This document describes how to install and configure Oracle Configurator.
Contents

Send Us Your Comments ..................................................................................................................... xi

Preface ................................................................................................................................................ xiii
  Intended Audience ............................................................................................................................. xiii
  Documentation Accessibility ............................................................................................................. xiv
  Structure .......................................................................................................................................... xiv
  Related Documents ....................................................................................................................... xv
  Conventions ..................................................................................................................................... xv
  Product Support .............................................................................................................................. xvi

1 Installing Oracle Configurator
  1.1 System Requirements ............................................................................................................... 1-2
  1.2 Supported Platforms ............................................................................................................... 1-2
  1.3 Required Patches .................................................................................................................... 1-2
  1.4 Completing the Oracle Configurator Installation .................................................................. 1-3
     1.4.1 Modify Database Configuration File Parameters ............................................................. 1-4
     1.4.2 Set Profile Options ........................................................................................................... 1-5
     1.4.2.1 ASO:Configurator URL ............................................................................................. 1-7
     1.4.2.2 ASO:Enable Configure Model Item .............................................................................. 1-7
     1.4.2.3 BOM:Configurator URL of UI Manager ..................................................................... 1-8
     1.4.2.4 CZ:Automatically Validate on Exit .............................................................................. 1-8
     1.4.2.5 CZ: Configurator Install Base ..................................................................................... 1-8
     1.4.2.6 CZ: Populate Decimal Quantity Flags .......................................................................... 1-9
1.4.2.7  CZ: Publication Lookup Mode .......................................................... 1-10
1.4.2.8  CZ: Publication Usage ................................................................. 1-10
1.4.2.9  CZ: Report All Baseline Conflicts .................................................. 1-10
1.4.2.10 CZ: Suppress Baseline Errors ....................................................... 1-11
1.4.2.11 CZ: Use Simple Configurator ....................................................... 1-12
1.4.2.12 GMA: Default Language ............................................................. 1-12
1.4.2.13 ICX: Language ............................................................................ 1-12
1.4.2.14 OM: Use Configurator ................................................................. 1-12
1.4.3  Set up Oracle Applications Responsibilities and Users ...................... 1-13
1.4.4  Verify and Test Web Server Configuration ........................................ 1-13
1.5  Upgrading to a New Release .............................................................. 1-13
1.6  Installation and Setup Considerations for Multiple Language Support ...... 1-13
  1.6.1  Installation Tasks Specific to MLS .................................................. 1-14
  1.6.2  Workstation Fonts for MLS ............................................................. 1-14
  1.6.3  Configuring Oracle Configurator Developer for MLS ...................... 1-14
  1.6.4  Setting Up the Runtime Oracle Configurator for MLS ...................... 1-15
        1.6.4.1  Configuring JInitiator for MLS ............................................. 1-15
        1.6.4.2  Configuring Browsers for MLS ............................................. 1-15

2  Oracle Configurator Servlet Considerations
2.1  Verifying Apache and JServ Setup ...................................................... 2-2
  2.1.1  Verifying httpd.conf ................................................................. 2-4
  2.1.2  Verifying jserv.conf ................................................................. 2-5
  2.1.3  Verifying jserv.properties .......................................................... 2-6
        2.1.3.1  Installing Functional Companions ....................................... 2-8
  2.1.4  Verifying zone.properties .......................................................... 2-8
  2.1.5  Verifying OC Servlet Properties ................................................. 2-8
2.2  Load Balancing .................................................................................. 2-9
  2.2.1  Load Balancing Procedure .......................................................... 2-10
  2.2.2  Configuration for Multiple Properties Files .................................... 2-13
2.3  Oracle Configurator Servlet Properties ............................................. 2-14
  2.3.1  Setting Parameters for Apache ..................................................... 2-14
        2.3.1.1  Syntax and Context for Setting Parameters ............................ 2-14
        2.3.1.2  Usage for Setting Parameters ............................................. 2-15
  2.3.2  Descriptions of Oracle Configurator Servlet Properties .................. 2-17
3 Troubleshooting Servlet Installation
3.1 Miscellaneous........................................................................................................... 3-1
3.2 Checking the Response of the UI Servlet................................................................. 3-1
3.3 Checking Your Model in the Runtime Oracle Configurator....................................... 3-3
3.4 Checking the Operation of the Apache Internet Server............................................. 3-5

4 Installing Oracle Configurator Developer
4.1 The Oracle Configurator Developer Software............................................................... 4-1
4.2 Installing Oracle Configurator Developer ..................................................................... 4-2
4.3 Installing Oracle Configurator Developer Patches ..................................................... 4-3
4.4 Oracle Configurator Developer Client/Server Environments...................................... 4-4
4.4.1 Server Environment for Oracle Configurator Developer......................................... 4-4
4.4.1.1 Establish Users and Responsibilities.................................................................. 4-5
4.4.1.2 Users and Responsibilities for Accessing Runtime Oracle Configurators ....... 4-6
4.4.1.3 Running Oracle Configurator Developer Using a Terminal Server.................. 4-6
4.4.2 Client Environment for Oracle Configurator Developer......................................... 4-7
4.4.2.1 Oracle8 Client Installation .............................................................................. 4-7
4.4.2.2 Runtime Oracle Configurator Client Requirements......................................... 4-8
4.4.2.3 Set Up Oracle Configurator Developer ............................................................ 4-8
4.4.2.4 Enable the Client for Database Connectivity .................................................... 4-9
4.4.2.5 Create DSNs and DBOwners ........................................................................ 4-10
4.4.2.6 Set Parameters in the spx.ini File for Development and Testing..................... 4-12
4.5 Parameterized Startup of Oracle Configurator Developer ......................................... 4-15
4.5.1 Syntax..................................................................................................................... 4-15
4.5.2 Usage....................................................................................................................... 4-16
4.5.3 Logging................................................................................................................... 4-17
4.6 Test Your Oracle Configurator Developer Installation............................................. 4-17

Glossary of Terms and Acronyms

Index
### List of Examples

<table>
<thead>
<tr>
<th>Example</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2–1</td>
<td>Shell Script for Starting JServ in Manual Mode (in Oracle Applications)</td>
<td>2-12</td>
</tr>
<tr>
<td>3–1</td>
<td>HTML Test Page for Invoking the DHTML runtime Oracle Configurator</td>
<td>3-3</td>
</tr>
<tr>
<td>3–2</td>
<td>Hello.java Test Class</td>
<td>3-6</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Configurator Developer Requirements</td>
<td>1-2</td>
</tr>
<tr>
<td>1-2</td>
<td>Profile Options for Oracle Configurator</td>
<td>1-6</td>
</tr>
<tr>
<td>1-3</td>
<td>CZ: Populate Decimal Quantity Flags Profile Option</td>
<td>1-9</td>
</tr>
<tr>
<td>2-1</td>
<td>Textual Placeholders for Configuration Files</td>
<td>2-3</td>
</tr>
<tr>
<td>2-2</td>
<td>Parameters for JServ Instances</td>
<td>2-10</td>
</tr>
<tr>
<td>2-3</td>
<td>Servlet Properties for Displaying HTML Pages</td>
<td>2-15</td>
</tr>
<tr>
<td>2-4</td>
<td>Log File Properties</td>
<td>2-16</td>
</tr>
<tr>
<td>2-5</td>
<td>Properties for the Oracle Configurator Servlet</td>
<td>2-17</td>
</tr>
<tr>
<td>2-6</td>
<td>Pricing Switch Values</td>
<td>2-19</td>
</tr>
<tr>
<td>2-7</td>
<td>Pricing Switch Settings</td>
<td>2-20</td>
</tr>
<tr>
<td>2-8</td>
<td>Heartbeat Mechanism Properties</td>
<td>2-26</td>
</tr>
<tr>
<td>3-1</td>
<td>Test Strings and Results</td>
<td>3-2</td>
</tr>
<tr>
<td>3-2</td>
<td>Library Path Variable Names by Operating System</td>
<td>3-10</td>
</tr>
<tr>
<td>4-1</td>
<td>Oracle Configurator Developer Software</td>
<td>4-1</td>
</tr>
<tr>
<td>4-2</td>
<td>Spx.ini Parameters for Development and Testing</td>
<td>4-13</td>
</tr>
<tr>
<td>4-3</td>
<td>Startup Parameters for Oracle Configurator Developer</td>
<td>4-16</td>
</tr>
<tr>
<td>4-4</td>
<td>Logging Levels for Oracle Configurator Developer</td>
<td>4-17</td>
</tr>
</tbody>
</table>
List of Figures

3–1  A Model, in the Runtime Oracle Configurator ............................................................... 3-5
4–1  Server Configuration for OC Server .................................................................................. 4-5
4–2  Client/Server Data Communication Architecture ......................................................... 4-9
Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, please indicate the title and part number of the documentation and the chapter, section, and page number (if available). You can send comments to us in the following ways:

- Electronic mail: your_product@oracle.com
- FAX: telephone number. Attn: Oracle Configurator
- Postal service:
  Oracle Corporation
  Oracle Configurator Documentation
  10 Van de Graaff Drive
  Burlington MA 01803-5146
  USA

If you would like a reply, please give your name, address, telephone number, and electronic mail address (optional).

If you have problems with the software, please contact your local Oracle Support Services.
This *Oracle Configurator Installation Guide* provides explanations and instructions for tasks required to install the CZ schema, Oracle Configurator Developer, and runtime Oracle Configurators.

**Intended Audience**

If you are responsible for installing Oracle Configurator, be sure you have read and understand the information in *Oracle Applications Concepts* and *Installing Oracle Applications*. *Oracle Applications Concepts* explains the technology, architecture, and terminology used with all Oracle Applications. *Installing Oracle Applications* provides instructions for installing Oracle Applications products and the CZ schema using Oracle Rapid Install.

This manual is intended for anyone installing or supporting the installation of Oracle Configurator (OC).

Ordinarily, the tasks presented in this book are performed by one of the following people:

- **System Administrator**

  Responsible for administering the Oracle Applications system, including:

  - Ensuring that hardware is correctly configured
  - Installing, configuring, and maintaining production and development software
  - Ensuring that the system is backed up daily
  - Designing and maintaining system security such as system accounts
The system administrator provides support for problems with the system. They may perform setup and initial maintenance of the production system or advise their client’s operational staff on these tasks. The system administrator works with the project team to optimize system performance, install packaged applications environments, and convert data.

- **Database Administrator**

  Installs and configures the Oracle8i database and maintains database access controls. This person also provides consultation on performance and is responsible for monitoring growth and fragmentation of the production database and ensuring database backup and recovery.

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### Structure

This manual contains the following chapters and appendixes:
- **Chapter 1, "Installing Oracle Configurator"** provides an overview of Oracle Configurator and describes the software components and system requirements. It also describes installation prerequisites and provides information for installing Oracle Configurator with Oracle Applications Release 11i and upgrading from a prior standalone version of the CZ schema to the current version.

- **Chapter 2, "Oracle Configurator Servlet Considerations"** describes the tasks to install, configure, and adjust your Apache configuration to balance the load of visits to the UI Servlet by your end users.

- **Chapter 3, "Troubleshooting Servlet Installation"** provides suggestions for resolving problems that may arise when installing the Oracle Configurator servlet.

- **Chapter 4, "Installing Oracle Configurator Developer"** describes prerequisites and provides information for installing Oracle Configurator Developer from the Oracle Configurator Developer compact disc. It also describes how to set up Oracle Configurator Developer client and server machines in order to use Oracle Configurator Developer to create a custom runtime Oracle Configurator.

- "**Glossary of Terms and Acronyms**" contains definitions that you may need while working with Oracle Configurator.

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**Related Documents**

For more information, see the documentation for your release of Oracle Applications, Oracle8i Oracle RDBMS documentation, Oracle Configurator documentation, and the product-specific Release Notes for releases supported to work with Oracle Configurator.

**Conventions**

In examples, an implied carriage return occurs at the end of each line, unless otherwise noted. You must press the Return key at the end of a line of input.

The table below lists other conventions that are also used in this manual.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>. .</td>
<td>Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.</td>
</tr>
</tbody>
</table>
Product Support

The mission of the Oracle Support Services organization is to help you resolve any issues or questions that you have regarding Oracle Configurator Developer and Oracle Configurator.

To report issues that are not mission-critical, submit a Technical Assistance Request (TAR) using Metalink, Oracle’s technical support Web site, at:

http://www.oracle.com/support/metalink/

Log into your Metalink account and navigate to the Configurator TAR template:

1. Choose the TARs link in the left menu.
2. Click on Create a TAR.
3. Fill in or choose a profile.
4. In the same form:
a. Choose **Product**: Oracle Configurator or Oracle Configurator Developer

b. Choose **Type of Problem**: Oracle Configurator Generic Issue template

5. Provide the information requested in the iTAR template.

You can also find product-specific documentation and other useful information using Metalink.

For a complete listing of available Oracle Support Services and phone numbers, see:

[http://www.oracle.com/support](http://www.oracle.com/support)
Installing Oracle Configurator

Oracle Configurator consists of the CZ schema, Oracle Configurator Developer (a graphical, drag-and-drop development and maintenance environment), and a runtime configurator called the runtime Oracle Configurator (the end-user environment). The CZ schema and the runtime Oracle Configurator are installed with Oracle Applications Release 11i using Oracle Rapid Install. You install Oracle Configurator Developer from the Oracle Configurator Developer compact disc.

The Rapid Install wizard guides you through the Oracle Applications installation or upgrade process. You select whether you want to install Oracle Applications for the first time, perform an upgrade of an existing Oracle Applications instance, or configure an existing applications instance. You can install or upgrade up to 3 instances at the same time. You select the product you want to install, and Oracle Rapid Install automatically selects and installs any dependent products. The information you supply in the Rapid Install wizard is captured in a configuration file, which you store for use during the various stages of your installation or upgrade. For more information about how Oracle Rapid Install works, see Installing Oracle Applications.

This manual presents the installation tasks necessary for completing the installation of Oracle Configurator and the runtime Oracle Configurator add-on in Oracle Order Management, Telesales, iStore, Sales Online, or Order Capture. It also describes the installation tasks for installing and running Oracle Configurator Developer to create a runtime Oracle Configurator in the following environments:

- A custom Web application using Oracle Configurator
- A test environment launched from Oracle Configurator Developer

For the most up-to-date information on installing and using Oracle Configurator (OC) successfully, see the Oracle Configurator Release Notes.
1.1 System Requirements

**Oracle Configurator Developer**

Table 1–1 lists the requirements for Oracle Configurator Developer.

<table>
<thead>
<tr>
<th>Development Workstation</th>
<th>Processor:</th>
<th>Pentium II 300Mhz or equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Memory:</td>
<td>256Mb minimum 512Mb or higher recommended</td>
</tr>
<tr>
<td></td>
<td>Disk Space:</td>
<td>40Mb Free</td>
</tr>
<tr>
<td></td>
<td>OS:</td>
<td>Windows 95/98, Windows NT 4.0, Windows 2000, and XP</td>
</tr>
<tr>
<td></td>
<td>Oracle8 Client</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MS Word 97, Word 2000 (for generating project reports)</td>
<td></td>
</tr>
</tbody>
</table>

**Data Server**

Oracle8i Enterprise Edition

1.2 Supported Platforms

The Oracle Configurator Developer is supported on Windows 95/98, Windows NT (Intel), and Windows 2000. The CZ schema and the runtime Oracle Configurator are supported on all of the same platforms as Oracle Applications.

1.3 Required Patches

After installing Oracle Applications, you must run `adpatch` to apply the latest patches to your Oracle Applications Release 11i environment. For the latest required patches, contact Oracle Support or go to Metalink, Oracle’s technical support Web site. See *Maintaining Oracle Applications* for information about applying patches.

If you have applied an Oracle Applications patch, you may also be required to apply an Oracle Configurator Developer patch on your client machine. For more
information about Oracle Configurator Developer patches, see Section 4.3, "Installing Oracle Configurator Developer Patches" on page 4-3.

1.4 Completing the Oracle Configurator Installation

Installing Oracle Configurator with Oracle Applications by running Oracle Rapid Install does not complete the Oracle Configurator installation. There are additional steps you must complete before you can run Oracle Configurator Developer or invoke a runtime Oracle Configurator from Oracle Applications.

Once you have installed or upgraded Oracle Configurator with Oracle Applications, you must:

1. Log into Oracle Applications as the system administrator.

2. Verify that the following parameters do not exist in the database configuration file DatabaseHostname_DatabaseSID.dbc (this file is located in $FND_TOP/secure):
   
   BATCH_VALIDATE_USER=valid Oracle Applications username (for example, jsmith)
   BATCH_VALIDATE_PWD=password for the above username

   If these parameters do exist in this file, please remove them.

3. Verify that the profile options that enable you to run the runtime Oracle Configurator within Oracle Applications are set correctly for your installation. (Oracle Rapid Install sets the profile options ASO:Configurator URL and BOM:Configurator URL of UI Manager automatically.) See Section 1.4.2, "Set Profile Options" on page 1-5.

4. Verify that Oracle Rapid Install has set up the server correctly. See Section 2.1, "Verifying Apache and JServ Setup" on page 2-2.

