Oracle® Virtual Assembly Builder

Installation Guide

11*g* Release 1.1 (11.1.1)

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ORACLE®

Oracle Virtual Assembly Builder Installation Guide 11*g* Release 1.1 (11.1.1)

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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

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at `http://www.oracle.com/accessibility/`.

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technical issues and provide customer support according to the Oracle service request process. Information about TRS is available at http://www.fcc.gov/cgb/consumerfacts/trs.html, and a list of phone numbers is available at http://www.fcc.gov/cgb/dro/trsphonebk.html.

Related Documents

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

- *Oracle Virtual Assembly Builder User'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.

1 Prepare for Installation

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

- Section 1.1, "Security Precautions"
- Section 1.2, "Before you Begin"
- Section 1.3, "Installation Overview"
- Section 1.4, "Certification and System Requirements"

1.1 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.

1.2 Before you Begin

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.

1.2.1 Virtual to Virtual Introspection and Deployment Requirements

The following are requirements for virtual to virtual introspection and deployment.

Note: Virtual introspection can only be performed on non-Oracle JRockit Virtual Edition deployments.

1.2.1.1 Introspection

Introspection on a deployed virtual machine (VM) can fail to complete when the temporary directory used for introspection is a mounted NFS share with NFS file locking. To avoid this problem, remount the NFS file system with locking turned off:

```
mount -o nolock example:/scratch /net/example/scratch
```

1.2.1.2 Base Image Template Sizing

You must ensure that the reference system on the virtual machine has enough space for an image of itself. If this is an issue, you can resolve it by using one of the following options:

- Copy `System.img` to Oracle Virtual Assembly Builder host and run `modifyjeos` to increase the disk size to handle the snapshot of the product installation. Then redeploy the image and restart it. This will provide enough space in the /tmp directory.
- If the previous option is not feasible, mount an NFS disk of suitable size, and place the catalog on it. For remote packaging, use the NFS disk location, rather than /tmp.

1.2.2 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.

1.2.3 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.

1.3 Installation Overview

In order to deploy your applications into virtualized environments, you must also have appropriate *Reference Systems* set up (for *Introspection*), and an Oracle VM environment ready to deploy your applications.

1.3.1 Installation Road Map

This document details the steps you must complete in order to install and configure Oracle Virtual Assembly Builder. The entire process is comprised of the following steps:

- Install and configure your reference systems. Supported reference systems include:
  - Oracle Coherence*Web (http://download.oracle.com/docs/cd/E15357_01/coh.360/e15829/toc.htm)
  - Oracle RDBMS (single instance) (http://www.oracle.com/technology/products/database/oracle11g/index.html)
  - Oracle Web Cache (http://www.oracle.com/technetwork/middleware/ias/index-089317.html)

  - Oracle HTTP Server (http://www.oracle.com/technetwork/middleware/ias/index-091236.html)
  - Oracle WebLogic Server (http://www.oracle.com/technology/products/weblogic/index.html)
- Install and configure Oracle Virtual Assembly Builder (this Guide).
- Install and configure your deployment environment. See also Oracle VM (http://www.oracle.com/technetwork/server-storage/vm) for more information.

1.4 Certification and System Requirements

Ensure your environment meets all requirements before starting the installation.

1.4.1 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 http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html).

1.4.2 System Requirements

Please ensure you meet the following requirements.

1.4.2.1 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
```

1.4.2.2 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.

1.4.2.3 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.
4. 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 RPM packages using the `rpm` command with the `-i` option.

1.4.2.4 System Base Images

Depending on the type of operating system you choose for your appliance at template creation time, you may need the Oracle Enterprise Linux Base Image or Oracle WebLogic Server on Oracle JRockit Virtual Edition Base Image (or both).

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.html`The 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 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
  - 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
- 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. Note that this is not what base image can preset.
    * 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.
- The base image must have the user *oracle*. One example of meeting this requirement 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.

- Oracle WebLogic Server on Oracle JRockit Virtual Edition Base Image is included in the Oracle WebLogic Server on Oracle JRockit Virtual Edition bundle. Unzip the product's zip file, and find the `system.img` and `vm.cfg` files (in the `wlsve` sub-directory of the structure into which you unzipped the files).

  Note: The base image (`system.img`) must not have an executable bit. Otherwise, export/import may not work properly. You must set the permission of base images properly, for example, to *644*:

