Oracle Virtual Assembly Builder Deployer - 11.1.1.0 [ORACLE\_HOME]



For more information about this screen, see "Select Domain Source" in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard.* 

Enter the domain name and domain location, and click Next.

3	Fusion Middleware Configuration Wizard	▶ _×
Specify Domain Name and Lo	cation	ORACLE
	Enter the name and location for the domain:	
Domain name:	base_domain	
Domain location:	/scratch/oracle/Middleware/user_projects/domains	<u>B</u> rowse
E <u>x</u> it <u>H</u> elp		Previous <u>N</u> ext

Enter the Oracle WebLogic administrator user name and password. The password must be at least 8 characters and contain at least one number or special character. Click **Next**.

3	Fusion Middleware Configuration Wizard	_×_
Configure Administrato	r User Name and Password	ORACLE
Oiscard Changes		
*Name:	weblogic	
*User password:		
*Confirm user password:	********	
Description:	This user is the default administrator.	
E <u>x</u> it <u>H</u> elp		Previous <u>N</u> ext

Select to use the Sun JDK. Click Next.

ware Configuration Wizard
ORACLE
at the production environment is secure. For more information, see the topic er documentation. JDK Selection
Available JDKs     JRockit SDK 1.6.0_29 @ /scratch/oracle/Middleware/ji     Sun SDK 1.6.0_29 @ /scratch/oracle/Middleware/jdk1
✓ Other JDK Location:



Select to create an Administration Server (required for Oracle Virtual Assembly Builder Deployer). Select any other optional configuration items you require.

Follow the remaining instructions. The domain is created, and the domain location and Administration Server URL are displayed.



The following servers are created:

Administration Server

## 3.3 Manual Configuration for Oracle Virtual Assembly Builder Deployer

"Once the Oracle WebLogic Server domain has been created, set the URL for the Oracle Virtual Assembly Builder Deployer:

- 1. Edit DOMAIN\_HOME/bin/setOVABDomainEnv.sh.
- **2.** Uncomment the "OVAB\_WEBSERVER\_URL" entry and replace the hostname and port with the host and port of your Oracle WebLogic Server.

The ovab.webserver.url property refers to the base URL used by Oracle VM to download assembly archives (OVA files) on to Oracle VM Server hosts. The URL must be accessible from the Oracle VM Server hosts. The port 7001 is the default non-secure application port in WLS. You can use https://<ip/host>:7002 for secure download, where 7002 is the default secure application port in Oracle WebLogic Server.

## 3.4 Configuring Security for the Deployer

Oracle Virtual Assembly Builder defines security roles and groups. The product installer sets up the necessary roles and groups for the embedded LDAP case. After the domain creation is complete you must create users and add them to the 'Cloud Admin' and 'Application Admin' groups through the Oracle WebLogic Server console. These are the users that should be specified when creating connections to the Deployer. All users added to the Cloud Admins group must also be added to the Application Admins group.

See *Oracle Virtual Assembly Builder User's Guide* for information on understanding and enabling the security model employed by Oracle Virtual Assembly Builder Deployer.

To configure an external LDAP server, create roles and groups, and add users to the Cloud Admins and Application Admins groups:

- 1. Use the procedures in *Oracle*® *Fusion Middleware Securing Oracle WebLogic Server* to configure Oracle WebLogic Server for external LDAP.
- **2.** Create groups for "Cloud Admins" and "Application Admins" in the LDAP server. See *Oracle Virtual Assembly Builder User's Guide*.
- 3. Add the users defined in the LDAP server to these groups.
- 4. Place the groups into the security roles using the role expression Grp(GroupName|GroupName).
- **5.** Perform the procedures in *Oracle Virtual Assembly Builder User's Guide* to define the connection to the Oracle VM or Oracle Exalogic backend endpoints, to provide credentials if required, and to add deployment targets in the backend.