5. (Optional, but recommended) Load balance the servlet to support multiple simultaneous users of the runtime Oracle Configurator. See Section 2.2, "Load Balancing" on page 2-9.

6. Set up your Oracle Applications responsibilities and users. See Section 1.4.3, "Set up Oracle Applications Responsibilities and Users" on page 1-13.

7. If you are not installing Oracle Configurator Developer to develop, maintain, or customize the runtime Oracle Configurator, complete your installation by verifying and testing your Web server configuration. See Section 1.4.4, "Verify and Test Web Server Configuration" on page 1-13.
Completing the Oracle Configurator Installation

If you are installing Oracle Configurator Developer to develop, maintain, or customize the runtime Oracle Configurator, complete the following additional steps.

8. Install Oracle Configurator Developer to develop, maintain, or customize the runtime Oracle Configurator. See Section 4.2, "Installing Oracle Configurator Developer" on page 4-2.

9. Set up your server machine and establish Oracle Configurator Developer users and responsibilities. See Section 4.4.1, "Server Environment for Oracle Configurator Developer" on page 4-4.

10. Set up your client machine. See Section 4.4.2, "Client Environment for Oracle Configurator Developer" on page 4-7.

11. Establish data connectivity between the client machine and the CZ schema on the server machine. See Section 4.4.2.4, "Enable the Client for Database Connectivity" on page 4-9.

12. Set parameters in the spx.ini file on the client machine to run Oracle Configurator Developer and the test environment you want. For more information about these parameters, see Section 4.4.2.6, "Set Parameters in the spx.ini File for Development and Testing" on page 4-12, and the Oracle Configurator Implementation Guide.

1.4.1 Modify Database Configuration File Parameters

If Oracle Configurator was not installed using Oracle Rapid Install, you must modify the database configuration file for your installation (this is required to invoke an Oracle Configurator from any Oracle Applications product). The configuration file is called DatabaseHostname_DatabaseSID.dbc and is located in $FND_TOP/secure.

**Note:** If you installed Oracle Configurator by running Oracle Rapid Install, do not perform the following steps. However, you should verify that certain parameters do not exist in DatabaseHostname_DatabaseSID.dbc. For more information, see Section 1.4 on page 1-3.

1. Update the database configuration file for the database instance to include batch validate username and password parameters.
When you install or upgrade Oracle Applications, the database configuration file must include batch validate username and password parameters to use the runtime Oracle Configurator. If you do not add this information, end users may see a blank (empty) Configurator window at runtime.

For example:

\[\text{BATCH\_VALIDATE\_USER=valid Oracle Applications username (for example, jsmith)}\]
\[\text{BATCH\_VALIDATE\_PWD=password for the above username}\]

2. Oracle Configurator Developer uses thin drivers. To use Oracle Configurator Developer you must ensure that the thin driver entries in the database configuration file are not commented out.

For example:

\[\text{APPS\_JDBC\_DRIVER\_TYPE=THIN}\]

3. Uncomment the following line and replace host\_name with the appropriate value:

\[\text{DB\_HOST=host\_name}\]

4. Uncomment the following line and replace port\_number with the appropriate value:

\[\text{DB\_PORT=port\_number}\]

5. Uncomment the following line and replace db\_name with the appropriate value:

\[\text{DB\_NAME=db\_name}\]

### 1.4.2 Set Profile Options

To utilize some Oracle Configurator Developer functionality or run the runtime Oracle Configurator within other Oracle Applications such as Order Management, you must set some profile options. The profile options that affect Oracle Configurator are listed in Table 1–2 on page 1-6 and are described in detail in the sections that follow.

For more information about setting profile options, see the *Oracle Applications User’s Guide*. 
<table>
<thead>
<tr>
<th>Profile Option</th>
<th>User</th>
<th>System Administrator</th>
<th>Requirements Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASO:Configurator URL</td>
<td>X</td>
<td>X</td>
<td>Required with iStore, TeleSales, SalesOnLine</td>
</tr>
<tr>
<td>ASO:Enable Configure Model Item</td>
<td>X</td>
<td>X</td>
<td>Required with iStore, TeleSales, SalesOnLine</td>
</tr>
<tr>
<td>BOM:Configurer URL of UI Manager</td>
<td>X</td>
<td>X</td>
<td>Required with Order Management, iStore, TeleSales, and SalesOnLine</td>
</tr>
<tr>
<td>CZ:Automatically Validate on Exit</td>
<td>0</td>
<td>0</td>
<td>Optional Always Validate on Exit</td>
</tr>
<tr>
<td>CZ: Configurator Install Base</td>
<td>X</td>
<td>X</td>
<td>Optional oracle.apps.cz.dio.config.Oracle InstalledBase</td>
</tr>
<tr>
<td>CZ: Populate Decimal Quantity Flag</td>
<td>0</td>
<td>0</td>
<td>Optional No</td>
</tr>
<tr>
<td>CZ:Publication Lookup Mode</td>
<td>X</td>
<td>X</td>
<td>Optional Production</td>
</tr>
<tr>
<td>CZ:Publication Usage</td>
<td>X</td>
<td>X</td>
<td>Optional Any Usage</td>
</tr>
<tr>
<td>CZ: Report All Baseline Conflicts</td>
<td>X</td>
<td>X</td>
<td>Required with Oracle Install Base No</td>
</tr>
<tr>
<td>CZ: Suppress Baseline Errors</td>
<td>X</td>
<td>X</td>
<td>Required with Oracle Install Base No</td>
</tr>
<tr>
<td>CZ:Use Simple Configurator</td>
<td>0</td>
<td>0</td>
<td>Required with Order Management</td>
</tr>
</tbody>
</table>
1.4.2.1 ASO: Configurator URL

This profile option indicates the location where the Oracle Configurator Servlet resides and allows iStore, TeleSales, or SalesOnLine to find the Oracle Configurator Servlet URL. The Oracle Configurator Servlet URL is the location where the configurator servlet resides. This URL is set up by the installer of the servlet.

The URL is the same as the Java property `cz.uiservlet.url` defined for your Oracle Configurator Servlet. All URLs in your profile options should be specified with the URL format: `machine_name.domain:port_number`; where `machine_name` is the name of the server machine, `domain` is your domain name, and `port_number` is the port where your service is running. The Apache server port is typically 880. For example:

```
```

See Section 2.3.2, "Descriptions of Oracle Configurator Servlet Properties" on page 2-17.

1.4.2.2 ASO: Enable Configure Model Item

This profile option enables iStore, TeleSales, or SalesOnLine to configure models created using Configurator Developer. Valid values for this profile option are Yes and No.
1.4.2.3 BOM:Configurator URL of UI Manager

This profile option allows the calling application to find the Oracle Configurator Servlet URL. The Oracle Configurator Servlet URL is the location where the Oracle Configurator Servlet resides. This URL is set up by the installer of the servlet.

**Note:** Setting this profile option is not required for installations of a runtime Oracle Configurator running in a custom Web application. The developer of the hosting application for the runtime Oracle Configurator must specify the URL of the Oracle Configurator Servlet, and then post the initialization message to that URL.

The BOM:Configurator URL of UI Manager profile option indicates the location where the Oracle Configurator Servlet resides. The URL is the same as the Java property `cz.uiservlet.url` defined for your Oracle Configurator Servlet (see Section 2.3.2, "Descriptions of Oracle Configurator Servlet Properties" on page 2-17).

All URLs in your profile options should be specified with the URL format: `machine_name:domain:port_number`; where `machine_name` is the name of the server machine, `domain` is your domain name, and `port_number` is the port where your service is running. The Apache server port is typically 880. For example:


1.4.2.4 CZ:Automatically Validate on Exit

This profile option controls validation behavior of the runtime Configurator window when an end user clicks Done to end the configuration session. The default value is Always Validate on Exit.

1.4.2.5 CZ: Configurator Install Base

This profile option enables Oracle Configurator to interact with an installed base repository by specifying the Java class to call when an end user configures trackable components.

The default value is `oracle.apps.cz.dio.config.OracleInstalledBase` which allows Oracle Configurator to integrate with Oracle Install Base. This option can be set at the Site, Application, Responsibility, and User levels.

For more information about trackable components and integration with Oracle Install Base, see Oracle Configurator Methodologies.
1.4.2.6 CZ: Populate Decimal Quantity Flags

Use this profile option to control whether BOM Standard Items that accept decimal quantities will allow end users to enter a decimal quantity in a runtime Oracle Configurator. This option can be set at the Site level only. Table 1–3 describes the effect of setting this profile option.

Table 1–3 CZ: Populate Decimal Quantity Flags Profile Option

<table>
<thead>
<tr>
<th>Value</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>This is the default value. All items are imported as allowing only integer input, regardless of how they are defined in Oracle Inventory.</td>
</tr>
<tr>
<td>Yes</td>
<td>All items are imported as allowing either decimal or integer input, depending on how they are defined in Oracle Inventory.</td>
</tr>
</tbody>
</table>

After you set this profile option to Yes, and import, refresh, and republish your configured models, you must restart the Oracle Configurator Servlet for configurations to use the new setting. See Chapter 2, "Oracle Configurator Servlet Considerations" on page 2-1. You must also republish your configuration models to ensure that they use the new setting. (Republishing is explained in the Oracle Configurator Developer User’s Guide.)

In Oracle Inventory, the decimal quantity flag is determined by the OM Indivisible check box in the Master Item window. Order Management uses this option to determine whether a partial quantity can be ordered in the Item’s base unit of measure (for example, 3.7 pounds).

**Warning:** Release 11i of Oracle Order Management does not currently support decimal quantities, so OM cannot book an order for a configuration that uses decimal quantities. To find out when this feature will be available, please search the Order Management area of Metalink, Oracle’s customer support Web site, at http://www.oracle.com/support/metalink/.

If your host application does not support input of decimal quantities, it is recommended that you set the value of this profile option to No. In this case, Oracle Configurator end users will be able to enter only an integer value for all BOM Standard Items.
If your sales order system does support input of decimal quantities, set the value of this profile option to Yes and then import new BOM Models or refresh and republish existing Models to use the new setting.

This profile option affects the behavior of the Populate Configuration Models, Refresh a Single Configuration Model, and Refresh All Imported Configuration Models concurrent programs. See the Oracle Configurator Implementation Guide for more information.

1.4.2.7 CZ:Publication Lookup Mode
Hosting applications may include a publication mode parameter in the session initialization message to select the publication (Model and UI) to display in the Configurator window. If the initialization message does not provide this parameter, the Oracle Configurator Servlet uses the value of CZ:Publication Lookup Mode. You can set this profile option to either Production or Test at the Site level only. The default value is Production.

1.4.2.8 CZ:Publication Usage
An Oracle Configurator Developer user specifies one or more Usages when publishing a configuration model to control its availability when accessed by hosting applications such as iStore or Order Capture. The hosting application optionally includes the value of this parameter in the session initialization message to select the UI and Model to display in a Configurator window. This profile option provides a default Usage to select a Model publication when no Usage is specified in the session initialization message. Valid values for this profile option include any Usage names that you define in Oracle Configurator Developer.

The default value of this profile option is Any Usage, which does not limit the availability of publications based on Usages. For more information about Publishing, see the Oracle Configurator Developer User’s Guide.

1.4.2.9 CZ: Report All Baseline Conflicts
If your Oracle Configurator end users can update installed configurations, this profile option determines what Oracle Configurator considers to be a conflict between the configuration the end user wants to update and the baseline configuration that exists in Oracle Install Base. (In other words, when the differences between the two are significant.)

If this option is set to Yes, Oracle Configurator displays a message when the baseline has changed, even if the changes are minor and compatible with the configuration that the end user wants to update. The message that appears lists the
differences between the baseline and the configuration that the end user has selected for update

If this option is set to No, Oracle Configurator displays a message only when the baseline has changed and the changes are not compatible with the configuration that the end user wants to update. This is the default value.

You can set this profile option at the Site, Application, Responsibility, and User levels.

See also Section 1.4.2.10, "CZ: Suppress Baseline Errors" on page 1-11.

For more information about updating configurations, see documentation for Telecommunications Services Ordering.

1.4.2.10 CZ: Suppress Baseline Errors

If your Oracle Configurator end users can update installed configurations, this profile option determines whether Oracle Configurator displays a message when the baseline configuration that exists in Oracle Install Base has changed, even though the changes are compatible with the configuration that the end user wants to update. (In other words, the baseline’s Instance Revision Number has changed in Oracle Install Base.)

When you update an instance of a configuration, Oracle Configurator compares it to the baseline configuration in Oracle Install Base. The baseline is specified by the Instance Revision Number of the component’s installed instance. If the Instance Revision Number of the component being configured does not match the installed component’s Instance Revision Number, validation errors are generated, because the installed and the new instances do not have the same baseline. This can happen if you are restoring a saved configuration after another configuration based on the same baseline has been accepted into the Install Base data repository.

If this option is set to Yes, Oracle Configurator does not display a message when the installed component’s Instance Revision Number has changed.

If this option is set to No, Oracle Configurator displays a message when the component’s Instance Revision Number has changed. This message lists the differences between the baseline and the configuration the end user wants to update. This is the default value.

If the baseline configuration and the configuration that the end user wants to update are not compatible (that is, the changes are significant), Oracle Configurator displays a message regardless of how you set this profile option.
You can set this profile option at the Site, Application, Responsibility, and User levels.

**Note:** Regardless of how you set this profile option or CZ: Report All Baseline Conflicts, the configuration always contains the latest baseline information when the Oracle Configurator session begins.

See also Section 1.4.2.9, "CZ: Report All Baseline Conflicts" on page 1-10.

For more information about updating configurations, see documentation for Telecommunications Services Ordering.

1.4.2.11 **CZ: Use Simple Configurator**

If you are using Oracle Order Management, this profile option must be set to No to launch a runtime Oracle Configurator window. If you are not using Order Management, this profile option is not used.

1.4.2.12 **GMA: Default Language**

The default value for this user profile option is set at the Site level by Oracle Rapid Install and is the base language of your Oracle Applications instance. The value of this profile option must be the same as the language in use on the workstation from which the user logs in to Oracle Applications. This profile option is relevant if you are using Multiple Language Support (MLS). See Section 1.6.3, "Configuring Oracle Configurator Developer for MLS" on page 1-14.

1.4.2.13 **ICX: Language**

This user profile option is set at the Site level by Oracle Rapid Install. Its value is the base language of your Oracle Applications instance, which is stored in FND_LANGUAGES.LANGUAGE_CODE.

1.4.2.14 **OM: Use Configurator**

This profile option supports usage of a runtime Oracle Configurator to configure products from Oracle Order Management. Valid values for this profile option are Yes or No. Set this profile option to Yes to use the runtime Oracle Configurator to configure items. Set this option to No to use the Order Management Options window to create sales orders by selecting options from an ATO/PTO BOM Model.

See the Oracle Order Management User's Guide for more information about the Options window.
1.4.3 Set up Oracle Applications Responsibilities and Users

Any Oracle Configurator user must also be defined in Oracle Applications and be assigned a Configurator responsibility (either the Configurator Administrator or Configurator Developer). For more information about assigning responsibilities, see Installing Oracle Applications.

1.4.4 Verify and Test Web Server Configuration

To use Oracle Configurator, your Web server must be up and running. To verify that Web server is up and running properly, see the documentation for your specific Web server.

1.5 Upgrading to a New Release

If you are upgrading from a previous version of Oracle Configurator Release 11i, run adpatch to apply the latest patches to your Oracle Applications Release 11i environment. For the latest required patches, go to Metalink, Oracle’s technical support Web site. See Maintaining Oracle Applications for information about applying these patches.

If you are migrating from an Oracle SellingPoint schema, see the chapter on data migration in the Oracle Configurator Implementation Guide.

Be sure to read the Oracle Configurator Release Notes for important information about the new version of Configurator Developer.

---

**Note:** Upgrading to a new version of Oracle Configurator does not prevent end users from restoring configurations that were saved using a previous version of the software. Additionally, restoring such a saved configuration does not adversely the configuration in any way; however, additional selections may be required if the Model structure or any rules have changed.

1.6 Installation and Setup Considerations for Multiple Language Support

Multiple Language Support (MLS) enables you to create a Model and one or more user interfaces in your base language and then display the runtime UI in any
language in which you do business. For information about using this feature in Configurator Developer, see the Oracle Configurator Developer User’s Guide.

1.6.1 Installation Tasks Specific to MLS

Consult Oracle Applications Concepts for background information on selecting languages, character sets, and territory values. Then consult Installing Oracle Applications (11.5.3) and follow the step on “Select NLS settings” in either Chapter 2, “Single-node Installations” or Chapter 3, “Multi-node Installations”.

Finally, follow the steps in the section “Set up National Language Support (NLS)” in Chapter 5, “Finishing Your Installation”. This task involves consulting the Oracle Applications NLS Release Notes for Release 11i, which can be obtained from Metalink, Oracle’s technical support Web site.

1.6.2 Workstation Fonts for MLS

The following procedures configure your workstation for using fonts compatible with MLS.

On a workstation running Windows NT or Windows 2000, if you follow the normal procedure for installing Windows, then the fonts for other languages are installed by default.