  ```
  $ chmod 644 System.img
  $ ls -l System.img
  -rw-r--r-- 1 jdoe g900 748500480 Apr 22 12:52 System.img
  ```

2

Install

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

- Section 2.1, "Install Oracle Virtual Assembly Builder"
- Section 2.2, "Deinstall"

2.1 Install 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"

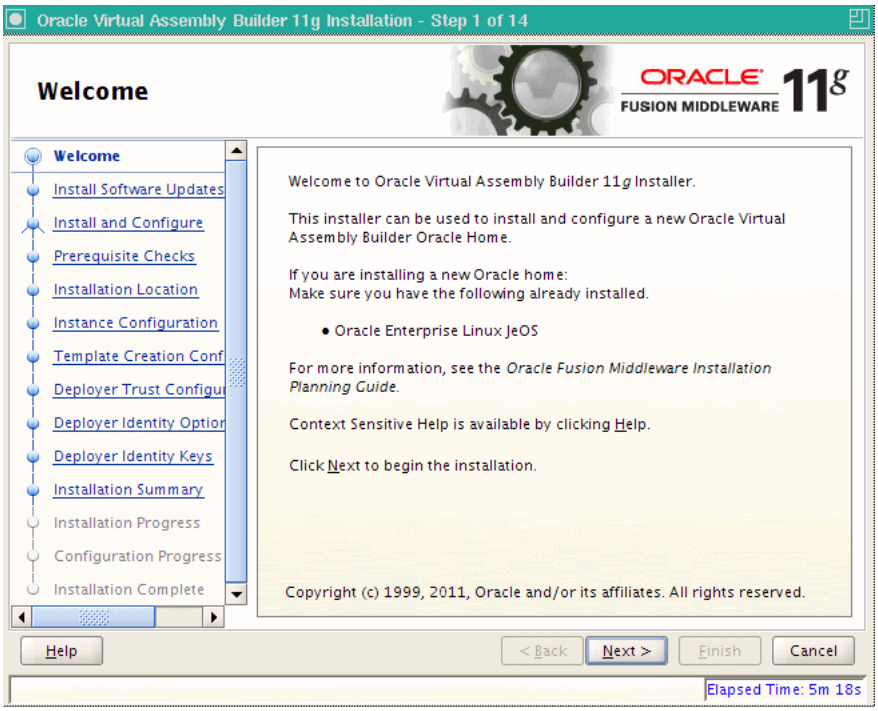
To start installation, launch Oracle Universal Installer (`.Disk1/runInstaller`).

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

Figure 2–1 Installation Welcome page



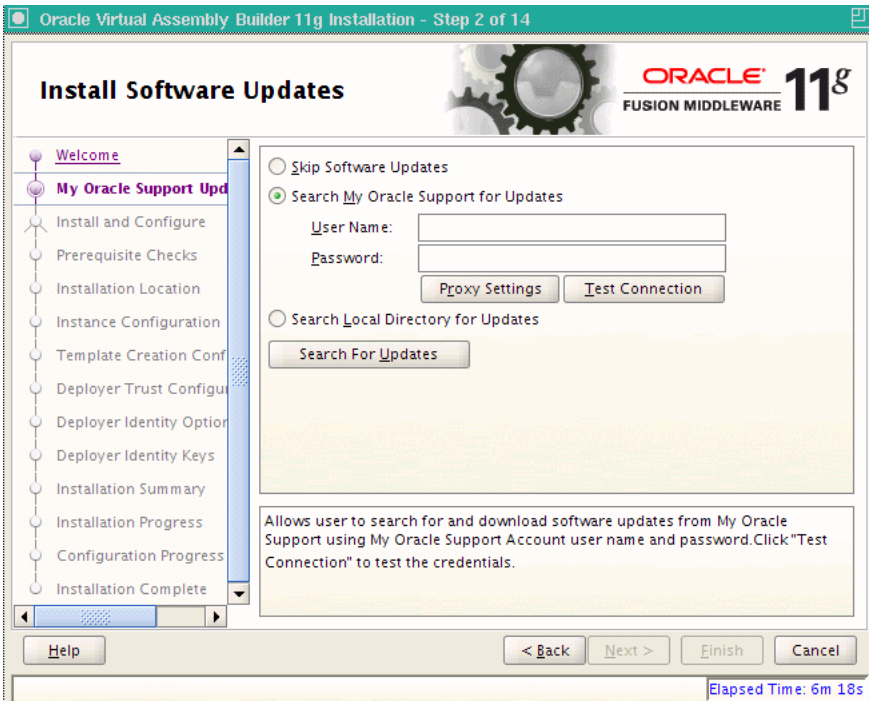
When you are ready to begin installation, click **Next**. The *Install Software Updates* page appears.

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.

---

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.

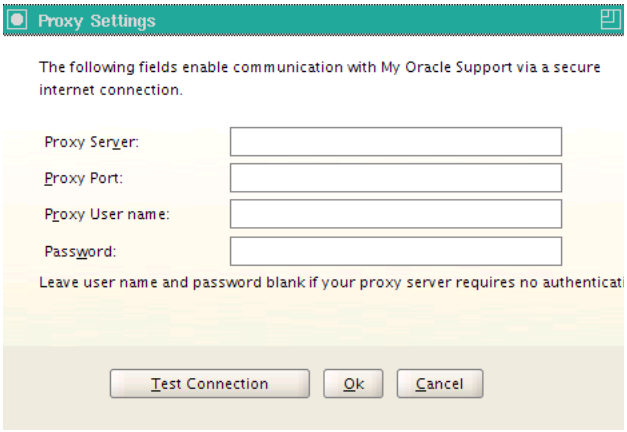
Figure 2–2 Install Software Updates page



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 2–3 Proxy Settings page

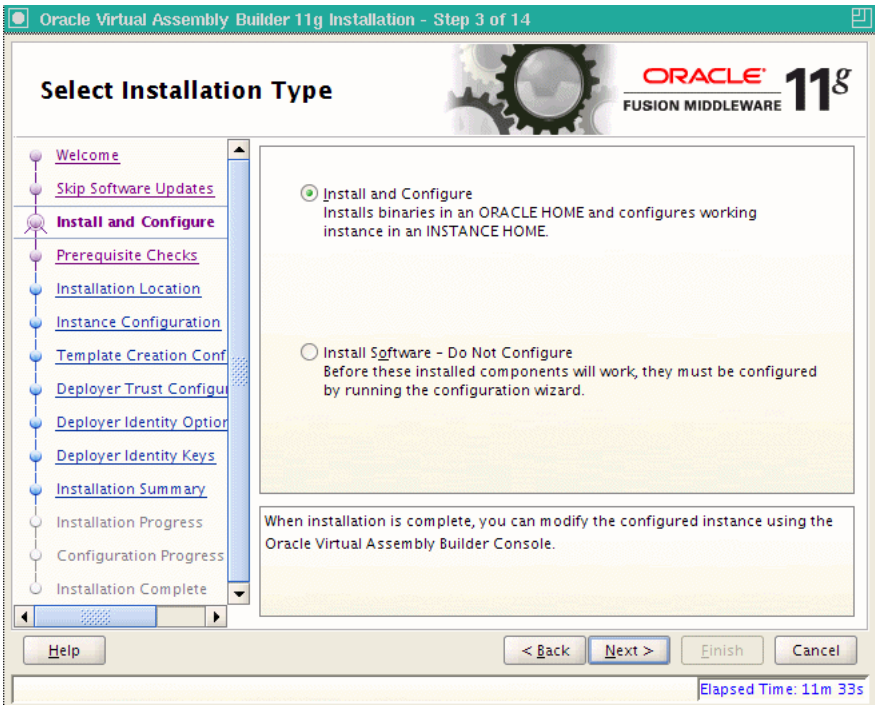


Enter proxy information and test the connection and/or click **OK**.

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

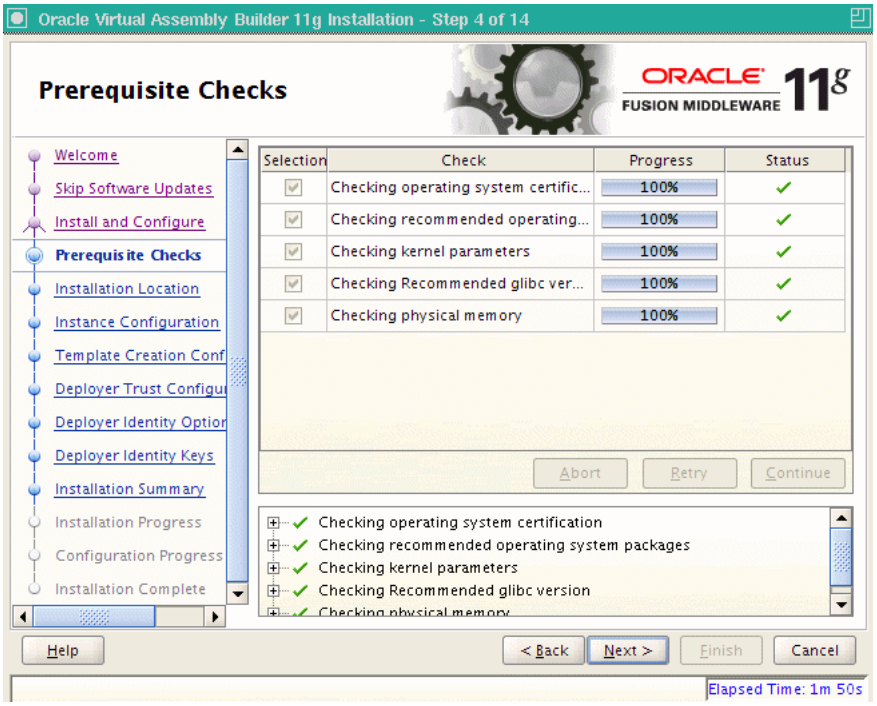
Click **Next**. Updates are installed, and the *Select Installation Type* page appears.

Figure 2–4 Select Installation Type page



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 and configure, choose the **Install and Configure** radio button, then click **Next**. The *Prerequisite Checks* page appears showing the progress of the checks, and listing any deficiencies.

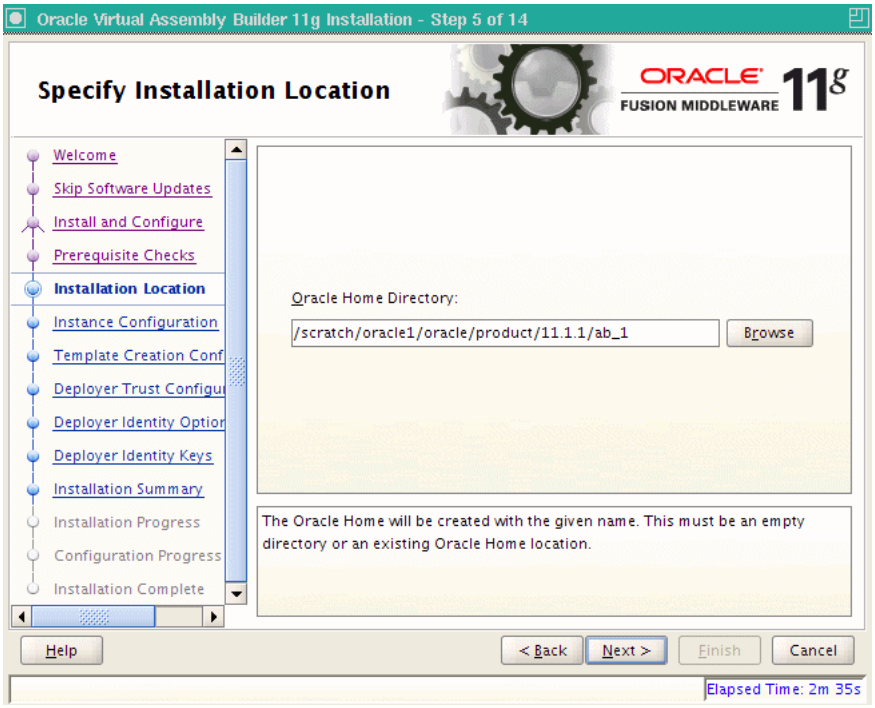
Figure 2–5 Prerequisite Checks page



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.

Figure 2–6 Specify Installation Location page



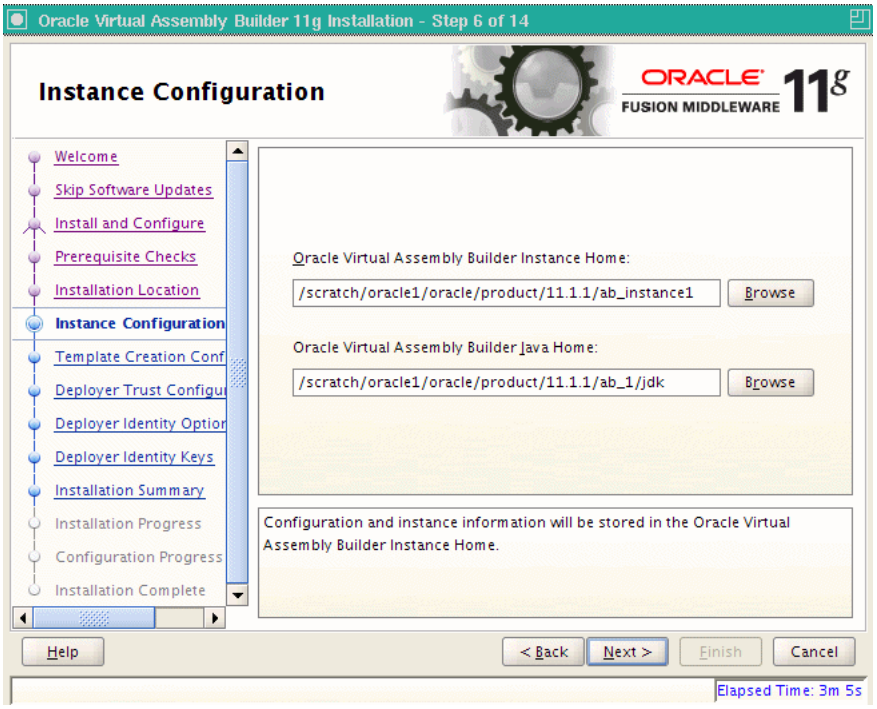
5. **Specify Installation Location.** You can select an existing Oracle Home location, or you can specify a new one. If you want to use a new directory, ensure that the directory is empty.

   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 *Instance Configuration* page appears.

Figure 2–7 Instance Configuration page



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

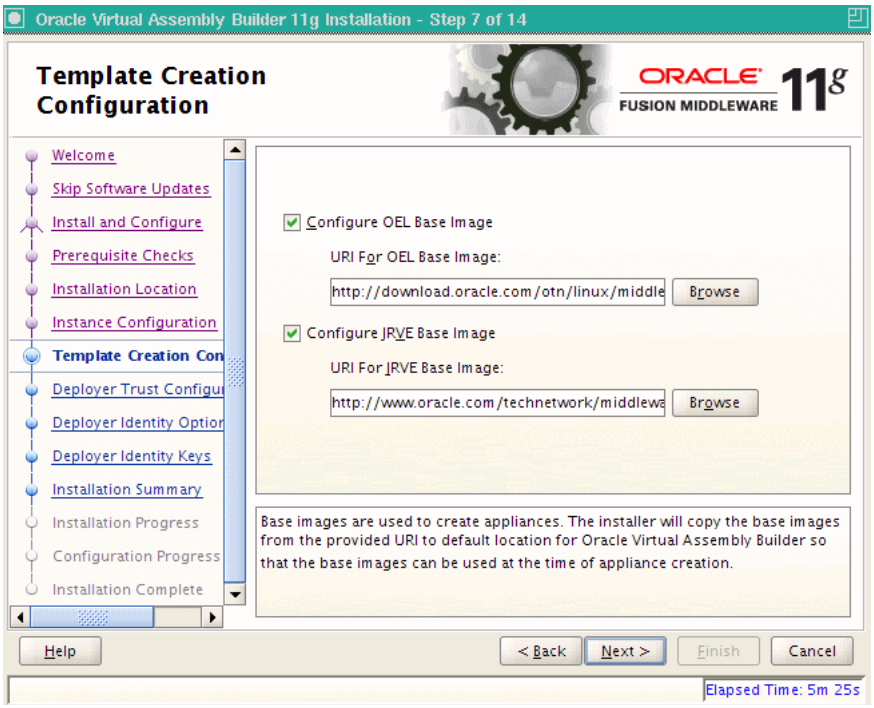
   Oracle Virtual Assembly Builder Instance Home: The home of an Oracle Virtual Assembly Builder instance.

   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.

Figure 2–8 Template Creation Configuration page



7. **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 *OEL and JRVE Base Images*.

Note: When you choose to configure OEL and JRVE base images, Oracle Installer copies a user-provided OEL base image in $AB_INSTANCE/templates/baseImage/OVM/OEL and JRVE base image in the $AB_INSTANCE/templates/baseImage/OVM/JRVE directory. These base images will be available as the default base images for this OVAB instance.

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

- Create following directories inside $ORACLE_HOME directory:

  $ORACLE_HOME/templates/baseImage/OVM/OEL

  $ORACLE_HOME/templates/baseImage/OVM/JRVE
- Copy OEL base image files (System.img and vm.cfg) into $ORACLE_HOME/templates/baseImag/OVM/OEL directory
- Copy JRVE base image files (system.img and vm.cfg) into $ORACLE_HOME/templates/baseImage/OVM/JRVE directory

---

Note: Base images are stored in either $AB_INSTANCE, or in $ORACLE_HOME. Here is the order of precedence for base image detection:

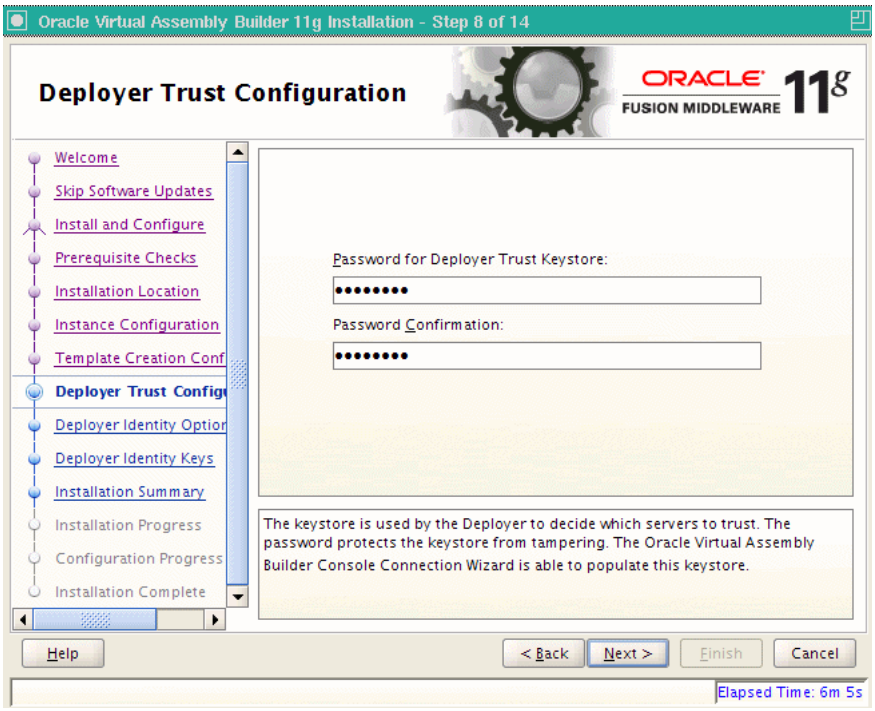
- location specified by `-baseImage` flag
- $AB_INSTANCE/templates/baseImage/OVM/[JRVE|OEL]
- $ORACLE_HOME/templates/baseImage/OVM/[JRVE|OEL]

Configure OEL Base Image: If selected, provide the URI for OEL Base Image.

Configure JRVE Base Image: If selected, provide the URI for JRVE Base Image.

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

Figure 2–9 Deployer Trust Configuration page



8. **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 *OVAB Supplied Demo Deployer Identity Options* page appears.

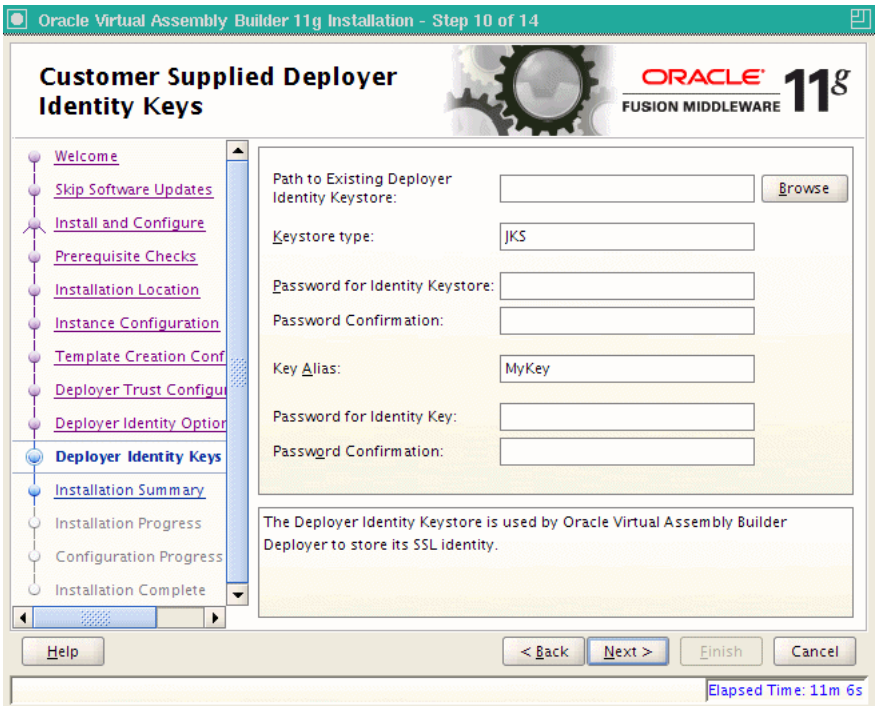
Figure 2–10 Deployer Identity Options page

9. **Deployer Identity Options.** On this page the deployer identity options are required. In order to have a valid SSL connection with Oracle Virtual Machine, the Oracle Virtual Assembly Builder Deployer must provide its identity as part of the connect. You can use your own keystore containing an identity certificate or choose the less secure option of using the Oracle Virtual Assembly Builder-generated self-signed Deployer Identity certificate. The following options are available:

   - *Customer Supplied Deployer Identity Keys*: Selecting this option uses the custom identity keystore supplied by you. When you choose *Customer Supplied Deployer Identity Keys*, the *Customer Supplied Deployer Identity Keys* page appears.