If you need to change the input locale for entering text in the character set of a desired language, go to the Windows Control Panel and select Regional Settings (Windows NT) or Regional Options (Windows 2000). On the Input Locales tab, you can add or remove input locales as needed. For details on other setup tasks, please refer to the Windows 2000 Help, by searching on the keyword: “regional settings” (Windows NT) or “regional options” (Windows 2000).

**Warning:** It is possible to change the input locale on your local machine after logging in to Configurator Developer and then modify existing models. However, Oracle Corporation strongly recommends that you do not do this as it can corrupt Model data.

1.6.3 Configuring Oracle Configurator Developer for MLS

The language in which you log in to Oracle Configurator Developer must match the base language of the Oracle Applications database instance to which you are connecting. There is no option for running Configurator Developer in a different
language than the one used by the database. See Section 1.4.2.12, "GMA: Default Language" on page 1-12.

In the Windows Control Panel, the Regional Settings (or Regional Options) must specify on the Number tab that the decimal symbol to be used when displaying numbers is set to "." (the period or dot character), and that the digit grouping symbol must be set to some character that is not the one set for the decimal symbol. You will not be able to log on to Oracle Configurator Developer if these settings are not configured correctly.

1.6.4 Setting Up the Runtime Oracle Configurator for MLS

Choose one of the following methods to set up the runtime Oracle Configurator to support MLS:

- Set the profile option ICX: CLIENT_IANA_ENCODING to "UTF-8". This is the default method used to display the Oracle Configurator session character set. This method enables you to display more than one language in the same UI screen at runtime.

- Add the following line to the jserv.properties file:
  
  wrapper.bin.parameters=-Dcz.use_client_iana_encoding=N

  If you add this line to jserv.properties, you can display only one international language other than English on the same UI screen. This method allows you to change the character set from one Oracle Configurator session to the next (setting the profile option described above prevents this).

  See Section 2.3.2, "Descriptions of Oracle Configurator Servlet Properties" on page 2-17.

1.6.4.1 Configuring JInitiator for MLS

If you are using the Java Applet user interface, you should use version 1.1.8.7 of Oracle JInitiator. See Table 4–2, "Spx.ini Parameters for Development and Testing" on page 4-13 for more details.

1.6.4.2 Configuring Browsers for MLS

The following procedures configure your browser for using fonts compatible with MLS.
Internet Explorer
If your browser is Microsoft Internet Explorer 5.0 or higher, begin by visiting a Web site that uses the fonts appropriate to the language you want to use. Before you reach this site, a message box will appear, asking you whether you want to download a font driver for the language. Click Yes to download and install the font driver automatically. When the download is complete, restart Internet Explorer. Then choose View > Encoding > More, and select the character set you want to use for the language you specified.

Netscape Navigator
If your browser is Netscape Navigator 4.6 or higher, and is an English language version with foreign language fonts installed, use the following procedure.

1. Choose Edit > Preferences > Navigator > Languages, and the languages that you wish to use at runtime.
2. Choose View > Character Set and the specific character set you want to use for the desired language.
3. Choose View > Character Set > Set Default Character Set.
4. Choose Edit > Preferences > Appearance > Fonts and select the desired code set from the For the Encoding list (such as "Japanese").
5. In the option group for respecting document-specified fonts, choose the option that uses your default font setting, and ignores the document-specified fonts.
To run a runtime Oracle Configurator (Java applet or DHTML), you must have the Oracle Configurator Servlet (or "OC Servlet") installed on your internet server. Installing the OC Servlet includes:

1. Using Oracle Rapid Install to install Oracle Applications Release 11i and Oracle Internet Application Server (iAS), which also installs the Apache Web server and supporting software. See Section 1, "Installing Oracle Configurator" on page 1-1.

2. Configuring Apache and JServ to work with the OC Servlet, by verifying (and modifying, if necessary) the Apache configuration files. See Section 2.1, "Verifying Apache and JServ Setup" on page 2-2.

3. Verifying or modifying Java system properties for the OC Servlet. See Section 2.1.5, "Verifying OC Servlet Properties" on page 2-8, and Section 2.3, "Oracle Configurator Servlet Properties" on page 2-14.


You may want to consult the Apache 1.3 User’s Guide and Apache Web site (http://java.apache.org) when installing, configuring, or load balancing the OC Servlet.

---

**Note:** These instructions assume that you are installing on the Solaris™ Operating Environment platform, unless noted otherwise.
2.1 Verifying Apache and JServ Setup

After you have installed Apache and its supporting software with Oracle Rapid Install, verify that the server has been set up correctly. To do this, enter a command with the following structure in the Location field of a Web browser:

URL of the Servlet?test=version

For example:


The result should be the build and schema version of Oracle Configurator running on the server.

If the build and schema version does not appear, check the setup of your configuration files as described in the remainder of this section.

- For details on Apache configuration files, consult the Apache documentation (at http://java.apache.org).
- You must log in as the owner of the Apache files in order to modify these files.
- Refer to the following sections for information about each configuration file:
  - Section 2.1.1, "Verifying httpd.conf" on page 2-4
  - Section 2.1.2, "Verifying jserv.conf" on page 2-5
  - Section 2.1.3, "Verifying jserv.properties" on page 2-6
  - Section 2.1.4, "Verifying zone.properties" on page 2-8
  - Section 2.1.5, "Verifying OC Servlet Properties" on page 2-8
- For a description the OC Servlet properties that are used in these files, see Section 2.3 on page 2-14.

Note: You should run the Oracle Configurator Servlet under the production version of the latest version of JDK 1.3 for your platform. The production version runs significantly faster than the reference version. See Section 2.1.3, "Verifying jserv.properties" on page 2-6 for details on verifying this setting.
In this chapter, various textual placeholders are used. Table 2–1 lists the placeholders that may require some explanation (the names of the other placeholders should be self-explanatory).

Table 2–1  Textual Placeholders for Configuration Files

<table>
<thead>
<tr>
<th>Placeholder</th>
<th>Example Values</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ias_install</td>
<td>/d01/oracle/viscomn/util/apache/1.3.9/Apache</td>
<td>The directory in which you install iAS, using Oracle Rapid Install.</td>
</tr>
<tr>
<td>apache_install</td>
<td>ias_install/Apache</td>
<td>The directory in which you install Apache, as part of iAS, using Oracle Rapid Install.</td>
</tr>
<tr>
<td>jserv_install</td>
<td>ias_install/Jserv</td>
<td>The directory in which you install JServ, as part of iAS, using Oracle Rapid Install.</td>
</tr>
<tr>
<td>hostname</td>
<td><a href="http://www.mysite.com">www.mysite.com</a></td>
<td>The name of the host machine.</td>
</tr>
<tr>
<td>portnum</td>
<td>8802</td>
<td>The port number used by the Apache listener, which is specified by Port in httpd.conf.</td>
</tr>
<tr>
<td>html_vpath</td>
<td>OA_HTML</td>
<td>When running under Oracle Applications, the location pointed to by $APPL_TOP/html.</td>
</tr>
<tr>
<td></td>
<td>apache_install/htdocs/html</td>
<td>Otherwise, a directory located under /htdocs, which is specified by DocumentRoot in httpd.conf.</td>
</tr>
<tr>
<td>media_vpath</td>
<td>OA_MEDIA</td>
<td>When running under Oracle Applications, the location pointed to by $APPL_TOP/media.</td>
</tr>
<tr>
<td></td>
<td>apache_install/htdocs/media</td>
<td>Otherwise, a directory located under /htdocs, which is specified by DocumentRoot in httpd.conf.</td>
</tr>
<tr>
<td>servlet_vpath</td>
<td>This should always be: configurator</td>
<td>A mounting location specified by ApJServMount in jserv.conf.</td>
</tr>
</tbody>
</table>
Verifying Apache and JServ Setup

In the case of a placeholder that refers to an environment variable, the configuration file should contain the actual value of the environment variable, not the variable itself. For example, for a placeholder such as:

\texttt{local\_value\_of\_\$APPL\_TOP}

your configuration file should contain:

\texttt{/d01/oracle/visappl}

rather than:

\texttt{\$APPL\_TOP}

\subsection{2.1.1 Verifying httpd.conf}

By default, Oracle Rapid Install places \texttt{httpd.conf} in \texttt{apache\_install/conf}. Oracle Rapid Install sets the following parameters to point to the appropriate locations:

\begin{itemize}
  \item \texttt{ServerRoot "apache\_install"}
  \item \texttt{DocumentRoot "apache\_install/htdocs"}
  \item \texttt{Alias /icons/ "apache\_install/icons/"}
  \item \texttt{Alias /OA\_HTML/ "\$APPL\_TOP/html"}
  \item \texttt{Alias /OA\_MEDIA/ "\$APPL\_TOP/html"}
\end{itemize}

Most of these parameters have corresponding \texttt{<Directory>} entries that should also be verified.

Note the use of trailing slash characters added to certain parameters.

You can ignore any settings of the aliases \texttt{/html/} and \texttt{/media/}. They are not used by the OC Servlet.

Verify that Apache's listening port is one that is not being used on the server machine:

\texttt{Port portnum}

At the very end of \texttt{httpd.conf}, verify that there is a line that points to the location of the JServ configuration file \texttt{jserv.conf}, which is located in \texttt{jserv\_install/etc}. For example:
Include \texttt{jserv\_install/etc/jserv.conf}

Verify that the Timeout parameter is set to a minimum of 1800 seconds (30 minutes).
\texttt{Timeout 1800}
Oracle Rapid Install

\subsection{2.1.2 Verifying \texttt{jserv.conf}}

By default, Oracle Rapid Install places \texttt{jserv.conf} in \texttt{jserv\_install/etc}.

Verify that the following parameter is set to point to \texttt{apache\_install}:
\texttt{LoadModule jserv\_module apache\_install/libexec/mod\_jserv.so}

Verify that the following parameter is set to point to \texttt{jserv\_install}:
\texttt{ApJServLogFile jserv\_install/logs/mod\_jserv.log}

Verify that \texttt{ApJServProperties} is set to point to the location of the JServ properties file \texttt{jserv\_properties}, which is located in \texttt{jserv\_install/etc}:
\texttt{ApJServProperties jserv\_install/etc/jserv\_properties}

Verify that JServ’s listening port is one that is not being used on the server machine (and different from the Port setting in \texttt{httpd.conf}):
\texttt{ApJServDefaultPort portnum\_jserv}

Ensure that there is a valid mount point for the OC Servlet zone, and the virtual path for the zone:
\texttt{ApJServMount /name\_of\_zone /zone\_property\_filename}

Where \texttt{zone\_property\_filename} is the name of the zone’s properties file, without the extension \texttt{.properties}. The default name is \texttt{root}, which would point to the file \texttt{root\_properties}.

This setting is required, in order to determine the \texttt{servlet\_vpath}:
\texttt{ApJServMount /configurator /root}

This causes the OC Servlet to use the file \texttt{zone\_properties}. 

\textbf{Verifying Apache and JServ Setup}
2.1.3 Verifying jserv.properties

The configuration file jserv.properties sets Java system properties on the Java Virtual Machine (JVM) that runs the JServ servlet engine. These system property values will be available to the OC Servlet when it starts up.

By default, Oracle Rapid Install places jserv.properties in jserv_install/etc.

Verify that the JServ engine is using the production version (as opposed to the reference version) of the JDK. For example:

```
wrapper.bin=/local/java/jdk1.3p/bin/java
```

Oracle strongly recommends that you run Java 1.3 or higher. However, if you are using an earlier version (such as 1.2.2), ensure that the JServ engine is using native (rather than "green") threads. (Version 1.3 uses native threads by default.) You can verify this by checking that the following parameter is the first parameter specified in jserv.properties:

```
wrapper.bin.parameters=-native
```

On platforms that are running Java with green threads and have no native thread implementation, specify the Xss8m option so that you use an 8 MB native stack. To specify this option, verify that the following parameter is the first parameter specified in jserv.properties:

```
wrapper.bin.parameters=-Xss8m
```

---

**Note:** If your operating system is HP-UX, you must use JDK version 1.2.2.08 or higher.

---

Verify that a single entry such as the following is added to set the maximum heap size. (Oracle recommends at least 600MB, but the required heap size may vary depending on your configuration.)

```
wrapper.bin.parameters=-Xmx1500m
```

For more information about heap size allocation, see the Oracle Configurator Performance Guide.

Verify the classpath for the OC Servlet. Oracle Rapid Install may set additional classpath entries. Only the entries affecting the OC Servlet are described here.
If you are configuring Apache for using the runtime Oracle Configurator embedded in Oracle Applications Release 11i, verify the following `wrapper.classpath` values or modify the values to point to the appropriate locations:

```
wrapper.classpath=local_value_of_$OA_JAVA/apps.zip
wrapper.classpath=local_value_of_$OA_JAVA/jdbc12.zip
wrapper.classpath=local_value_of_$OA_JAVA/xmlparserv2.zip
```

**Note:** The second entry above assumes you are using JDK version 1.2 or above, which requires `jdbc12.zip` in the classpath. If you are using JDK version 1.1.8 or before, enter `jdbc111.zip` instead.

The following entries are required for the operation of the Apache Web server and the JServ engine:

```
wrapper.classpath=jserv_install/libexec/ApacheJServ.jar
wrapper.classpath=ias_install/Jsdk/lib/jsdk.jar
```

Verify that the `wrapper.env` section specifies Oracle Configurator’s load library path:

```
wrapper.env=library_path=local_value_of_$CZ_TOP/bin
```

The name of `library_path` varies by platform. For the Solaris™ Operating Environment, it is LD_LIBRARY_PATH. For HP, it is SHLIBPATH. For Windows NT, it is %PATH%. The `library_path` must include the directory in which shared object files are available. For Oracle Configurator, these files are `libcz.so` and `libczjni.so`. After using Oracle Rapid Install, the shared object files may need to be relinked with `adrelink`.

Verify that the port number matches the ApJServDefaultPort that you set in `jserv.conf`:

```
port=portnum_jserv
```

Verify that the following parameters point to `jserv_install`:

```
root.properties=jserv_install/etc/zone.properties
log.file=jserv_install/logs/jserv.log
```
2.1.3.1 Installing Functional Companions

If you have created Functional Companion classes or "return_url" servlets, they must be in the OC Servlet’s classpath. For example, if you install your Functional Companion classes in `jserv_install/servlets`, then add the following parameter:

```
wrapper.classpath=jserv_install/servlets
```

See the *Oracle Configurator Implementation Guide* for information on return_url servlets. See the *Oracle Configuration Interface Object (CIO) Developer’s Guide* for more information about Functional Companions.

---

**Note:** When you modify and recompile a Functional Companion, you must restart the OC Servlet to load the new class file.

2.1.4 Verifying zone.properties

The configuration file `zone.properties` sets Java servlet properties on the OC Servlet that are not available to the JVM running the JServ engine. This file is read after `jserv.properties`. By default, Oracle Rapid Install places `zone.properties` in `jserv_install/etc`.

Verify that the following parameter points to the directories that contain the classes that are often modified and recompiled, so that they can be reloaded.

```
repositories=where_modified_classes_are_reloaded_from
```

Example:

```
repositories=jserv_install/servlets
```

Verify that certain Java property values are being set, by being passed as initial arguments to the Java interpreter. See Section 2.1.5, "Verifying OC Servlet Properties" on page 2-8 for details.

2.1.5 Verifying OC Servlet Properties

Verify that certain Java property values are being set for the OC Servlet, by being passed as arguments to the Java interpreter. By default, Oracle Rapid Install creates servlet property settings in `zone.properties`.

You can also set other Java servlet properties to control the behavior of the OC Servlet, such as:
2.2 Load Balancing

Load balancing means distributing processing and communications activity evenly across a computer network so that no single device is overwhelmed. Load balancing is especially important for networks where it is difficult to predict the number of requests that will be issued to a server.

For more information about load balancing, visit the Apache Web site at http://java.apache.org/jserv/howto.load-balancing.html

You may need to adjust your Apache configuration to balance the load of visits to the OC Servlet by your end users.

**Note:** Internet Application Server (iAS) version 1.0.2.2 or later can be set up to automatically load balance server processes using a process manager. If you are using version 1.0.2.2 or later, refer to the corresponding release of the Oracle 9i Application Server documentation for information about setting up the mod_oprocmgr module. Otherwise, refer to the information provided in this section.

Load balancing can be performed at the level of the Apache Web listener (HTTPD), and also by creating multiple instances of the JServ servlet engine. Only the second approach is outlined here, and assumes a single Web listener.

To run multiple instances of the JServ engine, you must first turn off the automatic spawning of JServ and start your instances in manual mode (using a script such as the one in Example 2–1 on page 2-12).

The Solaris™ Operating Environment shell in which you run JServ should set the maximum number of file descriptors to 1024. For example:

```bash
ulimit -n 1024
```

You should set the **maximum heap size** for the Java Virtual Machine to an optimal value, such as 1500MB. To do this, pass the following runtime parameter:
For more information about heap size allocation, see the Oracle Configurator Performance Guide.

### 2.2.1 Load Balancing Procedure

Here is one possible procedure for setting up load balancing:

1. In `jserv.conf`, change the `ApJServManual` setting to `on`:
   
   ```
   ApJServManual on
   ```

   For more information about `ApJServManual`, see Section 3.4, "Checking the Operation of the Apache Internet Server" on page 3-5.