     Note: *Customer Supplied Deployer Identity Keys* is the default keystore option. It is much more secure than using the demo self-signed certificates.

Figure 2–11 Customer Supplied Deployer Identity Keys page

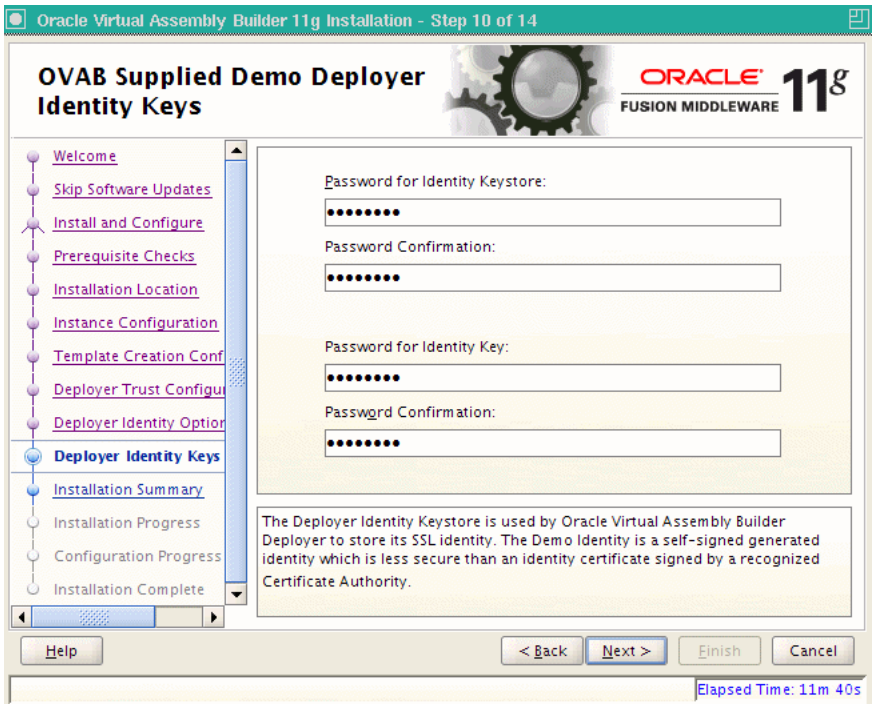


Enter or select:

- Path to Existing Deployer Identity Keystore: The location of .jks file.
- Keystore Type: Defaulted to JKS (User-modifiable)
- Password for Identity Keystore (enter and confirm)
- Key Alias: Defaulted to MyKey (User-modifiable)
- Identity Key (enter and confirm)

- *Oracle Virtual Assembly Builder Supplied Demo Deployer Identity Keys*: Selecting this option uses the self-signed generated identity keystore supplied by the install program; it is less secure than an identity certificate signed by a recognized Certificate Authority. When you select *Oracle Virtual Assembly Builder Supplied Demo Deployer Identity Keys*, the *Oracle Virtual Assembly Builder Supplied Demo Deployer Identity Keys* page appears.

Figure 2–12 OVAB Supplied Demo Deployer Identity Keys

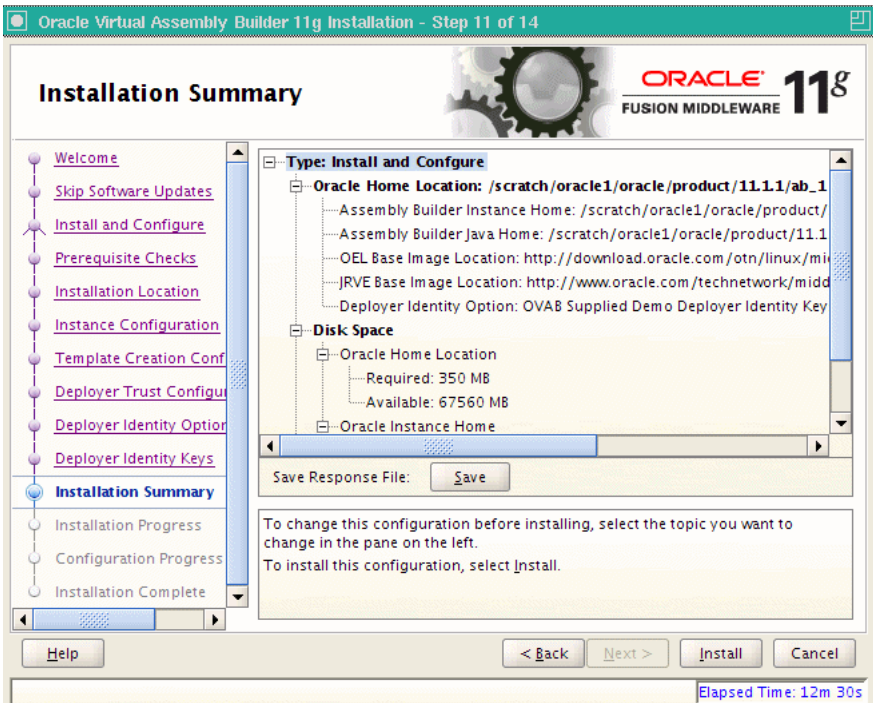


Enter or select:

- Password for Identity Keystore (enter and confirm)
- Identity Key (enter and confirm)

Click **Next**. The *Installation Summary* page appears.

Figure 2–13 Installation Summary page



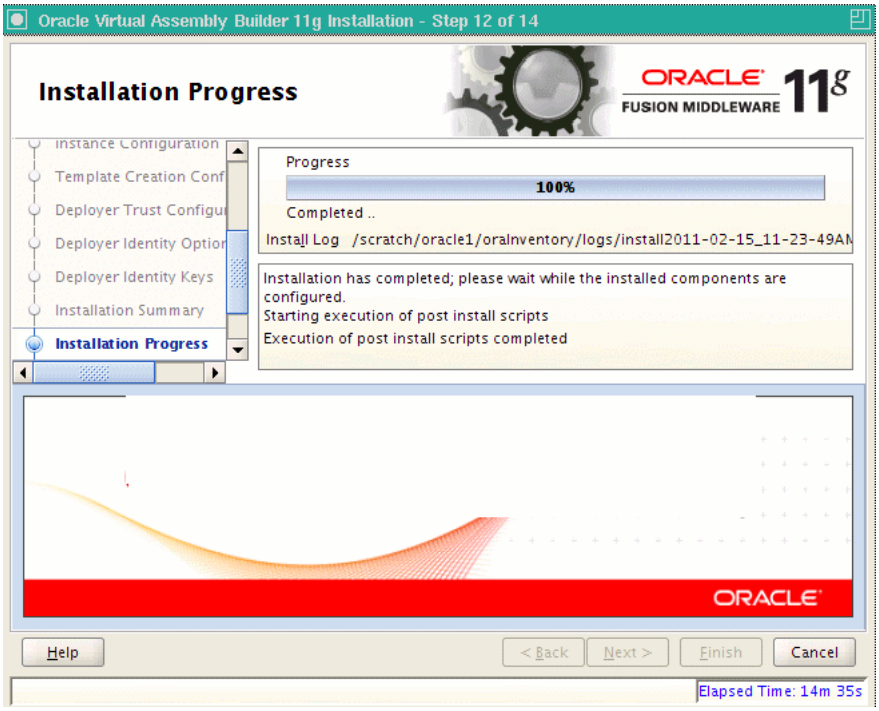
10. **Summary.** The Installation Summary page lists the components and locations for install.You can save the response file by clicking **Save**.

    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.

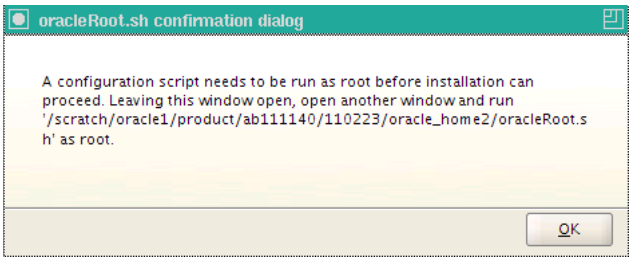
11. Depending on your selections, an *Installation Progress* page appears with relevant information.

Figure 2–14 Installation Progress page



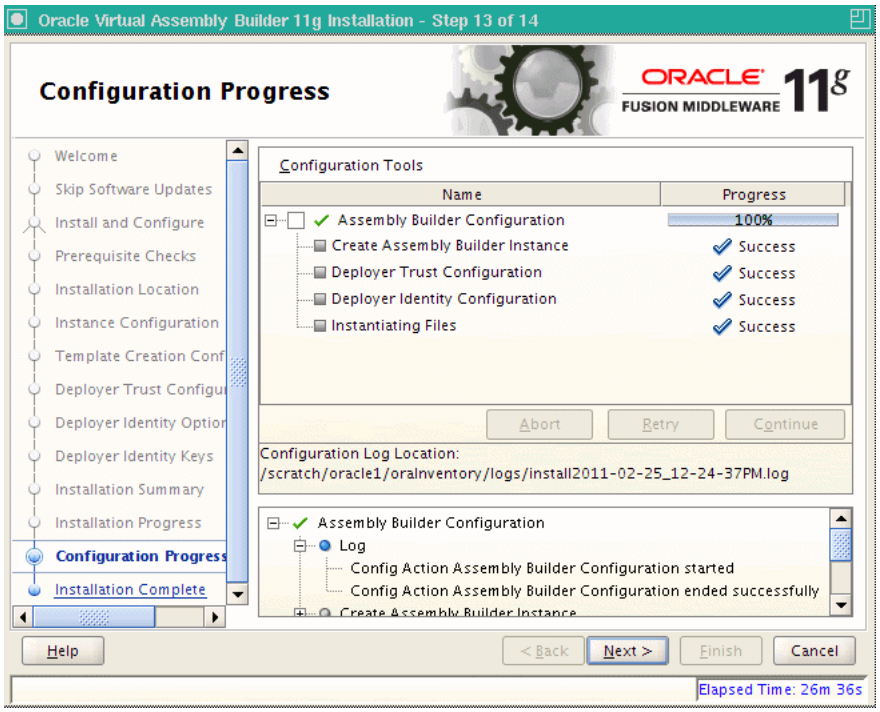
12. As installation progresses, a pop-up message will appear, instructing you to run a configuration script. Follow the instructions in the message.

Figure 2–15 Configuration script pop-up message



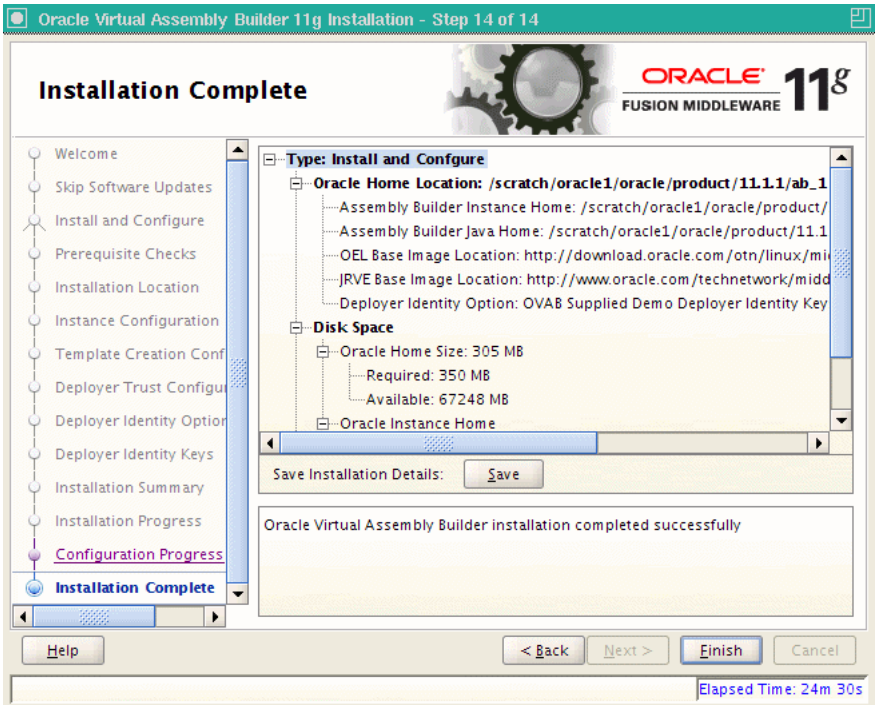
13. After you run the script, a Configuration Progress page appears.

Figure 2–16 Configuration Progress page



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

Figure 2–17 Installation Complete page



2.1.2 Install Only

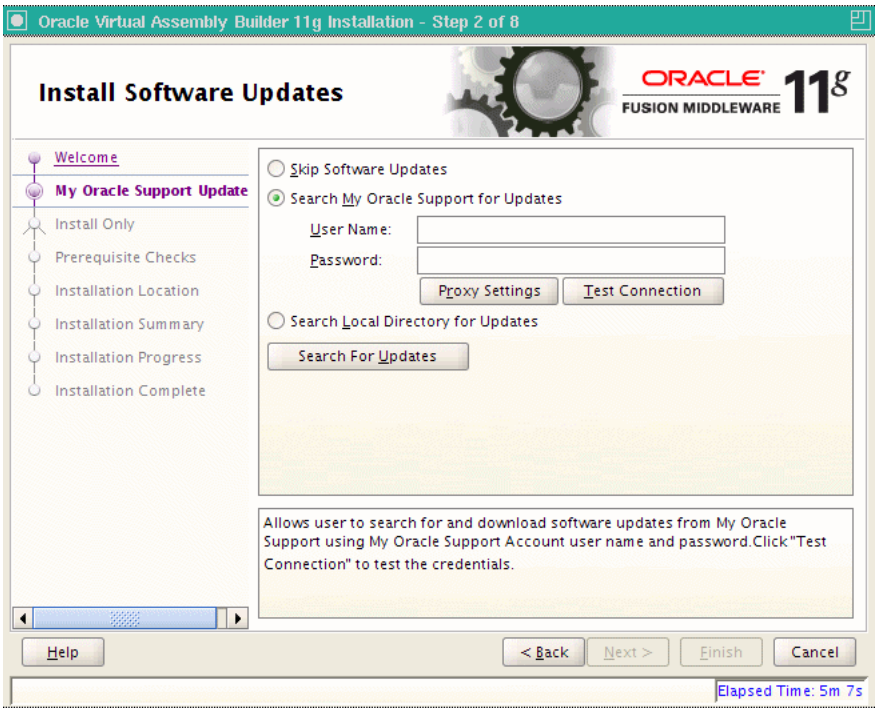
This option is used to install the Oracle Virtual Assembly Builder binaries into an Oracle Home. To install Oracle Virtual Assembly Builder and configure it later, start the installer, then follow these steps:

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

Figure 2–18 Welcome page

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

Figure 2–19 Software Updates page



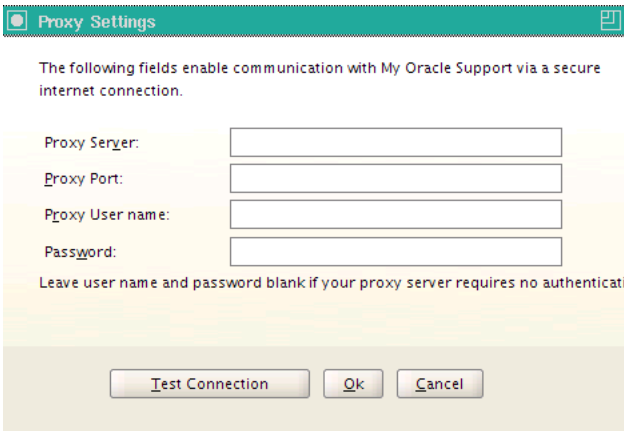
Note: Help is available on all of the pages. Use it to learn about what you can do in that page, field descriptions, possible values, and other information.

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.

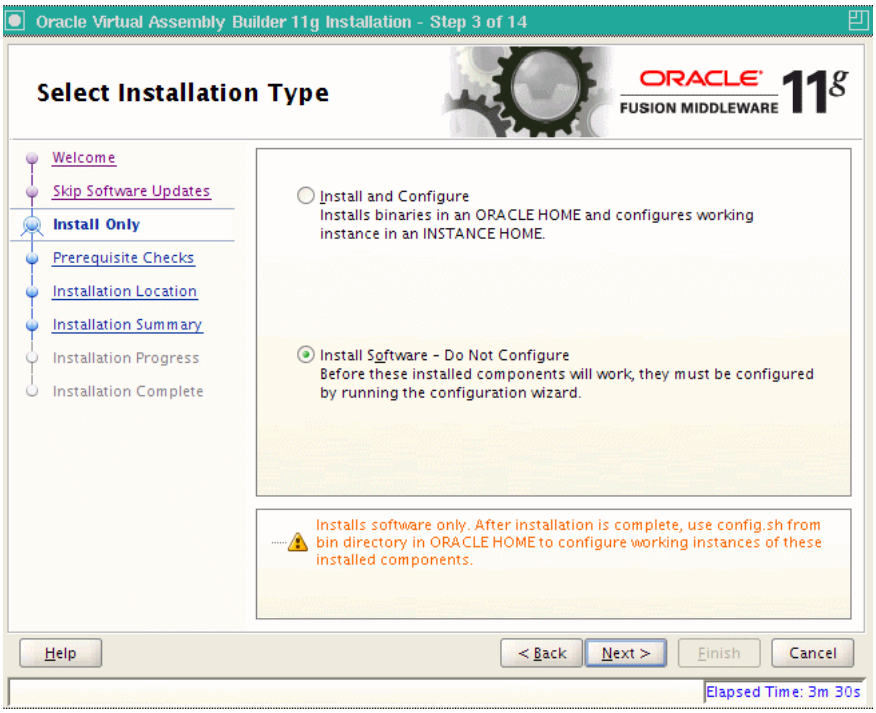
Figure 2–20 Proxy Settings page



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

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

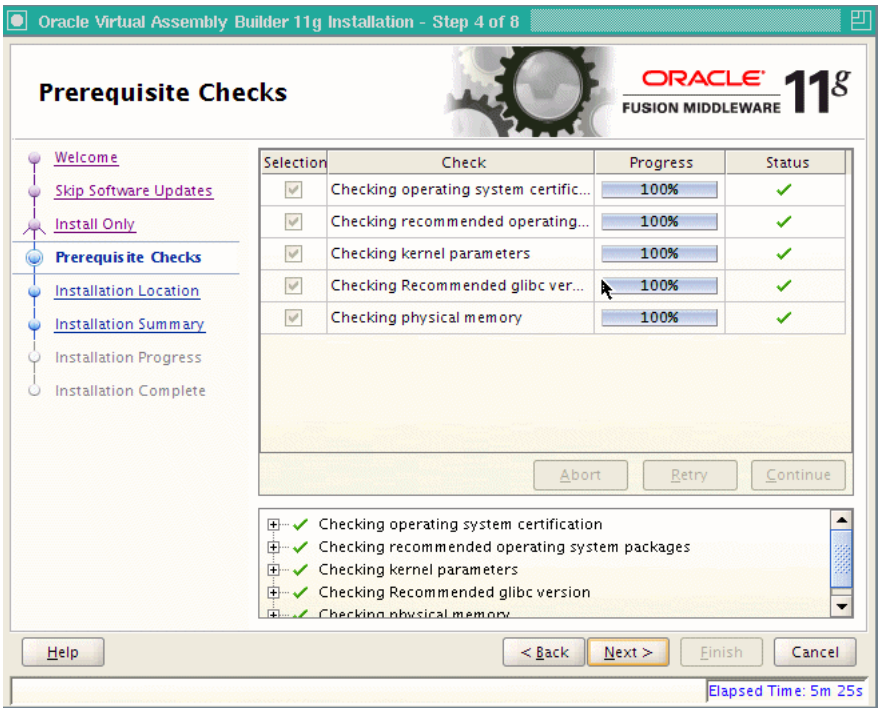
Figure 2–21 Select Installation Type page



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, choose the **Install Software - Do Not Configure** 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.

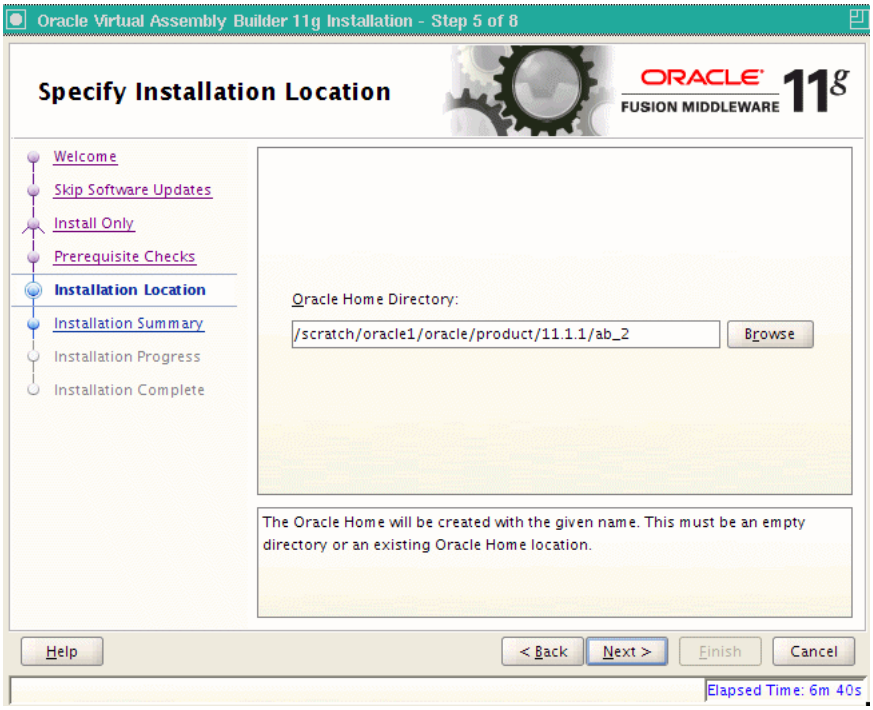
Figure 2–22 Prerequisite Checks page



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 2–23 Specify Installation Location page



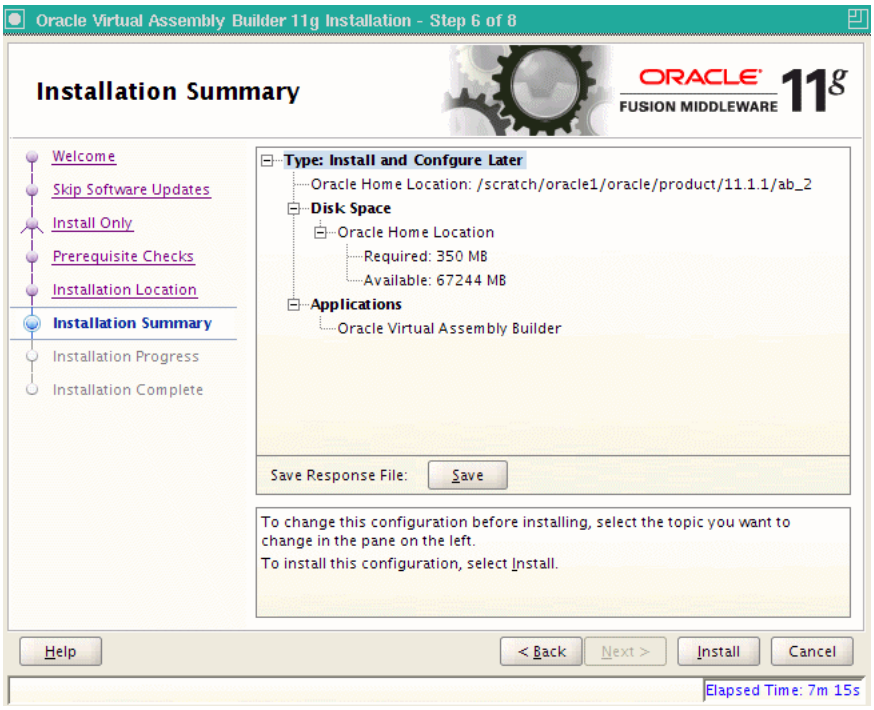
5. **Specify Installation Location.** You can select an existing Oracle Home location, or you can specify a new one. If you want to use a new directory, ensure that the directory is empty.

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 2–24 Installation Summary page

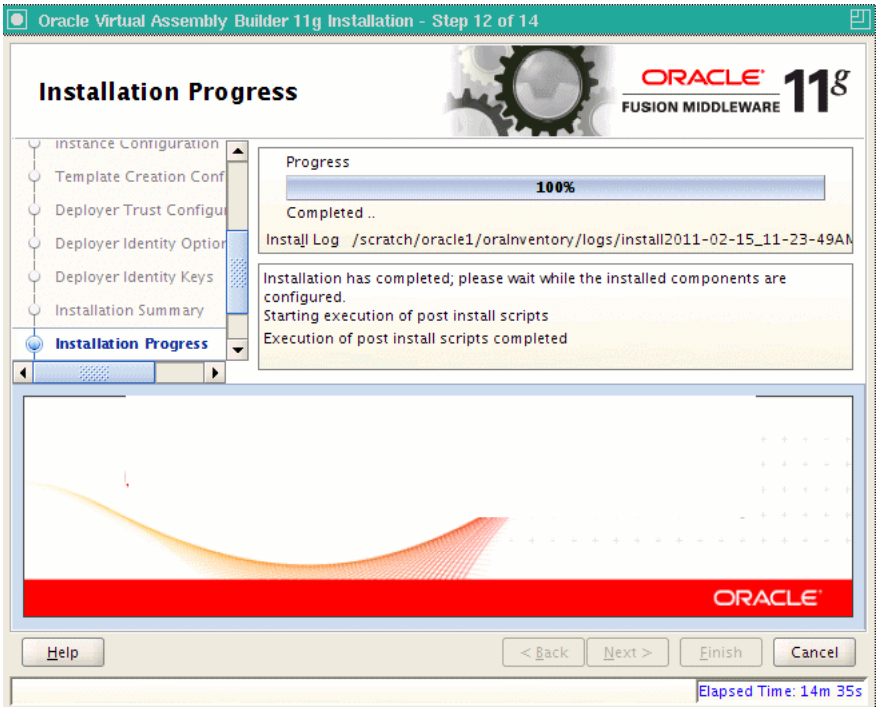


6. **Summary.** The *Installation Summary* page lists the components and locations for install.You can save the response file by clicking **Save**.

   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 *Installation Summary* page.

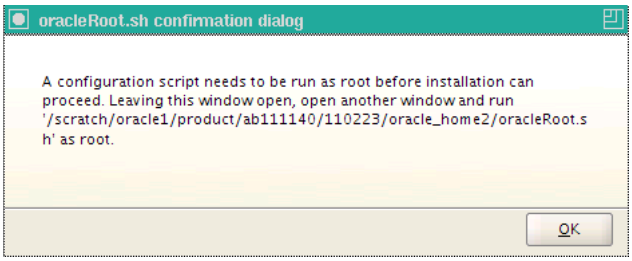
   Click **Install** to start the installation process. An *Installation Progress* page appears with relevant information.

Figure 2–25 Installation Progress page



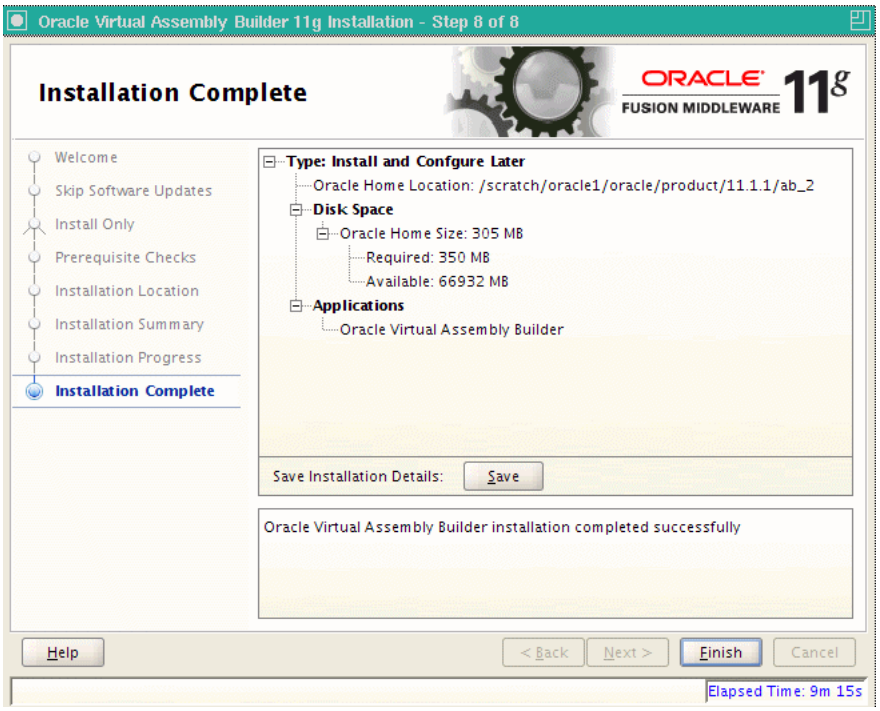
7. As installation progresses, a pop-up message will appear, instructing you to run a configuration script. Follow the instructions in the message.

Figure 2–26 Configuration script pop-up message



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

Figure 2–27 Installation Complete page



2.1.3 Configure Only

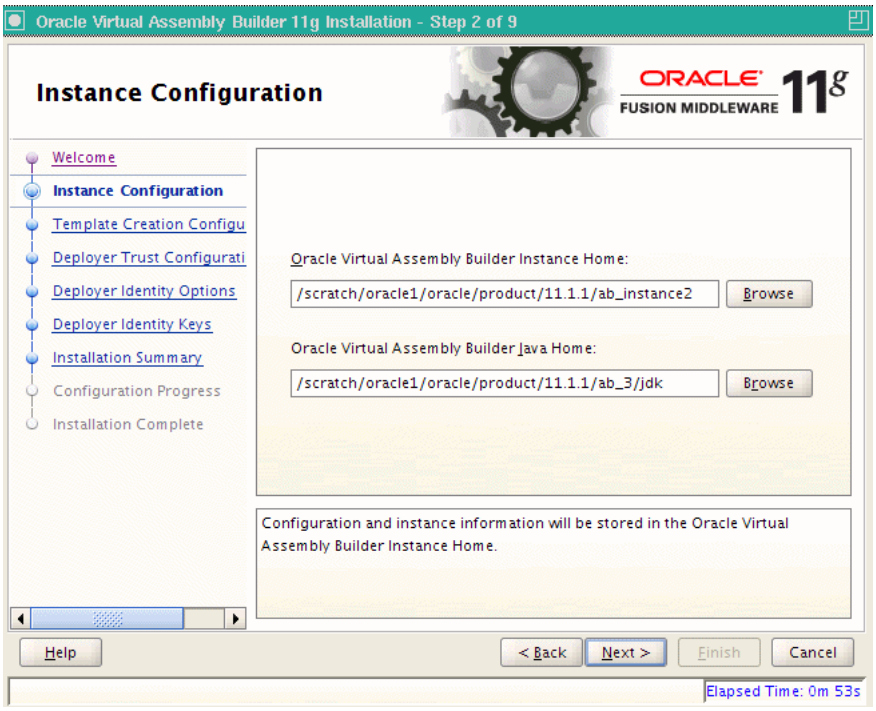
This Installation option (in which only instance configuration occurs) is available when a user launches the Configuration Wizard after completing a software installation. To begin Configure Only, execute `config.sh` from the `$ORACLE_HOME/bin` folder. Follow these steps:

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

Figure 2–28 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.



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

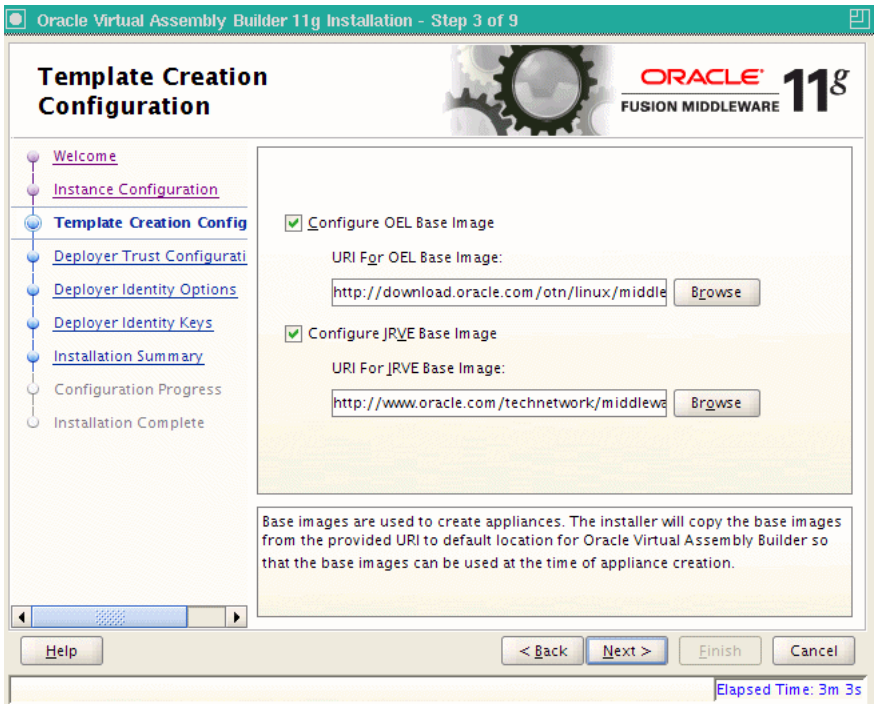
   Oracle Virtual Assembly Builder Instance Home: The home of an Oracle Virtual Assembly Builder instance.

   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 (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.

Figure 2–29 Template Creation Configuration page



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 *OEL and JRVE Base Images*.

Note: When you choose to configure OEL and JRVE base images, Oracle Installer copies a user-provided OEL base image in $AB_INSTANCE/templates/baseImage/OVM/OEL and JRVE base image in the $AB_INSTANCE/templates/baseImage/OVM/JRVE directory. These base images will be available as the default base images for this OVAB instance.

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

- Create following directories inside $ORACLE_HOME directory:

  $ORACLE_HOME/templates/baseImage/OVM/OEL

  $ORACLE_HOME/templates/baseImage/OVM/JRVE
- Copy OEL base image files (System.img and vm.cfg) into $ORACLE_HOME/templates/baseImag/OVM/OEL directory
- Copy JRVE base image files (system.img and vm.cfg) into $ORACLE_HOME/templates/baseImage/OVM/JRVE 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/[JRVE|OEL]
- $ORACLE_HOME/templates/baseImage/OVM/[JRVE|OEL]

Configure OEL Base Image: If selected, provide the URI for OEL Base Image.

Configure JRVE Base Image: If selected, provide the URI for JRVE Base Image.

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

Figure 2–30 Deployer Trust Configuration page

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

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

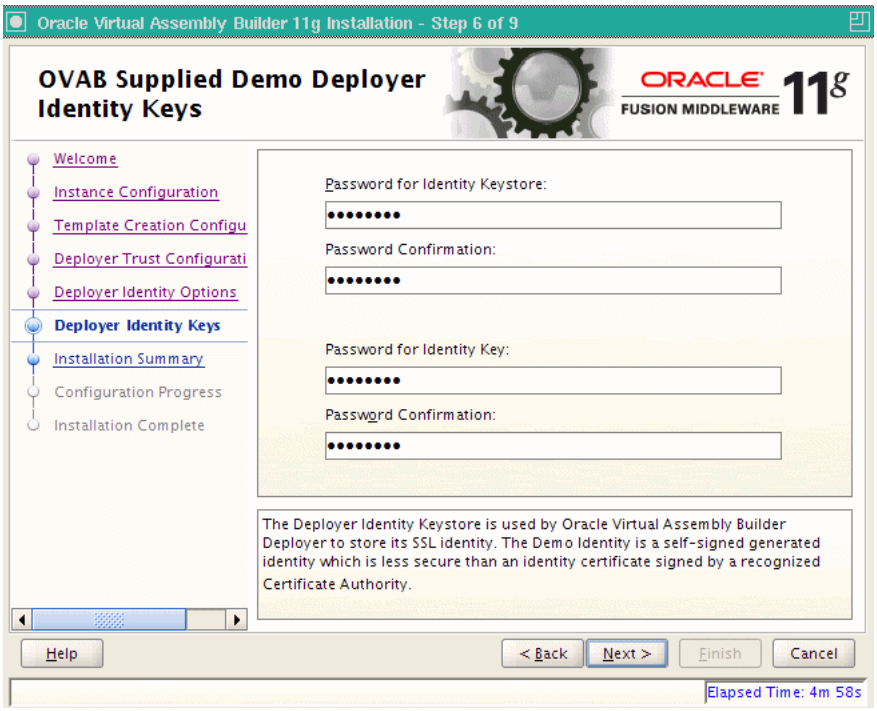
   On this page the deployer identity options are required. When the code running in Oracle Virtual Machine connects to the Oracle Virtual Assembly Builder Deployer using https to retrieve templates and pass phone home information, the Deployer's https server must pass its identity to the client. You can use the Oracle Virtual Assembly Builder-generated Deployer Identity (signed by the root certificate) or supply your own keystore. The following options are available:

   - *Customer Supplied Deployer Identity Keys*: Selecting this option uses the custom identity keystore supplied by the customer. The keystore details are asked in a subsequent screen. This option will be the default option in the screen.

- *Oracle Virtual Assembly Builder Supplied Demo Deployer Identity Keys*: Selecting this option uses the self-signed generated identity keystore supplied by the install program; it is less secure than an identity certificate signed by a recognized Certificate Authority.

Click **Next**. The *OVAB Supplied Demo Deployer Identity Keys* page appears.

Figure 2–31 OVAB Supplied Demo Deployer Identity Keys page



5. **Demo Deployer Identity Keys.** This screen will appear only if you selected *Customer Supplied Deployer Identity Keys* in the previous screen. The Keystores are used by the Deployer to store SSL credentials. Select *Customer Supplied Deployer Identity Keys* (default), or *Oracle Virtual Assembly Builder Supplied Demo Deployer Identity Keys*.

   After choosing your option, click **Next**. Depending on which option you chose, different pages will appear (for Customer-Supplied or OVAB-Supplied).

   If you choose *Customer Supplied Deployer Identity Keys* enter or select:

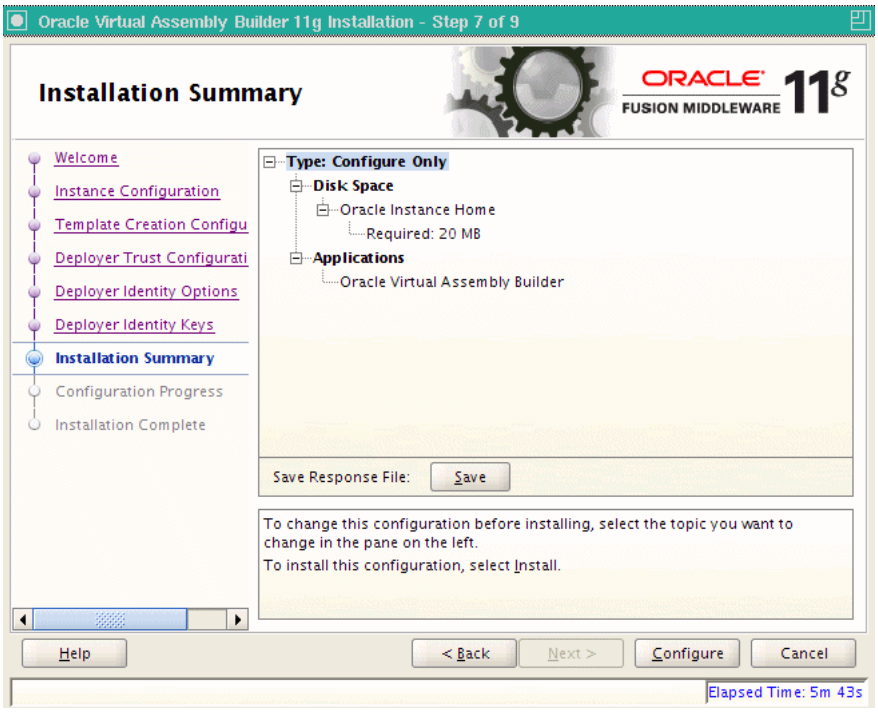
   - Path to Existing Deployer Identity Keystore: The location of .jks file.
   - Keystore Type: Defaulted to JKS (User-modifiable)
   - Password for Identity Keystore (enter and confirm)
   - Key Alias: Defaulted to MyKey (User-modifiable)
   - Identity Key (enter and confirm)

   If you choose *Oracle Virtual Assembly Builder Supplied Demo Deployer Identity Keys* enter or select:

   - Password for Identity Keystore (enter and confirm)
   - Identity Key (enter and confirm)

Click **Next**. The *Installation Summary* page appears.

Figure 2–32 Installation Summary page



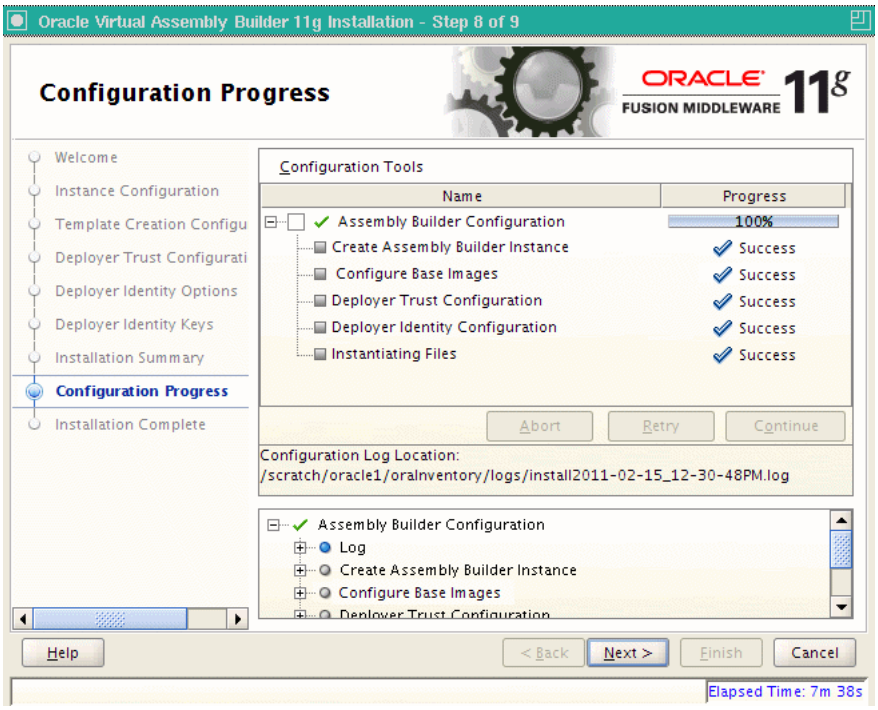
6. **Summary.** The *Installation Summary* page lists the components and locations for install.You can save the response file by clicking **Save**.

   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.

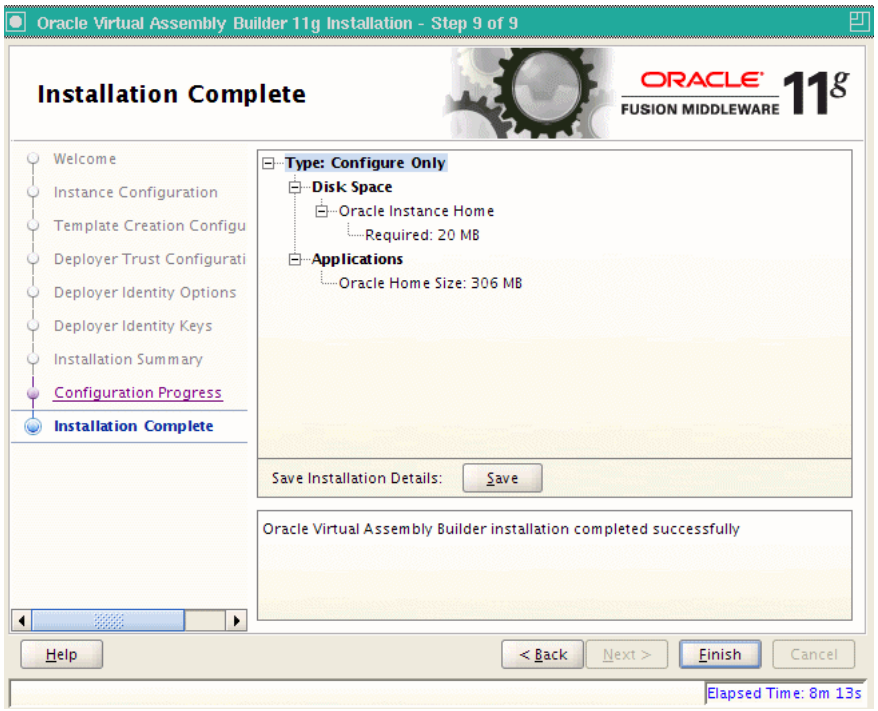
7. A Configuration Progress page appears.

Figure 2–33 Configuration Progress page



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

Figure 2–34 Installation Complete page



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 Deinstall

To deinstall Oracle Virtual Assembly Builder, execute this command:

```
$ORACLE_HOME/oui/bin/runInstaller -deinstall
```

In silent mode:

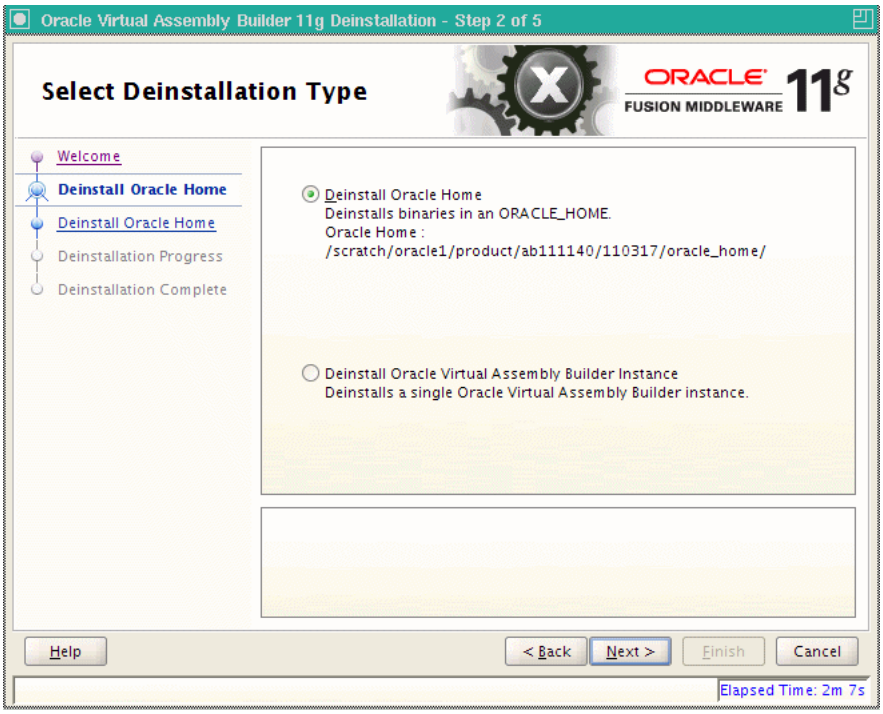
```
$ORACLE_HOME/oui/bin/runInstaller -deinstall -silent -responseFile <absolute path
of response file>
```

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

Figure 2–35 Deinstall Welcome page

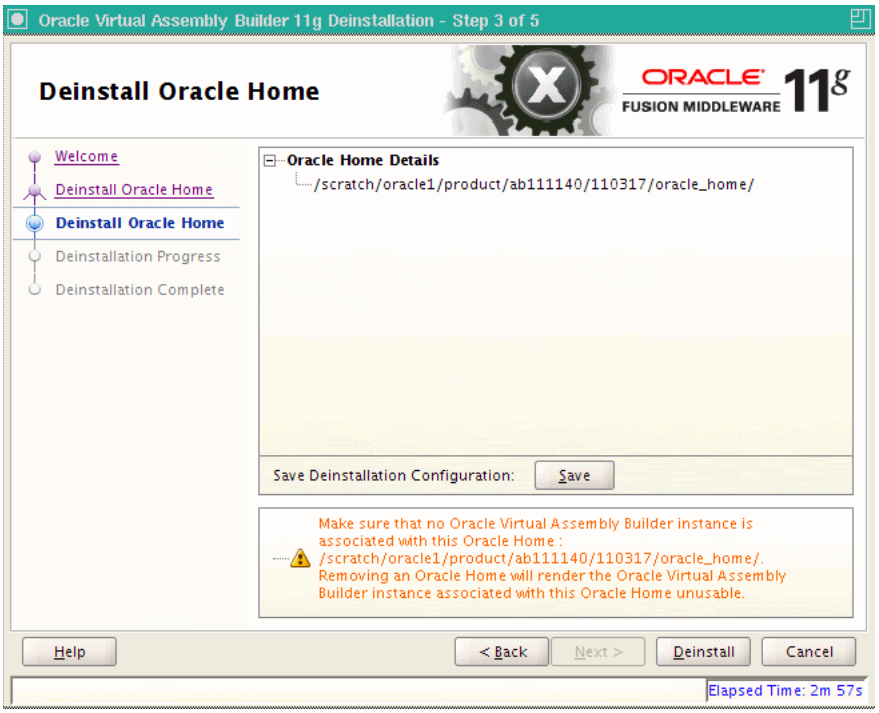
1. Click **Next**. The *Select Deinstallation Type* page appears.

Figure 2–36 Select Deinstallation Type page



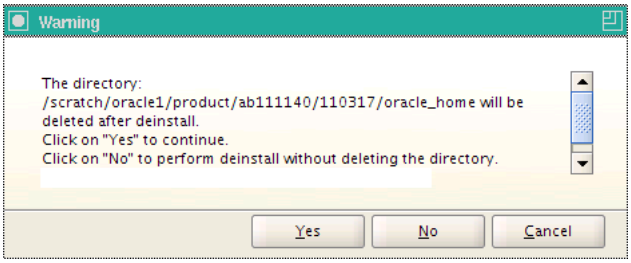
2. Depending on what you want to deinstall, different pages will appear.
   - If you choose to deinstall Oracle Home, the *Deinstall Oracle Home* page appears:

Figure 2–37 Deinstall Oracle Home page



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.

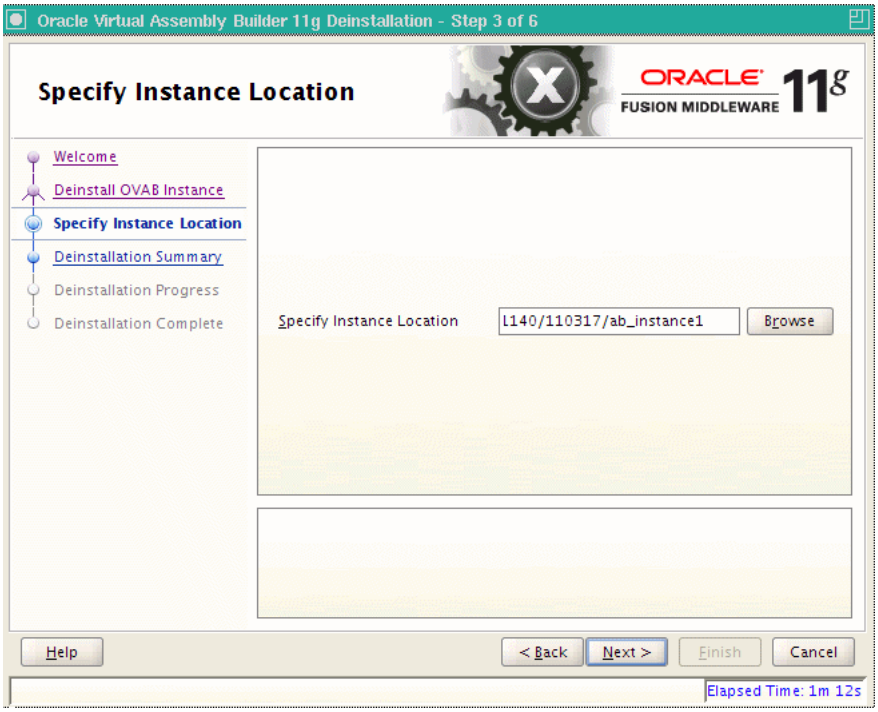
Figure 2–38 Deinstallation Warning Pop-up



Choose **Yes** or **No**. The *Deinstallation Progress* page appears (see Figure 2–41).

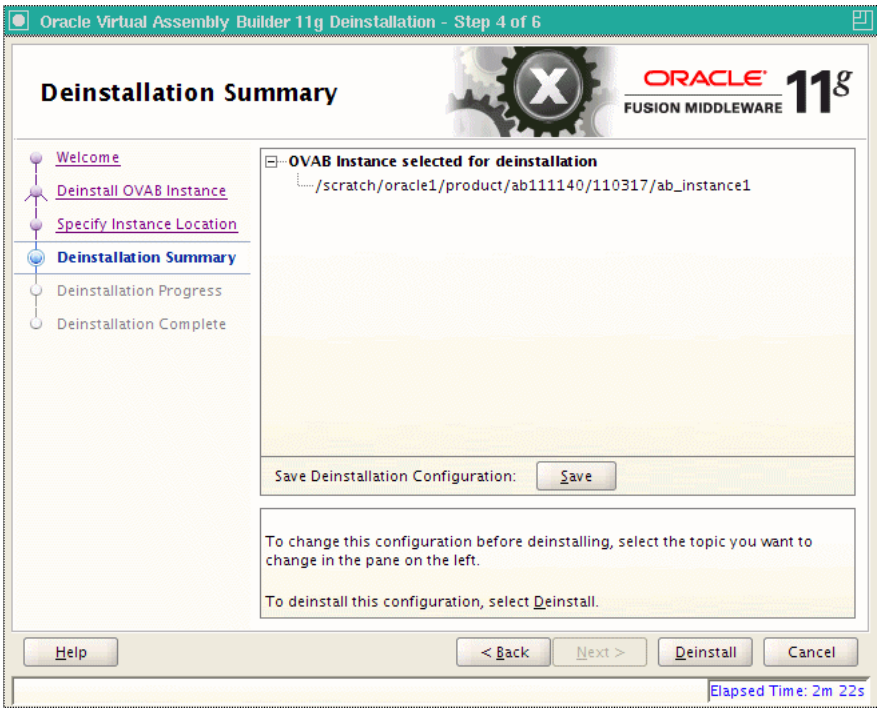
- If you choose to deinstall the Oracle Virtual Assembly Builder instance, the *Specify Instance Location* page appears:

Figure 2–39 Specify Instance Location page



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

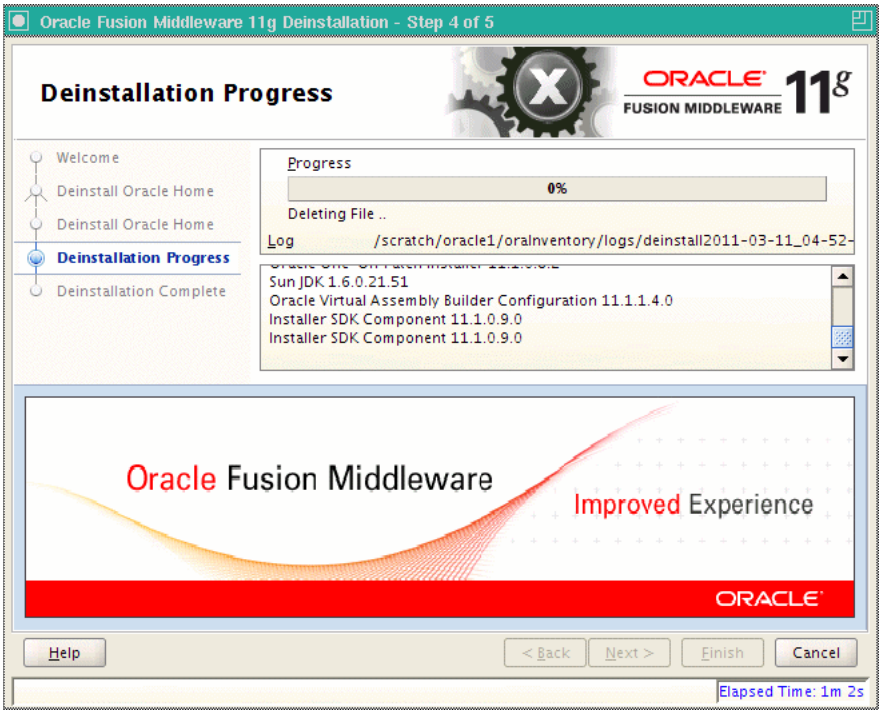
Figure 2–40 Oracle Virtual Assembly Builder Deinstallation Summary page



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

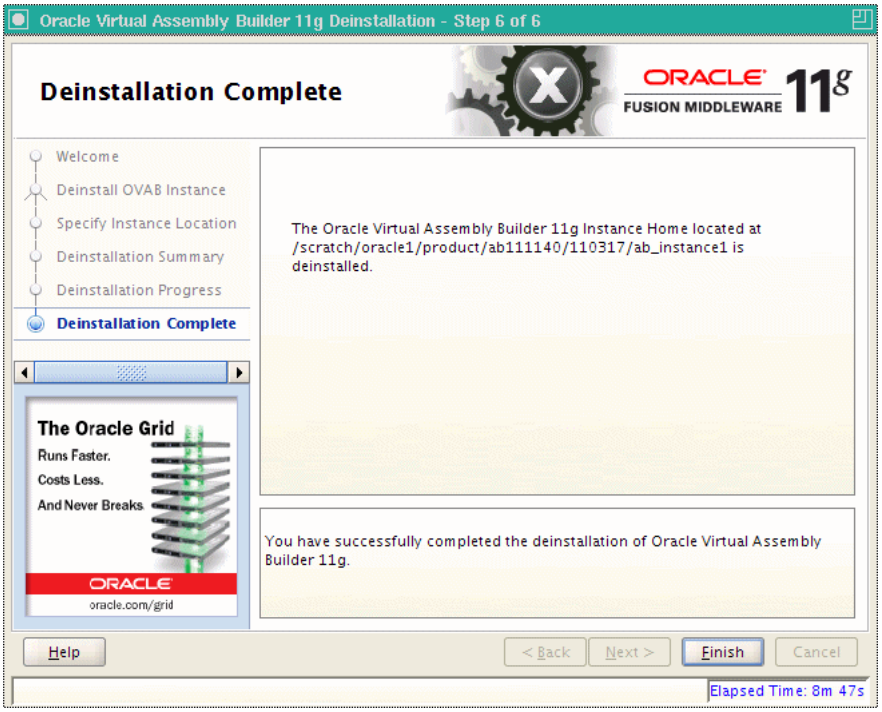
The content of the Deinstallation Progress page varies according to your selections.

Figure 2–41 Deinstallation Progress page



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

Figure 2–42 Deinstallation Complete page



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

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