2. In `jserv.conf`, change the `ApJServMount` property to:
   
   ```
   ApJServMount /configurator balance://set1/zone_name
   ```

   In this example, `set1` is your arbitrary name for the set of JServ instances that you are spawning, and `zone_name` is the name that you specified for your zone's properties file in `jserv.properties`.

3. In `jserv.conf`, add settings for the JServ instances that you intend to run:
   
   ```
   ApJServBalance set1 host1jserv1
   ApJServBalance set1 host1jserv2
   ApJServBalance host1jserv1 ajpv12://hostname:portnum_jserv1
   ApJServBalance host1jserv2 ajpv12://hostname:portnum_jserv2
   ApJServRoute JS1 host1jserv1
   ApJServRoute JS2 host1jserv2
   ```

   **Table 2–2** describes each parameter in this example.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>set1</code></td>
<td>The name of the set of JServ instances that you specified for <code>ApJServMount</code>, in step 2.</td>
</tr>
<tr>
<td><code>host1jserv1</code></td>
<td>Your arbitrary names for use in tracing in log files.</td>
</tr>
<tr>
<td><code>host1jserv2</code></td>
<td></td>
</tr>
<tr>
<td><code>ajpv12</code></td>
<td>Indicates the protocol used (Apache Jserv Protocol version 1.2)</td>
</tr>
</tbody>
</table>
4. Set up your JServ instances to start up in manual mode. To do this you should use a shell script. An example script is shown in Example 2–1 on page 2-12.

Be aware that none of the system properties set in jserv.properties are applied when you start a JServ instance manually, so you must pass them as command line arguments in the script. So, in the script, you set your CLASSPATH and command line arguments to be passed to the JVM. You also pass the properties file that you want to use to start the JServ (jserv.properties).

5. In jserv.properties, change bindaddress to:

bindaddress=*  

**Warning:** Setting this parameter to * presents a possible security risk. Consult the Apache documentation and the comments in jserv.properties for details.

In a production environment, bindaddress would be the IP address where you will be receiving requests.

6. In jserv.properties, change port to

port=portnum_jserv

In this example, portnum_jserv is the port for JServ that you specified in jserv.conf, with ApJServDefaultPort portnum_jserv.

7. In jserv.properties, you may optionally want to change the root.properties setting to point to a different zone properties file for each servlet, in order to read a different set of runtime parameters (for example, to send your logs to a different directory for each servlet). See Section 2.2.2, "Configuration for Multiple Properties Files" on page 2-13 for details.

8. Start up your JServ instances by running the script in Example 2–1.

---

**Table 2–2 Parameters for JServ Instances**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>hostname</td>
<td>The host machine(s) on which you are running your JServ instances.</td>
</tr>
<tr>
<td>portnum_jserv1</td>
<td>The ports for JServ instances that you specified in jserv.conf, with ...</td>
</tr>
<tr>
<td>portnum_jserv2</td>
<td>... with ApJServDefaultPort portnum_jserv.</td>
</tr>
</tbody>
</table>
9. Start up Apache:

    apache_install/bin/apachectl start

Example 2–1  Shell Script for Starting JServ in Manual Mode (in Oracle Applications)

#!/bin/sh

ulimit -n 1024

properties=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/etc/jserv.properties
# for 2nd JServ instance, change above line to:
# properties=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/etc/jserv2.properties

log=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs/jserv1.log
# for 2nd JServ instance, change above line to:
# log=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs/jserv2.log

cmdlineargs=-Dcz.uimanager.logpath=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs/ \
    -native \n    -mx256m"

# for 2nd JServ instance, change the "logpath" line above to:
# -Dcz.uimanager.logpath=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs2/ \

echo $cmdlineargs >> $log

CLASSPATH=$CLASSPATH:/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/servlets

java $cmdlineargs -classpath $CLASSPATH org.apache.jserv.JServ $properties $1 2>> $log &
sleep 3

If you are setting OC Servlet parameters for each JServ instance (similar to how parameters are passed in jserv.properties), rather than for the entire servlet zone (by setting the parameters in zone.properties), then you need to pass the same parameters to each JServ instance. To do this, modify the cmdlineargs in the script in Example 2–1 to include the parameters as Java system property settings. The lines would look like this example:
... 
```
cmdlineargs="-Dcz.uimanager.logpath=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs/ \
-Dcz.html.source.treeview=http://www.mysite.com:8802/OA_HTML/cztree.jsp \
-Dcz.html.source.display=http://www.mysite.com:8802/OA_HTML/czdisp.jsp \
-mx256m"
```
... 

Notice that the settings for `cz.uimanager.logpath` and `mx` are the same as in Example 2–1, since you would not be setting those in `zone.properties`.

---

**Note:** The script in Example 2–1 is for the OC Servlet running inside Oracle Applications Release 11i. If you are running the OC Servlet outside Oracle Applications Release 11i, then you need to change the classpath, by adding `cz3rdpty.jar` and `config.jar`, and removing `apps.zip` and `xmlparserv2.zip`. The path to `jdbc111.zip` must also change. See Section 2.1.3, "Verifying jserv.properties" on page 2-6 for details.

---

### 2.2.2 Configuration for Multiple Properties Files

If you are following step 7 on page 2-11, edit the configuration files as follows, for each Jserv instance that you are creating.

1. Create another version of `jserv.properties` (for example, `jserv2.properties`). In this alternate version:
   - Comment out the `wrapper.bin.parameters` and `wrapper.classpath` properties that you are setting in the script.
   - Point to a new `zone.properties` file that you will create in step 2 below:
     ```
     filename.properties=file_location/filename.properties
     ```

   Example:
   ```
   oc_configurator.properties=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/etc/oc_configurator.properties
   ```

   - Point to a different log file, in a different log file directory:
     ```
     log.file=jserv_install/logs2/jserv.log
     ```

   - Change the port number, according to what you set in step 6 on page 2-11:
     ```
     port=portnum_jserv2
     ```
2. Create another version of `zone.properties` (for example, `zone2.properties`). In this alternate version, point to different log files. For example:

```
servlets.default.initArgs=cz.uiservlet.logfilename=jserv_install/logs2/cz
```

3. Create another version of the script in Example 2–1. In this alternate version, change the lines indicated in the example by the comment "# for 2nd JServ instance...".

### 2.3 Oracle Configurator Servlet Properties

You can control certain behaviors of the runtime Oracle Configurator by passing parameter values to custom properties of the OC Servlet. These properties are passed as Java system properties to the JVM in which the process for the OC Servlet is running.

#### 2.3.1 Setting Parameters for Apache

This section describes setting up parameters for your Apache Web Server.

##### 2.3.1.1 Syntax and Context for Setting Parameters

When using Apache, you can set the parameters that determine the properties for a Java servlet in either of these locations:

- In `zone.properties`, as global initialization parameters for the servlet, using this syntax:

```
servlets.default.initArgs=property_name=property_value
```

Example:

```
servlets.default.initArgs=cz.uimanager.logpath=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs/
```

- In `jserv.properties`, as system execution parameters for the JServ JVM, using this syntax:

```
wrapper.bin.parameters=-Dproperty_name=property_value
```

Example:
wrapper.bin.parameters=-Dcz.uimanager.logpath=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs/

This syntax is like using the \-D option of the Java interpreter:

```java
java -Dproperty_name=property_value
```

---

**Note:** The method recommended for use with the OC Servlet is the one using `servlets.default.initArgs`, in `zone.properties`.

### 2.3.1.2 Usage for Setting Parameters

- For most installations, it is not necessary to add properties to the `zone.properties` file. By default, the Oracle Configurator Servlet derives all required configuration information from the hosting application’s session request and uses default values for other required properties. If you do add properties to `zone.properties`, these properties take precedence over information derived from the session request. Deriving configuration information from the session request makes it easier to run the OC Servlet on a different host (server machine), if required.

Although it is not necessary to add properties to the `zone.properties` file, you may want to define the properties shown in Table 2–3 if, for example, you want to deploy additional servlets that display HTML pages in different languages.

<table>
<thead>
<tr>
<th>Property</th>
<th>Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>cz.uiservlet.blaftertemplateurl</code></td>
<td>on page 2-31</td>
</tr>
<tr>
<td><code>cz.uiservlet.formtemplateurl</code></td>
<td>on page 2-33</td>
</tr>
<tr>
<td><code>cz.uiservlet.templateurl</code></td>
<td>on page 2-38</td>
</tr>
</tbody>
</table>

When adding properties to the configuration files, you can specify the property’s location either by entering a fully qualified path or a relative URL. The recommended method is using a relative URL, as this method enables the OC Servlet to gather its configuration information from the session request. For an example of how each property listed above can be defined using a relative
URL, see Section 2.3.2, "Descriptions of Oracle Configurator Servlet Properties" on page 2-17.

- If you set parameters in `zone.properties`, then you are setting a single set of properties for all of the servlets that are running in that servlet zone. By default, all servlets run in a single zone. By setting the properties once, in a single location, you can greatly simplify the maintenance of the multiple startup scripts required for load balancing. The properties are only available to the servlets.

If you set parameters in `jserv.properties`, then you can vary the settings for each of multiple JServ instances that you may be running. This would be the case when you are load balancing (as described in Section 2.2, "Load Balancing" on page 2-9). The settings will be used by each servlet that starts up in the JVM provided by that JServ instance. The properties are available not only to the servlets, but to any other processes in the same JVM.

- The use of `servlets.default.initArgs` parameters replaces the use of a separate `.initArgs` file.

- If a parameter for the OC Servlet is omitted from an Apache configuration file, then its default value is used by the runtime Oracle Configurator. You can omit all OC Servlet parameters, without triggering an error.

- You can leave obsolete OC Servlet parameters in your configuration files, without triggering an error. You can also set unimplemented parameters without triggering an error, if you observe the rules for syntax. You may wish to do this for testing purposes, to observe which parameters have been passed to the OC Servlet.

- You can view the parameters that have been passed, along with the other Java system properties set for the OC Servlet, in the servlet log file. See the description of `cz.uiservlet.logfilename` on page 2-35 for details.

- If you omit all the properties that produce log files, then logging will be turned off. These properties are listed in Table 2–4.

<table>
<thead>
<tr>
<th>Property</th>
<th>Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>cz.uimanager.logpath</code></td>
<td>on page 2-23</td>
</tr>
<tr>
<td><code>cz.uiservlet.logfilename</code></td>
<td>on page 2-35</td>
</tr>
</tbody>
</table>
If you are not starting up Apache in manual mode, you can set some parameters in `zone.properties` and other parameters in `jserv.properties` without triggering an error, but this is not recommended.

---

**Note:** Oracle Configurator gives precedence to parameters that are set in `zone.properties` as `initArgs` parameters. If you set a parameter with the same name in both `zone.properties` and `jserv.properties`, then only the one in `zone.properties` is used. This behavior overrides the normal behavior of Apache, in which precedence is given to the first setting of a parameter, and `jserv.properties` is read first, effectively giving precedence to the parameters set in that file.

---

### 2.3.2 Descriptions of Oracle Configurator Servlet Properties

The properties of the OC Servlet for which you can set Apache configuration parameters are listed in Table 2–5 on page 2-17. The columns “Applet” and “DHTML” indicate the type of runtime Oracle Configurator with which the property can be used. For additional details on using some of these properties with the DHTML runtime Oracle Configurator, see the *Oracle Configurator Implementation Guide*.

**Table 2–5  Properties for the Oracle Configurator Servlet**

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
<th>Applet</th>
<th>DHTML</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Properties used by both Applet and DHTML windows:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>cz.activemodel</code></td>
<td>on page 2-19</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.activemodel.lazyloadlistprice</code></td>
<td>on page 2-21</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uimanager.logpath</code></td>
<td>on page 2-23</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uiserver.check_heartbeat_timeout</code></td>
<td>on page 2-25</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uiserver.ciolog</code></td>
<td>on page 2-27</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uiserver.heartbeat_interval</code></td>
<td>on page 2-27</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uiserver.lazyload</code></td>
<td>on page 2-28</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uiserver.poll_timeout_applet</code></td>
<td>on page 2-30</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uiserver.poll_timeout_applet_to_dhtml</code></td>
<td>on page 2-30</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><code>cz.uiserver.applet_client_poll_wait</code></td>
<td>on page 2-24</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>
Table 2–5  (Cont.) Properties for the Oracle Configurator Servlet

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
<th>Applet</th>
<th>DHTML</th>
</tr>
</thead>
<tbody>
<tr>
<td>cz.uiservlet.dio_share</td>
<td>on page 2-32</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.jdbcdriver</td>
<td>on page 2-34</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.logfilename</td>
<td>on page 2-35</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.name</td>
<td>on page 2-36</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.pre_load_filename</td>
<td>on page 2-36</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.url</td>
<td>on page 2-38</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.versionfuncsavail</td>
<td>on page 2-38</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>cz.use_client_iana_encoding</td>
<td>on page 2-39</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Properties used only by Applet window:

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
<th>Applet</th>
<th>DHTML</th>
</tr>
</thead>
<tbody>
<tr>
<td>cz.uiserver.media.folder</td>
<td>on page 2-30</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>cz.uiservlet.applet.summary</td>
<td>on page 2-31</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

Properties used only by DHTML window:

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Description</th>
<th>Applet</th>
<th>DHTML</th>
</tr>
</thead>
<tbody>
<tr>
<td>cz.html.source.display</td>
<td>on page 2-21</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.html.source.formtreeview</td>
<td>on page 2-22</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.html.source.treeview</td>
<td>on page 2-22</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.scrolling.treeview</td>
<td>on page 2-22</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiserver.add_instance_expansion_policy</td>
<td>on page 2-23</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiserver.auto_expand_entire_tree</td>
<td>on page 2-25</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiserver.lazyload</td>
<td>on page 2-28</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiserver.illegal_is_not_available</td>
<td>on page 2-29</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiserver.summary.itemcolumn</td>
<td>on page 2-31</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.blaftemplateurl</td>
<td>on page 2-31</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.formtemplateurl</td>
<td>on page 2-33</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.hide_uiservlet_errors</td>
<td>on page 2-33</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.ignore_url_properties</td>
<td>on page 2-34</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.proxyscript</td>
<td>on page 2-37</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>cz.uiservlet.templateurl</td>
<td>on page 2-38</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>
**cz.activemodel**

Controls the type of prices to be displayed. See the section on pricing in the *Oracle Configurator Implementation Guide* for more details on controlling pricing.

The syntax for this setting is:

```
cz.activemodel=/switch
```

Where *switch* is one of the values listed in Table 2–6.

<table>
<thead>
<tr>
<th>Switch</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>lp</td>
<td>Fetch List Prices from the database.</td>
</tr>
<tr>
<td>dp</td>
<td>Fetch Discounted Prices from the database.</td>
</tr>
<tr>
<td>atp</td>
<td>Fetch ATP data from the database.</td>
</tr>
<tr>
<td>nolp</td>
<td>Do not fetch List Prices from the database.</td>
</tr>
<tr>
<td>nodp</td>
<td>Do not fetch Discounted Prices from the database.</td>
</tr>
<tr>
<td>noatp</td>
<td>Do not fetch ATP data from the database.</td>
</tr>
<tr>
<td>deltaMode</td>
<td>Values are ALL or BOM. Setting the value to ALL causes the CIO method IRuntimeNode.isChildChanged() to examine all descendants of the current node. Setting the value to BOM restricts the examination to BOM nodes only. The default value is BOM.</td>
</tr>
<tr>
<td>Syntax:</td>
<td>`cz.activemodel=/other switches/</td>
</tr>
<tr>
<td>Example:</td>
<td>`cz.activemodel=/lp</td>
</tr>
</tbody>
</table>

You can set more than one switch. The syntax for this setting is:

```
cz.activemodel=/switch1|/switch2
```

Note that each switch is separated by the pipe character ( | ), and that the pipe character is required at the end of the property setting.

If you set contradictory switches, then only the first switch is respected. Example:

```
cz.activemodel=/lp|/nolp
```
The default pricing behavior for the OC Servlet is that all price fetching is turned off. You can produce this behavior by omitting the `cz.activemodel` property from the OC Servlet’s configuration files.

If one of the switches that disable fetching has been set, the end user will receive an error message when pricing is requested in the runtime Oracle Configurator.

Be aware that in Dynamic HTML in a browser, the display of columns for Discount Price and Extended Price is controlled by the initialization message. If you pass pricing parameters, these columns will be displayed.

---

**Note:** If you are using iAS 1.0.2.2.2, specifying a value for `cz.activemodel` in `jserv.properties` prevents the JVM (Java Virtual Machine) from starting. To resolve this, add the following line to `zone.properties`:

```
serverlets.default.initArgs=cz.activemodel=/lp|/dp|/atp|/ap|/ap
```

---

**Caution:** Oracle also uses the `cz.activemodel` property internally to write debugging output to a file pathname. If you are using the property to write debugging output, you must ensure that the pathname is specified explicitly, to avoid conflicts with the pricing switches. For example, if your output path is `/lp`, then you must write the property value as `/lp/` to avoid conflict with the pricing switch `/lp`. If `cz.activemodel` is not specified, the debugging output is directed to `cz.uimanager.logpath`, so be sure that you observe this caution for that property as well.

---

**Examples of Setting Pricing Switches**

The following table lists examples of setting pricing switches, and their effects.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>cz.activemodel=/lp</code></td>
<td>List Prices will be fetched and displayed.</td>
</tr>
</tbody>
</table>
Controls the incremental fetching of list price data from the database. The fetching of list prices can impose a significant performance cost, especially if your Model is complex. See the Oracle Configurator Implementation Guide for more background on pricing in Oracle Configurator.

If you set this property to true, then list prices are only fetched for the items on the page that is currently being displayed. When the runtime Oracle Configurator is initialized, list prices are fetched only for the first screen displayed. Thereafter, list prices are fetched only when a new page is displayed.

If you set this property to false, then list prices are fetched for all the items in your Model, regardless of the page on which they appear.

The default value is true.

Syntax:

\[ \text{cz.activemodel.lazyloadlistprice=[true|false]} \]

Example:

\[ \text{cz.activemodel.lazyloadlistprice=true} \]

cz.html.source.display

Specifies the JSP template file that produces the primary display view in the runtime Oracle Configurator.

Syntax:

\[ \text{cz.html.source.display=http://hostname:portnum/html_vpath/czdisp.jsp} \]

Example:
Oracle Configurator Servlet Properties

- **cz.html.source.display**
  
  `http://www.mysite.com:8802/OA_HTML/czdisp.jsp`
  
  For important information about using JSP template files, see "cz.uiservlet.ignore_url_properties" on page 2-34.

- **cz.html.source.formtreeview**
  
  The tree template rendered when the look and feel is for the Form type. This corresponds to the "Oracle Forms Look" specified in Oracle Configurator Developer when creating a new User Interface.
  
  Syntax:
  
  `cz.html.source.formtreeview=http://host:port/html_vpath/czFormTree.jsp`
  
  Example:
  
  `cz.html.source.formtreeview=http://www.mysite.com:8802/OA_HTML/czFormTree.jsp`
  
  For important information about using JSP template files, see "cz.uiservlet.ignore_url_properties" on page 2-34.

- **cz.html.source.treeview**
  
  Specifies the JSP template file that produces the tree view in the runtime Oracle Configurator.
  
  Syntax:
  
  
  Example:
  
  `cz.html.source.treeview=http://www.mysite.com:8802/OA_HTML/cztree.jsp`
  
  For important information about using JSP template files, see "cz.uiservlet.ignore_url_properties" on page 2-34.

- **cz.scrolling.treeview**
  
  Controls whether there is scrolling in the tree view frame in the configuration window.
  
  The default value is **auto**.
  
  Syntax:
  
  `cz.scrolling.treeview=[auto|yes|no]`
Example:

cz.scrolling.treeview=yes

cz.uimanager.logpath

Sets the path into which the UI Server will write a log file only when it handles an exception and exits. Exception logs are named with the convention:

cz-exc_date_time_processid.txt

(Normal log file names and locations are controlled by the property cz.uiservlet.logfilename on page 2-35.)

Syntax:

cz.uimanager.logpath=logging_dir/

A trailing slash character must be added to the value.

Example for the Solaris™ Operating Environment:

cz.uimanager.logpath=jserv_install/logs/

Example for Windows NT:

cz.uimanager.logpath=D:\oran\OSP\OSP\log\n
---

**Caution:** The cz.uimanager.logpath property is also used internally by Oracle to write debugging output to a file pathname, in the event that the cz.activemodel property is not specified. See the Caution on page 2-20 for the cz.activemodel property for an explanation.

---

cz.uiserver.add_instance_expansion_policy

This property controls whether new component instances added to the configuration are expanded in the Navigation Tree when an end user clicks an Add button at runtime.

This property is not defined in jserv.properties by default.

Valid values include NodeOnly and NodeAndAllChildren.

Set this property to NodeOnly to display only the new instance in the Navigation Tree when the end user clicks an Add button (this is the default behavior). In this
case, the end user must manually expand the node (by clicking on it) to view its substructure.

Set this property to `NodeAndAllChildren` to display the new instance and its entire substructure in the Navigation Tree when the end user clicks an **Add** button.

**Syntax:**

```plaintext
cz.uiserver.add_instance_expansion_policy=[NodeOnly|NodeAndAllChildren]
```

**Example:**

```plaintext
cz.uiserver.add_instance_expansion_policy=NodeAndAllChildren
```

**Add** buttons and the Navigation Tree are explained in the *Oracle Configurator Developer User's Guide*.

---

**cz.uiserver.applet_client_poll_wait**

If your operating system is Macintosh version 9x running mrj 2.2x and you have implemented Secure Sockets Layer (SSL), this property sets the length of time that the Applet session "sleeps" between polls to the server, allowing the DHTML session a free connection to the server. If your operating system is not the specific Macintosh version listed above or you have not implemented SSL, the OC Servlet ignores this property.

Background: In Macintosh version 9x, mrj 2.2x, the Applet and DHTML windows do not maintain separate connections when polling the server. This adversely affects the performance of the DHTML UI and may even cause it to fail.

See "The Heartbeat Mechanism and Guided Selling" on page 2-26 for additional background.

The suggested range is 5,000 to 30,000 milliseconds. The default value is 15,000 milliseconds.

**Note:** Setting this property to a small value (such as 5,000) may affect the runtime performance of the DHTML UI. Specifying a large value (such as 30,000) improves runtime performance, but increases the time required to return control to the OM Sales Order window when the Oracle Configurator session ends.

**Syntax:**

```plaintext
cz.uiserver.applet_client_poll_wait=milliseconds
```

---

---
Example:

cz.uiserver.applet_client_poll_wait=20000

cz.uiserver.auto_expand_entire_tree

This property controls whether branches in the runtime Navigation Tree that represent BOM Option Classes are visible when an Oracle Configurator session begins.

If this property is not defined in jserv.properties or it is set to false, only the top-level branches of the Navigation Tree are visible when an Oracle Configurator session begins. In this case, the end user must manually expand the tree to view any branches that represent BOM Option Classes.

If this property is set to true, all branches of the Navigation Tree that represent BOM Option Classes are visible when an Oracle Configurator session begins.

This property is not defined in jserv.properties by default, and is used only by the DHTML UI.

Syntax:

cz.uiserver.auto_expand_entire_tree=[true|false]

Example:

cz.uiserver.auto_expand_entire_tree=true

For more information about the runtime Navigation Tree, see the Oracle Configurator Developer User’s Guide.

cz.uiserver.check_heartbeat_timeout

Controls the timeout for the UI Server’s checking of "heartbeat" events. (See "The Heartbeat Mechanism and Guided Selling" on page 2-26 for a description of heartbeat events.) If the UI Server doesn’t receive any heartbeats from the DHTML client browser after this time value, then the UI Server will end itself and the guided buying or selling session in the DHTML user interface is terminated, with a "terminate" message being sent back to the Applet client. The default value is 30,000 milliseconds.

If loading a large configuration model on to the DHTML client, this property should be changed to a value close to the time it takes to load the Model. For example, if the configuration model takes 60 seconds to load, the value of this property should be set to approximately 60000 milliseconds.
Syntax:

cz.uiserver.check_heartbeat_timeout=milliseconds

Example:

cz.uiserver.check_heartbeat_timeout=30000

The Heartbeat Mechanism and Guided Selling

You can enable the use of the DHTML User Interface to provide guided buying or selling in Oracle Order Management, which normally uses the Java applet User Interface. (See the Oracle Configurator Developer User’s Guide for details on how to enable the DHTML User Interface for Order Management.)

In this situation, an Oracle Configurator Applet client runs under Order Management, but is not visible to the end user. The Applet client is not able to directly determine the status of the end user’s DHTML client browser, so it is not able to know if the client browser has crashed or been closed prematurely. To handle this problem, Oracle Configurator uses a "heartbeat" mechanism, in which:

1. The DHTML client (the browser) sends heartbeat events to a DHTML session running in the UI Server. Continued heartbeats indicate that the DHTML client is still "alive". A cessation of heartbeats indicate that the DHTML client has terminated. This cessation is detected by the DHTML session.

2. The Applet client polls an Applet session running in the UI Server, to check whether the UI Server has received a termination message from the DHTML session.

3. If the heartbeats received by the DHTML session cease to satisfy a specified frequency, then the UI Server sends the termination message to the Applet session, which is being polled by the Applet client running under Order Management.

The servlet properties that govern the operation of the heartbeat mechanism are listed in Table 2–8.

<table>
<thead>
<tr>
<th>Property</th>
<th>Page Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>cz.uiserver.check_heartbeat_timeout</td>
<td>on page 2-25</td>
</tr>
<tr>
<td>cz.uiserver.heartbeat_interval</td>
<td>on page 2-27</td>
</tr>
<tr>
<td>cz.uiserver.poll_timeout_applet</td>
<td>on page 2-30</td>
</tr>
</tbody>
</table>
The value for all of these heartbeat parameters must be greater than zero, and must be less than the timeout value for the Web listener. (For Apache, this listener timeout value is specified by the setting for Timeout in `httpd.conf`.)

To use guided buying or selling in Order Management, you must also ensure the JServ engine uses native threads. (See Section 2.1.3, "Verifying jserv.properties" on page 2-6.)

### cz.uiserver.cilog

Sets the absolute path and file name for the CIO activity log file.

(Normal log file names and locations are controlled by the property `cz.uiservlet.logfilename` on page 2-35.)

Syntax:

```plaintext
cz.uiserver.cilog=absolute_path/filename
```

Example:

```plaintext
cz.uiserver.cilog=jserv_install/logs/server_logs/cio_log.txt
```

### cz.uiserver.displayconsequences

If this parameter is set to `true`, then the OC Servlet displays the consequences of overriding a contradiction during a configuration session. If it is set to `false`, a contradiction message appears, but it does not describe the changes that will be made to the configuration if the user chooses to override the contradiction.

Syntax:

```plaintext
cz.uiserver.displayconsequences=[true|false]
```

Example:

```plaintext
cz.uiserver.displayconsequences=true
```

### cz.uiserver.heartbeat_interval

Controls the frequency at which the heartbeat is sent from the client browser to the UI Server. The default value is 10,000 milliseconds.
See "The Heartbeat Mechanism and Guided Selling" on page 2-26 for background.

Syntax:

```
cz.uiserver.heartbeat_interval=milliseconds
```

Example:

```
cz.uiserver.heartbeat_interval=10000
```

cz.uiserver.lazyload

This property controls how UI screens in a DHTML User Interface are loaded when an end user opens a Model in a runtime Oracle Configurator. Choose a value for this property based on how many child (referenced) Models are required in the configuration, as well as application screen sizes, and usage.

For example:

- Set this property to 0 (zero) if you want to load only the top level nodes in the Model (for example, the root Model node and all of its child Component nodes). This is the default value.
  
  This value is recommended if, for example, the Model contains many child Models that are required in the configuration (that is, the **Instances Minimum** value is set to 1 or more in Configurator Developer).

- Set this property to 1 if you want to load all of the top level nodes in the Model, and any required child Models.

- Set this property to 2 if you want to load all of the top level nodes in the Model, any required child Models, and all of the UI screens for these nodes.

- Set this property to 3 if you want to load all nodes, UI screens, and Model data.

If you set this property to a low value (such as 0 or 1), the initialization of the configuration session is faster, but the first visit to any screen is potentially slower (this is because the OC Servlet loads a UI screen only when the end user navigates to it). However, after a screen is visited once, subsequent visits to that screen are fast. This behavior may be more desirable if end users make numerous visits to a screen.

If you set this property to a higher value (such as 2 or 3), the initialization of the configuration session is slower, but the first visit to any UI screen is potentially faster (this is because all of the UI screens are loaded when the configuration session is initialized). Subsequent visits to that screen are also fast. If an end user visits each screen only once, and a fast initial load is not critically important, it may be appropriate to set this property to either 2 or 3.
Syntax:

cz.uiserver.lazyload=[0|1|2|3]

Example:

cz.uiserver.lazyload=0

---

**Note:** In previous versions of Oracle Configurator, the valid values for this property were `true` and `false`. If you recently upgraded your installation, note that a value of `true` is the same as setting this property to 0 (load only top Model nodes); and a value of `false` is the same as setting this property to 3 (load all nodes, UI screens, and data).

---

**Note:** Consider the interaction of the behavior of this property with that provided by `cz.uiservlet.dio_share` on page 2-32 and `cz.uiservlet.pre_load_filename` on page 2-36.

---

**cz.uiserver.lfalse_is_not_available**

Controls the appearance of options in the DHTML user interface when they have been set logically false (LFALSE) by Oracle Configurator.

By default, this parameter is set to `false`, which causes logically false options to be displayed as if they had never been selected (that is, as if their logic state were actually UNKNOWN).

Setting this parameter to `true` causes logically false options to be displayed with an icon (such as a red "X", which is the default icon).

In Oracle Configurator Developer, you can use the **Hide unselectable Controls and Options** setting to completely hide logically false options. For more information, see the section on dynamic visibility in the Oracle Configurator Developer User’s Guide.

Syntax:

cz.uiserver.lfalse_is_not_available=[true|false]

Example:

cz.uiserver.lfalse_is_not_available=true
Oracle Configurator Servlet Properties

For information about how this parameter affects runtime Oracle Configurator performance, see the Oracle Configurator Performance Guide.

**cz.uiserver.media.folder**

Location of the directory containing image media for the OC Servlet.

The default value is /OA_MEDIA/, which is used if this property is not set.

Syntax:

`cz.uiserver.media.folder=http://hostname:portnum/di_dir_path/`

Example:

`cz.uiserver.media.folder=http://www.mysite.com:8802/OA_MEDIA/alt/`

**cz.uiserver.poll_timeout_applet**

Sets the time after which the UI Server’s Applet session tells the Applet client to poll back, to check whether the UI Server session was terminated. The suggested range is 30,000 to 60,000 milliseconds. The default value is 20,000 milliseconds.

See "The Heartbeat Mechanism and Guided Selling" on page 2-26 for background.

Syntax:

`cz.uiserver.poll_timeout_applet=milliseconds`

Example:

`cz.uiserver.poll_timeout_applet=20000`

**cz.uiserver.poll_timeout_applet_to_dhtml**

Controls the timeout for the DHTML session when it is being checked by the applet session. The suggested range is 30,000 to 60,000 milliseconds. The default value is 30,000 milliseconds.

See "The Heartbeat Mechanism and Guided Selling" on page 2-26 for background.

Syntax:

`cz.uiserver.poll_timeout_applet_to_dhtml=milliseconds`

Example:

`cz.uiserver.poll_timeout_applet_to_dhtml=30000`
**cz.uiserver.summary.itemcolumn**

Controls whether the Item column is displayed or hidden on the Summary screen of the DHTML user interface.

Setting this parameter to `hidden` causes the Item column to be hidden. Omitting this property, or setting it to any other value, causes the Item column to be displayed.

This property has special relevance for MLS deployments. Because the Item column displays names that cannot be translated out of the base language, you may wish to hide this column.

Syntax:

```
cz.uiserver.summary.itemcolumn=[hidden]
```

Example:

```
cz.uiserver.summary.itemcolumn=hidden
```

**cz.uiservlet.applet.summary**

Sets the indentation character used for the summary grid in the Java Applet.

Syntax:

```
cz.uiservlet.applet.summary="."
```

**cz.uiservlet.blaftemplateurl**

The file rendered when the look and feel of the runtime UI is the BLAF (Browser Look And Feel) type. This corresponds to the "Oracle Web Look" option set when generating a new User Interface in Oracle Configurator Developer.

This property is not required in `zone.properties`. You may want to add this property if, for example, you are defining a servlet that displays HTML pages in a different language. If you define this property, you can specify its location either by entering a fully qualified path or a relative URL. The recommended method is using a relative URL.

Relative URL:

```
cz.uiservlet.blaftemplateurl=/OA_HTML/czBlafTemplate.jsp
```

Syntax of fully qualified path:

```
cz.uiservlet.blaftemplateurl=http://host:port/html_vpath/czBlafTemplate.jsp
```
Example of fully qualified path:

cz.uiservlet.blaftemplateurl=http://www.mysite.com:8802/OA_HTML/czBlafTemplate.jsp

For important information about using JSP template files, see "cz.uiservlet.ignore_url_properties" on page 2-34.

**cz.uiservlet.dio_share**

Controls whether the UI Server running inside the OC Servlet shares (caches) the Model in the DIO between configuration sessions.

Setting this property to **true** enables sharing the cached Model. Sharing the cached Model improves the loading performance of sessions after the first one for a given Model, but requires that the OC Servlet be restarted in order for the runtime Oracle Configurator to reflect recent changes to the Active Model. However, configuration sessions started with the Test button in Oracle Configurator Developer ignore the cached Model and fetch the latest Model from the database, thus reflecting changes to the Active Model. This setting provides a convenience for Model developers, while providing efficiency for runtime users. As a general rule, you should keep the property set to **true**.

Setting this property to **false** disables sharing of the cached Model for all configuration sessions on the same OC Servlet.

The default is **true**.

Syntax:

cz.uiservlet.dio_share=[true|false]

Example:

cz.uiservlet.dio_share=false

---

**Note:** This property provides a development convenience, when you disable Model caching. However, this convenience counteracts the performance enhancement derived by preloading and caching a Model at servlet startup, by using `cz.uiservlet.pre_load_filename`. You must also consider the interaction of this property with `cz.uiserver.lazyload` on page 2-28.
**cz.uiservlet.formtemplateurl**

The file rendered when the look and feel of the User Interface is the Oracle Applications "Forms" type. This corresponds to the "Oracle Forms Look" set when generating a new UI in Oracle Configurator Developer.

This property is not required in `zone.properties`. You may want to add this property if, for example, you are defining a servlet that displays HTML pages in a different language. If you define this property, you can specify its location by entering either a fully qualified path or a relative URL. The recommended method is using a relative URL.

Relative URL:
```
cz.uiservlet.formtemplateurl=/OA_HTML/czFormTemplate.jsp
```

Syntax of fully qualified path:
```
cz.uiservlet.formtemplateurl=http://host:port/html_vpath/czFormTemplate.jsp
```

Example of fully qualified path:
```
cz.uiservlet.formtemplateurl=http://www.mysite.com:8802/OA_HTML/czFormTemplate.jsp
```

For important information about using JSP template files, see "cz.uiservlet.ignore_url_properties" on page 2-34.

**cz.uiservlet.hide_uiservlet_errors**

This property determines whether error messages from the Oracle Configurator Servlet appear on the DHTML client (the Web browser). By default, this property does not exist in `jserv.properties` and OC Servlet error messages are not displayed on the client. In this case, all error conditions originating from the OC Servlet return the following message: "Application was unable to interpret event information."

The default behavior prevents error details from appearing in the client browser, making it more difficult for unauthenticated users to access the application and improving security of the runtime Oracle Configurator.

If you add this property to `jserv.properties` and set it to `false`, the OC Servlet sends a descriptive error message back to the DHTML client when the XML parser encounters an event parsing error.

Syntax:
```
cz.uiservlet.hide_uiservlet_errors=[true|false]
```
Example:

cz.uiservlet.hide_uiservlet_errors=true

cz.uiservlet.ignore_url_properties

This property determines whether the OC Servlet ignores the system properties that identify the JSP template files which are used to render screens in a DHTML User Interface. This property does not exist in jserv.properties by default.

If this property is not defined in jserv.properties or it is set to True, the Oracle Configurator Servlet uses the default JSP template files to render DHTML UI screens. In this case, the OC Servlet ignores the following properties:

- cz.html.source.display
- cz.html.source.formtreeview
- cz.html.source.treeview
- cz.uiservlet.blaftemplateurl
- cz.uiservlet.formtemplateurl
- cz.uiservlet.templateurl

If you recently upgraded your Oracle Configurator installation and want to continue to use any custom UI templates, you must add this property to jserv.properties and set it to False.

Syntax:

cz.uiservlet.ignore_url_properties=[true|false]

Example:

cz.uiservlet.ignore_url_properties=false

cz.uiservlet.jdbcdriver

Sets the class name of the JDBC driver for connecting the OC Servlet to a database.
There is no default setting. You must set this property.

Syntax:

cz.uiservlet.jdbcdriver=driver_class

Example:
cz.uiservlet.jdbcdriver=oracle.jdbc.driver.OracleDriver

**cz.uiservlet.logfilename**

The path and file name prefix for normal servlet and configuration session logging files. Do not specify a specific file name. The logs will automatically be prefixed with the prefix you specify. If this parameter is omitted, no logging files will be written.

The servlet log file records servlet startup and shutdown, the system and servlet properties passed to it, and the classpath used. It is named with the convention:

`prefix-servlet_date_time_processid.txt`

Example:

`cz-servlet_03Jan01_1056AM_23193.txt`

The configuration session log file records the initialization messages sent to the OC Servlet, the HTML template used, XML events, and JavaScript rendering. It is named with the convention:

`prefix-session_servletname_sessionid_date_time_processid.txt`

Example:

`cz-session-myservlet_DHTML2_03Jan01_1058AM_30519.txt`

The value of `servletname` is set by `cz.uiservlet.name` on page 2-36.

The output for `sessionid` is set by the UI Server. It is composed of an ID for the type of session (DHTML, APPLET, BatchSingle, or returnui) appended with a counter.

Example:

`DHTML2`

(Exception log file names and locations are controlled by the property `cz.uiservlet.logfilename` on page 2-35.)

**Syntax:**

`cz.uiservlet.logfilename=logging_dir/prefix`

**Examples for the Solaris™ Operating Environment:**

`cz.uiservlet.logfilename=jserv_install/logs/server_logs/cz`
Oracle Configurator Servlet Properties

cz.uiservlet.logfilename=/d01/oracle/viscomn/util/apache/1.3.9/Apache/Jserv/logs
/cz

Example for Windows NT:

cz.uiservlet.logfilename=D:\orant\OSP\OSP\log

cz.uiservlet.name

Provides a name for use in tracing your servlet in log files. The name is inserted into
the name of the session files written to the location specified by
cz.uiservlet.logfilename on page 2-35.

Syntax:

cz.uiservlet.name=string

Example:

cz.uiservlet.name=myservlet

cz.uiservlet.pre_load_filename

Absolute path to a file containing an initialization message for the OC Servlet. This
file is read if you are preloading the servlet. In order to preload a servlet with
Apache, you must specify its class name as the value of the parameter
servlets.startup in the file zone.properties.

Example for setting servlets.startup:

servlets.startup=oracle.apps.cz.servlet.UiServlet

Syntax for this property:

cz.uiservlet.pre_load_filename=absolute_path_to_init_file

The contents of init_file is a valid Oracle Configurator initialization message,
the construction of which is described in detail in the Oracle Configurator
Implementation Guide. Make sure that each initialization message in init_file is
completely on a single line, with no line breaks in the message text. There can be
multiple initialization messages in the file, but each message must be on its own
line.

Example for an initialization message:

<initialize>
<param name="database_id">dbc_filename</param>
Example for setting this property:

cz.uiservlet.pre_load_filename=/home/apache/init_msg.txt

---

**Note:** This property provides a performance enhancement, by caching a Model at servlet startup. However, this enhancement is counteracted if you disable Model caching, by setting `cz.uiservlet.dio_share` to `false`. You must also consider the interaction of this property with `cz.uiserver.lazyload` on page 2-28.

---

**cz.uiservlet.proxyscript**

URL of JavaScript source file for the Proxy Frame. See the *Oracle Configurator Implementation Guide* for details about the Proxy Frame.

This property is not required in `zone.properties`. You may want to add this property if, for example, you are defining a servlet that displays HTML pages in a different language. If you define this property, you can specify its location either by entering a fully qualified path or a relative URL. The recommended method is using a relative URL.

Relative URL:

cz.uiservlet.proxyscript=/OA_HTML/czProxy.js

Syntax of fully qualified path:

cz.uiservlet.proxyscript=http://hostname:portnum/html_vpath/czProxy.js

Example of fully qualified path:

cz.uiservlet.proxyscript=http://www.mysite.com:8802/OA_HTML/czProxy.js
Oracle Configurator Servlet Properties

**cz.uiservlet.templateurl**

URL of the HTML template for a DHTML client running in a Netscape Web browser. See the *Oracle Configurator Implementation Guide* for details about HTML templates.

This property is not required in `zone.properties`. You may want to add this property if, for example, you are defining a servlet that displays HTML pages in a different language. If you define this property, you can specify its location either by entering a fully qualified path or a relative URL. The recommended method is using a relative URL. If this property is not set in `zone.properties`, the servlet uses the URL defined for `cz.uiservlet.blaftemplateurl`.

Relative URL:
```
cz.uiservlet.templateurl=/OA_HTML/US/czFraNS.htm
```

Syntax:
```
```

Example:
```
```

**cz.uiservlet.url**

URL of the Oracle Configurator Servlet.

Syntax:
```
```

Example:
```
```

**cz.uiservlet.versionfuncsavail**

Use this property to determine whether the servlet responds to any message entered in a Web browser (for example, a test message). The default value of this property is True.

For more information, see Section 3.2, "Checking the Response of the UI Servlet" on page 3-1.
Syntax:

cz.uiservlet.versionFuncsAvail=[true|false]

Example:

cz.uiservlet.versionFuncsAvail=true

**cz.use_client_iana_encoding**

Add this property to jserv.properties if you are implementing Multiple Language Support (MLS) and want to display only one international language other than English on the same UI screen. This allows you to change the character set from one Oracle Configurator session to the next.

Syntax:

cz.use_client_iana_encoding=[Y|N]

Example:

wrapper.bin.parameters=cz.use_client_iana_encoding=N

---

**Note:** If you add this parameter, be sure the profile option ICX: CLIENT_IANA_ENCODING is *not* defined. If this profile option is defined, you will not be able to change the character set from one Oracle Configurator session to the next.

---

For more information about MLS, see Section 1.6 on page 1-13.
Troubleshooting Servlet Installation

This section provides suggestions for resolving problems that may arise when installing the Oracle Configurator servlet. This installation is described in Chapter 2, "Oracle Configurator Servlet Considerations".

3.1 Miscellaneous

- Make sure that you have set your virtual paths correctly.
- Make sure that your executable path includes the Shared Object files, (.so or .dll). A symptom of this problem might be an error message starting with a line like this one:

```
java.lang.UnsatisfiedLinkError: no czjni in shared library path
```

- Make sure that your database configuration file includes the batch validate username and password parameters. See Section 1.4.1, "Modify Database Configuration File Parameters" on page 1-4.

3.2 Checking the Response of the UI Servlet

**What you are checking**

Does the UI Servlet respond to a test message?

**The test**

Invoke this URL in a Web browser:

```
```
Checking the Response of the UI Servlet

where hostname is the name of your internet server, portnum is the port number for your Web listener, configurator is the virtual path that you set up when you installed the servlet, and test_string is an unquoted character string. Do not include any whitespace characters in test_string. If the servlet is installed correctly and running, it should produce an HTML page that prints the results listed in Table 3–1 for different values of test_string.

Note: The property cz.uiservlet.versionfuncsavail determines whether you can test the response of the servlet using a test string. See Section 2.3.2, “Descriptions of Oracle Configurator Servlet Properties” on page 2-17.

Table 3–1 Test Strings and Results

<table>
<thead>
<tr>
<th>Value of test_string</th>
<th>Result printed in HTML page</th>
</tr>
</thead>
<tbody>
<tr>
<td>version</td>
<td>The current build version of Oracle Configurator and the expected version for the CZ schema.</td>
</tr>
<tr>
<td>host</td>
<td>The host name of the Web server, and the listener port used. These are the values of hostname and portnum specified in your test URL.</td>
</tr>
<tr>
<td>any_other_string</td>
<td>The string that you entered.</td>
</tr>
</tbody>
</table>

Example:


produces a result like the following:

Using configuration software build: 11.5.4.15.55
Expecting schema: 15i

Example:


produces the following result:

hello_world
If the test fails

- In your internet server, turn on the maximum amount of logging. Look in the log file to see which classes it loads, and from which JAR files. Towards the end of this file, there may be a message that some class failed to load. It is probably the case that there is a JAR file in the list that is not in the path specified or that there was an error in specifying its name.

- There may be a basic problem with your configuration of Apache. See Section 3.4, “Checking the Operation of the Apache Internet Server” on page 3-5.

- *apps.zip* may not be in your class path.

- The JServ engine may not have been started up.

3.3 Checking Your Model in the Runtime Oracle Configurator

What you are checking

Does your configuration Model behave as you expect in the runtime Oracle Configurator?

---

**Note:** You can also test your Model through Configurator Developer, using the Test module. See the *Oracle Configurator Developer User’s Guide* for details.

---

The test

You can test the behavior of the DHTML runtime Oracle Configurator by creating an HTML test page that substitutes for your host application.

1. Create an HTML test page that posts the OC initialization message to the UI Servlet.

   See the chapter on session initialization in the *Oracle Configurator Implementation Guide* for an explanation of the OC initialization message.

   See Example 3–1, and the *Oracle Configurator Implementation Guide* for examples of simple test pages.

**Example 3–1  HTML Test Page for Invoking the DHTML runtime Oracle Configurator**

```html
<html>
<head>
<title>Minimal Configurator Test</title>
```

Troubleshooting Servlet Installation 3-3
Checking Your Model in the Runtime Oracle Configurator

<form>
  <input type="hidden" name="XMLmsg" value="
    <initialize>
      <param name="database_id">serv01_sid02</param>
      <param name="ui_type">DHTML</param>
      <param name="ui_def_id">3120</param>
    </initialize>"
  >

  <p>Click the button to configure the model...</p>
  <input type="submit" value="Configure" />
</form>

2. Ensure that you have the necessary database connectivity, and that your UI Servlet is installed and configured correctly. See Chapter 2, "Oracle Configurator Servlet Considerations".

3. Test the runtime Oracle Configurator by opening the HTML test page.

Your default Web browser opens, displaying the current Model using the selected User Interface, in a frame built with the Oracle Configurator HTML templates. If you used Example 3–1, click the button to produce the User Interface.

See Figure 3–1 on page 3-5 for a general example of the appearance of the DHTML runtime Oracle Configurator.
3.4 Checking the Operation of the Apache Internet Server

Test 1 - What you are checking
Does your Apache internet server respond at all?

The test
1. Compile the code in Example 3–2 into the file Hello.class in your servlets directory.
2. In a Web browser, invoke this URL:
http://hostname:portnum/servlet_vpath/Hello

where hostname is the server that you have installed on, portnum is the port number configured for the HTTP listener, and servlet_vpath is the mounting location specified by ApJServMount in the file Jserv.conf (this is usually configurator). For example:

http://www.mysite.com:10130/configurator/Hello

3. The browser should display the HTML message written by your test class.

**Example 3–2 Hello.java Test Class**

```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

/**
 * This is a simple example of an HTTP Servlet. It responds to the GET
 * and HEAD methods of the HTTP protocol.
 */
public class Hello extends HttpServlet
{
    /**
     * Handle the GET and HEAD methods by building a simple Web page.
     * HEAD is just like GET, except that the server returns only the
     * headers (including content length) not the body we write.
     */
    public void doGet (HttpServletRequest request,
                      HttpServletResponse response)
        throws ServletException, IOException
    {
        PrintWriter out;
        String title = "Example Apache JServ Servlet";

        // set content type and other response header fields first
        response.setContentType("text/html");

        // then write the data of the response
        out = response.getWriter();
        out.println("<HTML><HEAD><TITLE>" + title + "</TITLE></HEAD><BODY bgcolor="#FFFFFF">");
        out.println("<H1>" + title + "</H1>");
    }
```
out.println("<H2> Congratulations, ApacheJServ is working!<br>");
out.println("</BODY></HTML>");
out.close();
}

If the test fails
Check that the internet server installation, the port number, and that the server you chose is available on the right network. Sometimes this can be a server name problem. To get around that problem, refer to the server by its IP address.

Test 2 - What you are checking
Is the hostname and port valid?

The Test
In a Web browser, invoke this URL:

http://hostname:portnum/

If the test is successful, the "Oracle Applications Rapid Install Portal" page appears. This indicates that Apache is working and that the hostname and port are valid. If this test works, but the first test did not, then there could be problems with the JServ/JVM configuration. Check the mount point (ApJServMount directive) in jserv.conf and look for errors in the mod_jserv_log and jserv_log files. Additionally, confirm that Java is setup correctly (change directory to the Java interpreter path specified in jserv.properties and enter "java -version").

If this test returns an error, there are problems with Apache on the machine. Check the error_log, make sure httpd.conf (or httpds.conf) is set up properly, and make sure the hostname is a resolvable DNS entry.

Test 3 - What you are checking
Does the /OA_HTML/ alias exist and, if so, is it valid?

The Test
In a Web browser, invoke this URL:

http://hostname:portnum/OA_HTML/czxml2js.xsl

Verify that a page can be pulled up (it will look like HTML source code). If this test fails, be sure that:
The /OA_HTML/ alias is set up correctly (in httpd.conf or httpds.conf or oracle_apache.conf or apps.conf)

There is no OA_HTML directory under the DocumentRoot (httpd.conf or httpds.conf)

Check Apache Configuration Files

If these tests do not resolve the problem, check the following Apache/JServ configuration files.

- In JServ.conf, check the settings of the following parameters and modify them as required:
  - **ApJServMount**: This parameter specifies the mount points for servlets zones. Be sure the following entry exists:

    ```
    ApJServMount /configurator /root
    ```

    See Section 2.1.2, "Verifying jserv.conf" on page 2-5.

- **ApJServVMTimeout**: This parameter indicates amount of time (in seconds) to give to the JVM to start up as well as the amount of time to wait to "ping" the JVM to see if it is active. For slow or heavily loaded machines, you may want to increase this value. The default is 10 seconds (used when the line is preceded by a "#" symbol).

    If the mod_jserv.log shows the JVM continually being spawned, exited, and restarted, increase this value to 300, restart Apache, and test again. If the problem goes away, it means the server is too heavily loaded. This is most often seen on single tier systems.

    For example:

    ```
    ApJServVMTimeout 300
    ```

- **ApJServManual**: This determines whether Apache will automatically start Apache JServ and Java Virtual Machine (JVM). If this is commented out (line is preceded by a "#") or set to off, then Apache will automatically start Apache JServ using the parameters specified in jserv.properties.

    If this parameter is set to on, then Apache JServ must be started manually via shell scripts. In this case, the parameters set in jserv.properties will not be used, and must be set in the scripts used to start the JVM. This parameter is set to on when load balancing is implemented. See Section 2.2, "Load Balancing" on page 2-9.
In the JServ.properties file, check the following and make changes as required:

- The path of the Java interpreter (java.exe or jre.exe) - Near the top of the file (just under "# The Java Virtual Machine interpreter") there is a line that begins with wrapper.bin. This must point to the full path of the Java executable (Java or JRE). This is usually apache_install/jdk/bin/java, where apache_install is replaced by the actual path.

  For example:
  
  `wrapper.bin=/u09/oracle/test1ora/iAS/Apache/jdk/bin/java`

  Note that the JRE or JDK (Java) can be used in many cases, but in other cases only the JDK can be used (for example, Oracle CRM). Rapid Install installs the JDK on the Solaris™ Operating Environment, but it is a manual process on other platforms.

- You must add the following parameters if you just upgraded to version 16.x of Oracle Configurator Developer:
  
  - `cz.uiservlet.blaftemplateurl`
  - `cz.uiservlet.formtemplateurl`
  - `cz.html.source.formtreeview`

  The value of ApJServManual determines where these parameters must be set:

  - If ApJServManual is set to off (or the line is commented out) in JServ.conf, add the parameters to the Jserv.properties file.
  - If ApJServManual is set to on, add the parameters to the zone.properties file.

  For more information about these properties, see Section 2.3, "Oracle Configurator Servlet Properties" on page 2-14.

- Verify that the Oracle Applications profile option BOM:Configurator URL of UI Manager has the same value as the cz.uiservlet.url parameter. (All Configurator Developer parameters in JServ.properties begin with wrapper.bin.parameters=-Dcz.) Refer to the Oracle Applications System Administrator’s Guide for information about setting profile options.

- The Shared Library Path - This variable points to the directory that contains the Configurator shared library(s). This path is always $CZ_TOP/bin. The shared library path variable name is platform-dependent. Table 3–2 lists the library path name for each operating system.
The CLASSPATH - See Section 2.1.3, "Verifying jserv.properties" on page 2-6.

**Table 3–2  Library Path Variable Names by Operating System**

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Variable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solaris ™ Operating Environment</td>
<td>LD_LIBRARY_PATH</td>
</tr>
<tr>
<td>HP</td>
<td>SHLIB_PATH</td>
</tr>
<tr>
<td>AIX</td>
<td>LIBPATH</td>
</tr>
<tr>
<td>NT</td>
<td>PATH</td>
</tr>
</tbody>
</table>

For example, if the operating system is the Solaris ™ Operating Environment:

```
wrapper.env=LD_LIBRARY_PATH=/u012/oracle/crplappl/cz/11.5.0/bin
```

**Note:** After running Oracle Rapid Install, the shared object files may need to be relinked with adrelink.
Installing Oracle Configurator Developer

Oracle Configurator Developer is the development and maintenance environment used to create configuration models and custom Oracle runtime configurator windows. Before installing Oracle Configurator Developer, be sure you have satisfied the following prerequisites:

- If you have a prior version of Oracle Configurator Developer, uninstall all components before installing the new version.
- Ensure that you have release 10.7, 11.0.1, 11.0.2, 11.0.3, or 11i of Oracle Applications installed and configured.
- For all development installations, ensure that Oracle8i Enterprise Edition (or higher) is installed on the server machine and Oracle8 Client is installed on the client machine.
- For Web deployment or development testing using the DHTML or JAVA applet, install a supported internet server and the OC servlet. See “System Requirements” on page 1-2 and Chapter 2, “Oracle Configurator Servlet Considerations” for more information.

4.1 The Oracle Configurator Developer Software

Table 4–1 lists the software included with Oracle Configurator Developer Release 11i.

<table>
<thead>
<tr>
<th>Product</th>
<th>Revision</th>
<th>Level</th>
<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Configurator Developer</td>
<td>11i</td>
<td>Production</td>
<td>Yes</td>
</tr>
<tr>
<td>Installation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oracle Configurator Developer</td>
<td>11i</td>
<td>Production</td>
<td>Yes</td>
</tr>
</tbody>
</table>
The folders called Migration and doc that are included in the Oracle Configurator Installation are described below:

- The Migration folder contains SQL scripts that enable you to migrate from Oracle SellingPoint 4.2.2 or later to the CZ schema version 14e (Release 11i of Oracle Applications, version 11.5.3 or 11.5.4). Note that your Oracle SellingPoint schema must be 14e before migrating. For more information, see the chapter on data migration in the Oracle Configurator Implementation Guide.

- The doc folder contains the following book files:
  
  - Oracle Configurator Developer User’s Guide.pdf
  - Oracle Configurator Installation Guide.pdf
  - Oracle Configurator Implementation Guide.pdf
  - Oracle Configuration Interface Object (CIO) Developer’s Guide.pdf

  You must have Adobe Acrobat Reader to view these books. Adobe Acrobat Reader is available on the Oracle Configurator Developer compact disc, by opening the file ar40eng.exe.

### 4.2 Installing Oracle Configurator Developer

Follow these steps to install Oracle Configurator Developer from the Oracle Configurator Developer compact disc:

1. Exit all other applications.
2. Insert the Oracle Configurator Developer compact disc.
3. From the Start menu, run:
Installing Oracle Configurator Developer Patches

D:\OCSetup.EXE

where D is your CD-ROM drive.

4. Specify the destination location for the installed components or accept the default location (%ORACLE_HOME%\OC\).

5. If you are running Windows 95/98, a dialog box appears prompting you to install DCOM98 from the Oracle Configurator Developer compact disc.

6. After the component installation is complete, a dialog box appears asking if you would like to install the Microsoft Data Access Components (MDAC). If you do not already have MDAC 2.1 installed, choose Yes.

7. Once the installation is complete on Windows 95/98, a confirmation dialog appears. If you have installed MDAC, your Windows 95/98 machine will reboot. You should reboot after installing any Oracle Configurator component on a Windows 95/98 machine. No reboot is necessary on Windows NT.

8. An spx.ini file was installed on your machine. This file contains default settings and may need to be edited for your site. Any previously installed spx.ini file was not overwritten by this install, but renamed spx.ini.bak. See Section 4.4.2.6, "Set Parameters in the spx.ini File for Development and Testing" on page 4-12 and the Oracle Configurator Implementation Guide for details on setting parameters in the spx.ini file.

To run Oracle Configurator Developer and a runtime Oracle Configurator, see "Test Your Oracle Configurator Developer Installation" on page 4-17.

4.3 Installing Oracle Configurator Developer Patches

After your initial install of Oracle Configurator Developer is completed, you can apply the latest patch or an interim release to your Oracle Configurator Developer environment. To obtain the latest Oracle Configurator Developer patches or interim releases, create a shipping TAR requesting the desired version from Metalink (Oracle’s technical support Web site), or any other standard Oracle Support method.

Follow these steps to install Oracle Configurator Developer patch:

1. Exit all other applications.

2. Uninstall any previously installed versions of Oracle Configurator Developer.

3. Unzip the patch .zip file.

4. From the Start menu, run OCSetup.exe.
5. Follow steps 4. through 8. of the instructions in "Installing Oracle Configurator Developer" on page 4-2.

6. Stop and then restart the Apache Web server.

### 4.4 Oracle Configurator Developer Client/Server Environments

Running Oracle Configurator and Oracle Configurator Developer involves servers that are both hardware devices running processes shared by client machines, as well as the shared server processes themselves.

A runtime Oracle Configurator and Oracle Configurator Developer typically run on client machines connected to the Oracle Applications database server. A runtime Oracle Configurator embedded in other Oracle Applications, such as Order Management, runs on the application server machine where the calling application runs. A runtime Oracle Configurator embedded in other Oracle Applications (such as Order Management and iStore) or in a custom Web application runs on the internet server machine.

#### 4.4.1 Server Environment for Oracle Configurator Developer

There are a number of servers included in the Oracle Configurator Developer environment:

- Database server where the Oracle Applications database, including the CZ schema, is installed
- Forms server running Oracle Applications Forms
- Web server for Web deployments

Figure 4–1 illustrates how Oracle Applications Forms and the Oracle Applications database containing the CZ schema can be located on separate machines.
In general, the Oracle Applications database with the CZ schema is installed on a database server for access by Oracle Configurator Developer and test runtime Oracle Configurators. This is the case for any installation of Oracle Configurator. Oracle Applications Forms and the Oracle Applications database containing the CZ schema can be located on separate machines. The server machine where the CZ schema is installed must also have Oracle8i Enterprise Edition installed and the client machine(s) must have Oracle8 Client installed.

The database server setup includes the following tasks:

- Install Oracle8i Enterprise Edition first
- Install the Oracle Applications database
- Create Users and Responsibilities (see "Establish Users and Responsibilities" on page 4-5)
- Set Oracle Configurator Developer database settings (see Section 4.4.2.6, "Set Parameters in the spx.ini File for Development and Testing" on page 4-12)

For information about installing the Oracle Applications database, see *Installing Oracle Applications*. For detailed information about the CZ schema or specific information about CZ schema DB settings, see *Oracle Configurator Implementation Guide*.

### 4.4.1.1 Establish Users and Responsibilities

An Oracle Configurator Developer user is established through Oracle Applications administration and resides in the Oracle Applications database. Each user must also be defined as a database user in the Oracle8i Enterprise Edition server database.
running the CZ schema and be assigned an Oracle Configurator responsibility (Configurator Administrator or Configurator Developer).

You can log in to Oracle Configurator Developer as an Oracle Applications user assigned either the Configurator Administrator or Configurator Developer responsibility. To do this, however, the datasource description in the spx.ini file on the client machine must provide additional gateway parameters (gwyuid and gwypass) that specify the Oracle public gateway login information. See Section 4.4.2.6, “Set Parameters in the spx.ini File for Development and Testing” on page 4-12. See the Oracle Configurator Implementation Guide for more information on these and other spx.ini parameters.

4.4.1.2 Users and Responsibilities for Accessing Runtime Oracle Configurators

Users of the runtime Oracle Configurator (DHTML or Java Applet) are created by your Oracle Applications system administrator and reside in the Oracle Applications database.

4.4.1.3 Running Oracle Configurator Developer Using a Terminal Server

Because Configurator Developer is a database-intensive application, the recommended configuration is to run the application over a local area network (LAN). However, your organization may need to work over a remote or wide area network (WAN). To run Configurator Developer on a remote database server while maintaining an acceptable level of performance requires the use of terminal server emulation software.

This software provides remote access to a server desktop and can run on a number of client hardware devices, such as a personal computer. Using a terminal server program minimizes network bandwidth requirements between the database server and client (Configurator Developer) and enables multiple users to run the application simultaneously.

To install Configurator Developer to run on a terminal server, be sure that:

- No one else is logged in to the system during installation
- Installation is performed by the system administrator or a user with the Administrator responsibility
- The installation process is performed using the "Add and Remove Programs" option from the Windows Control Panel

To install Configurator Developer for use with terminal emulation software, perform the following:
1. Log in to the terminal server machine as the System Administrator, then choose Start > Settings > Control Panel > Add/Remove Programs.

2. If Oracle Configurator Developer appears in the list of installed applications, uninstall the application.

3. Click Install.

4. Insert the Oracle Configurator Developer compact disc or navigate to the location of the file OCSetup.exe, then continue with the installation.

5. When prompted, choose to enable the application for All Users.

6. If this is the initial Oracle Configurator Developer installation, click Yes when prompted to install the Microsoft Data Access Components (MDAC); otherwise, click No.

7. When the installation is complete, modify the default spx.ini file as required. See Section 4.4.2.6, “Set Parameters in the spx.ini File for Development and Testing” on page 4-12 and the Oracle Configurator Implementation Guide for details on setting parameters in the spx.ini file.

8. Copy the modified spx.ini file to each user’s Windows directory on the terminal server.

For example:

\[user_folder/\]windows/[spx.ini]

### 4.4.2 Client Environment for Oracle Configurator Developer

Installing Oracle Configurator for an implementation, test, or maintenance environment consists of installing Oracle Configurator Developer. Oracle Configurator Developer runs on a client machine with Oracle8 Client for:

- Implementers developing and testing a runtime Oracle Configurator.
- People who are maintaining, supporting, and upgrading a deployed runtime Oracle Configurator.

#### 4.4.2.1 Oracle8 Client Installation

Oracle8 Client allows the Oracle Configurator Developer user to access an Oracle8i Enterprise Edition database from a client machine not running Oracle8i Enterprise Edition. Networked client machines must have Oracle8 Client installed if they access the Oracle8i Enterprise Edition Server database.
4.4.2.2 Runtime Oracle Configurator Client Requirements

When unit testing the UI (Java applet or DHTML) from Oracle Configurator Developer using the Test button, the URL for the DHTML and Java applet Servlet UI and JDBC thin client parameter (for DHTML only) must be specified in the spx.ini file. See Section 4.4.2.6, "Set Parameters in the spx.ini File for Development and Testing" on page 4-12.

4.4.2.3 Set Up Oracle Configurator Developer

The usual setup is Oracle Configurator Developer running on a client machine networked to a server where the Oracle Applications database with the CZ schema is installed. The requirements for a networked setup are:

- Oracle8 Client is installed on the client machine that is running Oracle Configurator Developer. See "Oracle8 Client Installation" on page 4-7.
- The client machine is configured to connect to the database server (Oracle Net8 Easy Config). See "Enable the Client for Database Connectivity" on page 4-9.
- A datasource name (DSN) for the CZ schema on the server machine is defined in ODBC Administrator on the client machine. See 'Create DSNs and DBOwners' on page 4-10.
- The user logged into Oracle Configurator Developer is a user defined in the Oracle Applications database.
- The spx.ini file is edited to include the correct DSN and DBOwner for the CZ schema on the server. See Section 4.4.2.6, "Set Parameters in the spx.ini File for Development and Testing" on page 4-12.
- Test your Oracle Configurator Developer installation. See "Test Your Oracle Configurator Developer Installation" on page 4-17.

Figure 4–2 illustrates an overview of the architecture of client/server data communication you set up with these tasks.
4.4.2.4 Enable the Client for Database Connectivity

Each machine running Oracle Configurator Developer must be configured to connect to an Oracle8i Enterprise Edition server instance through Oracle Net8 Easy Config. The service name is used to create a TNS alias.

When running Oracle Configurator Developer or a test configurator on a client machine, the client machine needs data connectivity to the CZ schema on the server machine. The client machine must be running Oracle8 Client. To establish data connectivity on the client machine, you need to know the following parameters:

- The name and of the server database instance or system identifier (SID) where the CZ schema is located
The host name and port number of the database server

The username and password for the CZ schema

You must set these parameters using Oracle Net8 Easy Config to establish data connectivity. To establish data connectivity, perform the following:

1. In Windows 95/98 or Windows NT 4.0, select **Start > Programs > Oracle for Windows > Oracle Net8 Easy Config.** (If you do not have this option, you have an outdated version of Oracle, or no client software. Install Oracle Net8 Easy Config using the Oracle Installer.)

2. Select **Add New Service** and enter the new service name. This is the name of the server database instance containing the CZ schema you will be connecting to. You must use this same name as the parameter in the **Server** field of your ODBC Configuration. Click **Next**.

3. Select the networking protocol TCP/IP (Internet Protocol). Click **Next**.

4. Enter the Host Name and the Port Number. The Host Name is the name of the physical server machine where the CZ schema is located. Make a note of the Port Number (default is 1521) in case it is needed for future reference. Click **Next**.

5. Enter the Database SID. This is the name of the server database instance containing the CZ schema you will be connecting to, the same name as the New Service you just added. Click **Next**.

6. Test the connection by clicking the **Test Service** button.

7. Enter the Username and Password for the owner of the CZ schema you’ve been setting up data connectivity to. Click **Test**.

8. After clicking on the **Test** button, the results display. Click **Done** when the result shows the test has completed successfully.

9. Click **Finish** to save your service configuration and exit Oracle Net8 Easy Config.

### 4.4.2.5 Create DSNs and DBOwners

Create ODBC datasource names (DSNs) for each Oracle8i Enterprise Edition server that you need for a development, test, or maintenance installation.

Each machine running Oracle Configurator Developer runs against a version of the CZ schema. The Data Source Name for that database must be registered in the Microsoft ODBC Administrator control panel.
For an Oracle8 Client database, use the ODBC driver Microsoft ODBC Driver for Oracle.

To set up the Data Source Name for your CZ schema, follow these instructions:

1. In Windows 95/98 or Windows NT 4.0, select Start > Settings > Control Panel and open ODBC Data Sources (32bit). This opens the ODBC Data Source Administrator window.

2. Select the System DSN tab.

3. Click Add. This opens the Create New Data Source dialog.

4. Select Microsoft ODBC for Oracle for setting a server DSN, then click Finish.

5. The Microsoft ODBC for Oracle Setup dialog appears. Enter the name of the database you want to access (including the extension, such as .db or .odb) in the Data Source Name field.

6. Optionally, enter a description of the database driver that the data source connects to in the Description field.

7. Optionally, enter your database user ID in the User Name field.

8. Enter the Service Name for the Oracle Server engine in the Server field. The Service Name identifies the Oracle Database instance (ocsid) that you want to access.

   **Note:** This Service Name must be the same name you entered as the New Service Name when establishing data connectivity using Net8 Easy Config.

9. You can click Options to make more specifications about the Oracle ODBC setup, but this is usually not necessary. These options include:

   Translation: Click Select to choose a loaded data translator. The default is No Translator.

   Performance: Include REMARKS in Catalog Functions specifies whether the driver returns Remarks columns for the SQL Columns result set. The ODBC Driver provides faster access when this value is not set.

   Include SYNONYMS in SQL Columns specifies whether the driver returns column information.
Customization: Enforce ODBC DayOfWeek Standard specifies whether the result set will conform to the ODBC specified day-of-week format (Sunday=1; Saturday=7).

10. Click OK to add the data source.

This brings you back to the ODBC Database Administrator top level. Notice your DSN has been created and the ODBC Administrator updates the Windows registry information. The User Name and Service Name that you enter become the default data source connection values for this data source.

11. Click Add to add another data source or click OK to exit.

4.4.2.6 Set Parameters in the spx.ini File for Development and Testing

Parameters in the spx.ini file determine connectivity and product behavior for development and testing in Oracle Configurator Developer. An spx.ini file is not required for deployments of a runtime Oracle Configurator.

When installing Oracle Configurator Developer, a default spx.ini file is copied to the Winnt directory (for Windows NT machines) or the Windows directory (for Windows 95/98 machines).

The spx.ini file sets the parameters for running:

- Oracle Configurator Developer
- Test instances of a runtime Oracle Configurator from within Oracle Configurator Developer (Test)

Throughout this section, references to the test configurator mean test instances of a runtime Oracle Configurator launched from within Oracle Configurator Developer (Test).

Oracle Configurator Developer requires that the DSNs defined in the spx.ini file point to an installed CZ schema. The DSNs set in the spx.ini file must also be registered in the ODBC Administrator for each machine running Oracle Configurator Developer and the test configurator.

Minimally, you must edit the spx.ini file and update the [DSN] entries by adding the ODBC DSN(s) you created for your CZ schema. The entries then appear in the list of available data sources when you log in to Oracle Configurator Developer. You must create the CZ schema DSN yourself, following the instructions in "Create DSNs and DBOwners" on page 4-10; the spx.ini entries will not work until you create the DSN.
For each data source identified in the [DSN] section in the `spx.ini` file, you can optionally set values for the test parameters that differ from one data source to the next. For more information, see the Oracle Configurator Implementation Guide.

You must minimally update the following `spx.ini` entries to start up and use Oracle Configurator Developer and a test configurator. See the Oracle Configurator Implementation Guide for more information about these and deployment parameters.

**Table 4–2 Spx.ini Parameters for Development and Testing**

<table>
<thead>
<tr>
<th>Section</th>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merlin</td>
<td>DBOwner</td>
<td>Specifies the default username of the owner of the CZ schema that the <code>spx.ini</code> file accesses when starting up Oracle Configurator Developer. Users log into Oracle Configurator Developer with this schema name and the password.</td>
</tr>
<tr>
<td>DSN</td>
<td></td>
<td>List of datasource names of the databases used for development, testing, or maintenance. There may be several DSNs listed. You may have a DSN listed for an Oracle Applications database available for use by Oracle Configurator Developer to test user interfaces launching a DHTML window or a Java applet.</td>
</tr>
<tr>
<td><code>dsn</code></td>
<td>DBOwner</td>
<td>The datasource name of the CZ schema used with Oracle Configurator Developer must be listed here. the DBOwner in this section is the username used to access the CZ schema. In order to use the Oracle Applications login functionality, the value for DBOwner here should be the same as the FNDNAM parameter value in the Oracle Applications environment file.</td>
</tr>
<tr>
<td>Section</td>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>JdbcUrl</td>
<td>If you are using Oracle Configurator Developer to test user interfaces launching a DHTML window, you must specify thin client usage by adding this parameter. Use this format jdbc:oracle:thin:@host:port:sid In this example, host is the name of the local machine, port is the port where your service is running, and sid is your server name. You must specify the JDBC connection URL in the section corresponding to the current data source. Example: [Test11] JdbcUrl=jdbc:oracle:thin:@host:1521:Test11</td>
<td></td>
</tr>
<tr>
<td>gwyuid</td>
<td>The public Oracle gateway username that grants access to the Oracle Applications log on window. Gwyuid and gwypass should be the same as the default username and password in your Oracle Applications environment file.</td>
<td></td>
</tr>
<tr>
<td>gwypass</td>
<td>The public Oracle gateway password that grants access to the Oracle Applications log on window.</td>
<td></td>
</tr>
<tr>
<td>Launch</td>
<td>Sets the type of environment to launch when using the Test button in Oracle Configurator Developer. Launch=1 specifies the Dynamic HTML in a browser. When Launch=1 is specified, the parameter InitServletURL must also be set to specify the URL of the servlet generating the Dynamic HTML in a browser. Launch=2 specifies the Java Applet. When Launch=2 is specified, the parameter InitServletURL must also be set to specify the URL of the servlet generating the Java Applet. See the Oracle Configurator Implementation Guide for additional parameters that must be set for the Oracle Configurator Developer test environment.</td>
<td></td>
</tr>
<tr>
<td>InitCodeBaseUrl</td>
<td>The URL of the servlet generating the Java Applet for testing.</td>
<td></td>
</tr>
<tr>
<td>InitServletUrl</td>
<td>The URL of the location of the class or Java archive files for testing with the Java Applet.</td>
<td></td>
</tr>
</tbody>
</table>
4.5 Parameterized Startup of Oracle Configurator Developer

You can also start up Oracle Configurator Developer using predefined parameters. Using this method you provide preset values for the mandatory login parameters (user, password, data source name), and bypass the Configurator Developer login screen where you would normally enter them. You can also control logging with a parameter.

4.5.1 Syntax

The syntax for the parameterized startup of Oracle Configurator Developer is:

```
[dev_path]\SPDeveloper /usr=username /pwd=password /dsn=datasource
[/log(n)=filename]
```

The order of the parameters is not significant. The parameters are not case-sensitive.

Example:

```
SPDeveloper /usr=apps /pwd=apps /dsn=vis01 /log(2)=oc_log.out
```
The startup parameters are defined in Table 4–3, "Startup Parameters for Oracle Configurator Developer" on page 4-16.

### Table 4–3 Startup Parameters for Oracle Configurator Developer

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>dev_path</td>
<td></td>
<td>The path to the directory in which OCD is installed. Typically, this is: [ORACLE_HOME]\OSP\Developer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This is not a formal startup parameter, but may be necessary if you are starting up from a directory other than the one in which OCD is installed.</td>
</tr>
<tr>
<td>/usr</td>
<td>username</td>
<td>These parameters are the same as those that you define for starting OCD from the Windows Start menu. For details, see Section 4.4.2, &quot;Client Environment for Oracle Configurator Developer&quot; on page 4-7.</td>
</tr>
<tr>
<td>/pwd</td>
<td>password</td>
<td></td>
</tr>
<tr>
<td>/dsn</td>
<td>datasource</td>
<td></td>
</tr>
<tr>
<td>/log</td>
<td></td>
<td>This parameter is optional. Any combination of its following variant forms may be used.</td>
</tr>
<tr>
<td>/log(n)</td>
<td>n</td>
<td>n is a number indicating the logging level, as listed in the Value column in Table 4–4 on page 4-17.</td>
</tr>
<tr>
<td>/log+</td>
<td>+</td>
<td>+ makes the log window visible.</td>
</tr>
<tr>
<td>/log=fil</td>
<td>filename</td>
<td>filename is the name of a log output file. By default, the file is written to dev_path. You can provide a path to write it to another location. This value overrides the default value specified on the Log tab of the Configurator Developer Options window (Tools &gt; Options).</td>
</tr>
</tbody>
</table>

### 4.5.2 Usage

You can enter the parameterized startup command in several locations:

- Directly on the command line in a Windows command prompt window
- In a Windows batch file
- In the Target field of a Windows shortcut to OCD, which will probably require providing a value for dev_path, such as:

  C:\orant\OSP\Developer\SPDeveloper /usr=apps /pwd=apps /dsn=vis01 /log(2)==oc_log.out
4.5.3 Logging

You can determine the level of logging messages that are written to the Log Messages window and the log file, by setting the value of \( n \) in the \(/log(n)\) parameter. See Table 4–3, "Startup Parameters for Oracle Configurator Developer" on page 4-16.

The logging levels are listed in Table 4–4, in order of increasing severity. Selecting a logging level includes that level and all higher levels in the log. For example, selecting DetailTrace includes all possible logging messages; selecting Error includes Error, DataDamaged, and Fatal logging messages. The Level Names correspond to the options on the Settings > Report Settings submenu of the Log Messages window. The Log Messages window is described in the Oracle Configurator Developer User’s Guide.

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
<th>Level Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>-10</td>
<td>DetailTrace (the default)</td>
</tr>
<tr>
<td></td>
<td>-9</td>
<td>Info</td>
</tr>
<tr>
<td>Warning</td>
<td>0</td>
<td>Empty/EOF</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Notification</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Warning</td>
</tr>
<tr>
<td>Serious</td>
<td>10</td>
<td>Error</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Data Damaged</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Fatal</td>
</tr>
</tbody>
</table>

4.6 Test Your Oracle Configurator Developer Installation

Run Oracle Configurator Developer to test the installation and connectivity. Before you do this, read the Oracle Configurator Release Notes, especially the section called "Before You Start."
Test Your Oracle Configurator Developer Installation

---

**Note:** For optimum performance while running Oracle Configurator Developer, close all other applications and turn off scheduled applications such as virus scans, disk optimizations, and background processes. For example, be sure MS Find Fast’s automatic index updating is turned off.

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**Warning:** Before beginning to implement your configurator project, attend training in Oracle Configurator Developer, read the Oracle Configurator Release Notes, and read the Oracle Configurator Developer User’s Guide or Help, especially the Introduction.

---

To test your Oracle Configurator Developer installation:

1. Start Oracle Configurator Developer and log in as the DBOwner.

2. To run Oracle Configurator Developer, click the Windows Start button, then choose Programs > Oracle Configurator. Depending on the installation option you selected, you have one or more of the following program options available:
   - Help
   - Manuals
   - Oracle Configurator Developer
   - Uninstall Oracle Configurator Developer

3. Log into Oracle Configurator Developer using the username specified in the spx.ini file (DBOwner) or a valid Oracle Applications username, and a password that has been assigned an Oracle Configurator responsibility (Configurator Administrator or Configurator Developer).

4. From the Datasource list, select the DSN for the database you want to use. The DSNs in the list are specified in the spx.ini file (see Oracle Configurator Implementation Guide for details).

5. Click OK. The Repository window appears.

6. To create a new Model, choose Create > New Model, then enter a name and description in the New Model dialog. If the database you chose contains existing Models, open the Model you want to modify by double clicking on it.

   For information about constructing models and building configuration rules, see the Oracle Configurator Developer User’s Guide.
7. To run the test configurator from Oracle Configurator Developer:
   a. In the Model module, choose **Tools > Generate Active Model**.
   b. In the UI module, choose **Create > New User Interface**.
   c. Click the **Test** button.
Test Your Oracle Configurator Developer Installation
Glossary of Terms and Acronyms

This glossary contains definitions that you may need while working with Oracle Configurator.

**Active Model**
The compiled structure and rules of a configuration model that is loaded into memory on the Web server at configuration session initialization and used by the Oracle Configurator engine to validate runtime selections. The Active Model must be generated either in Oracle Configurator Developer or programmatically in order to access the configuration model at runtime.

**API**
Application Programming Interface

**applet**
A Java application running inside a Web browser. See also Java and servlet.

**application architecture**
The software structure of an application at runtime. Architecture affects how an application is used, maintained, extended, and changed.

**architecture**
See application architecture.

**ATO**
Assemble to Order
ATP
Available to Promise

attribute
The defining characteristic of something. Models have attributes such as Effectivity Sets and Usage. Components, Features, and Options have attributes such as Name, Description, and Effectivity.

benchmark
Represents performance data collected during runtime tests under various conditions that emulate expected and extreme use of the product.

beta
An external release, delivered as an installable application, and subject to acceptance, validation, and integration testing. Specially selected and prepared end users may participate in beta testing.

bill of material
A list of Items associated with a parent Item, such as an assembly, and information about how each Item relates to that parent Item.

Bills of Material
The application in Oracle Applications in which you define a bill of material.

BOM
See bill of material.

BOM item
The node imported into Oracle Configurator Developer that corresponds to an Oracle Bills of Material item. Can be a BOM Model, BOM Option Class node, or BOM Standard Item node.

BOM Model
A model that you import from Oracle Bills of Material into Oracle Configurator Developer. When you import a BOM Model, effective dates, ATO rules, and other data are also imported into Configurator Developer. In Configurator Developer, you can extend the structure of the BOM Model, but you cannot modify the BOM Model itself or any of its attributes.
BOM Model node
The imported node in Oracle Configurator Developer that corresponds to a BOM Model created in Oracle Bills of Material.

BOM Option Class node
The imported node in Oracle Configurator Developer that corresponds to a BOM Option Class created in Oracle Bills of Material.

BOM Standard Item node
The imported node in Oracle Configurator Developer that corresponds to a BOM Standard Item created in Oracle Bills of Material.

Boolean Feature
An element of a component in the Model that has two options: true or false.

bug
See defect.

build
A specific instance of an application during its construction. A build must have an install program early in the project so that application implementers can unit test their latest work in the context of the entire available application.

CIO
See Oracle Configuration Interface Object (CIO).

client
A runtime program using a server to access functionality shared with other clients.

Comparison rule
An Oracle Configurator Developer rule type that establishes a relationship to determine the selection state of a logical Item (Option, Boolean Feature, or List-of-Options Feature) based on a comparison of two numeric values (numeric Features, Totals, Resources, Option counts, or numeric constants). The numeric values being compared can be computed or they can be discrete intervals in a continuous numeric input.
Compatibility rule
An Oracle Configurator Developer rule type that establishes a relationship among Features in the Model to control the allowable combinations of Options. See also, Property-based Compatibility rule.

Compatibility Table
A kind of Explicit Compatibility rule. For example, a type of compatibility relationship where the allowable combination of Options are explicitly enumerated.

component
A piece of something or a configurable element in a model such as a BOM Model, Model, or Component.

Component
An element of the model structure, typically containing Features, that is configurable and instantiable. An Oracle Configurator Developer node type that represents a configurable element of a Model. Corresponds to one UI screen of selections in a runtime Oracle Configurator.

Component Set
An element of the Model that contains a number of instantiated Components of the same type, where each Component of the set is independently configured.

concurrent manager
A process manager that coordinates the concurrent processes generated by users’ concurrent requests. An Oracle Applications product group can have several concurrent managers.

concurrent process
A task that can be scheduled and is run by a concurrent manager. A concurrent process runs simultaneously with interactive functions and other concurrent processes.

concurrent processing facility
An Oracle Applications facility that runs time-consuming, non-interactive tasks in the background.

concurrent program
Executable code (usually written in SQL*Plus or Pro*C) that performs the function(s) of a requested task. Concurrent programs are stored procedures that
perform actions such as generating reports and copying data to and from a database.

**concurrent request**
A user-initiated request issued to the concurrent processing facility to submit a non-interactive task, such as running a report.

**configuration**
A specific set of specifications for a product, resulting from selections made in a runtime configurator.

**configuration attribute**
A characteristic of an item that is defined in the host application (outside of its inventory of items), in the Model, or captured during a configuration session. Configuration attributes are inputs from or outputs to the host application at initialization and termination of the configuration session, respectively.

**Configuration Interface Object**
See Oracle Configuration Interface Object (CIO).

**configuration model**
Represents all possible configurations of the available options, and consists of model structure and rules. It also commonly includes User Interface definitions and Functional Companions. A configuration model is usually accessed in a runtime Oracle Configurator window. See also model.

**configuration rules**
The Oracle Configurator Developer Logic rules, Compatibility rules, Comparison rules, Numeric rules, and Design Charts available for defining configurations. See also rules.

**configuration session**
The time from launching or invoking to exiting Oracle Configurator, during which end users make selections to configure an orderable product. A configuration session is limited to one configuration model that is loaded when the session is initialized.

**configurator**
The part of an application that provides custom configuration capabilities. Commonly, a window that can be launched from a hosting application so end users
can make selections resulting in valid configurations. Compare Oracle Configurator.

**connectivity**
The connection between client and database server that allows data communication.

The connection across components of a model that allows modeling such products as networks and material processing systems.

**Connector**
The node in the model structure that enables an end user at runtime to connect the Connector node’s parent to a referenced Model.

**Container Model**
A type of BOM Model that you import from Oracle Bills of Material into Oracle Configurator Developer to create configuration models containing connectivity and trackable components. Configurations created from Container Models can be tracked and updated in Oracle Install Base.

**context**
The surrounding text or conditions of something.

Determines which context-sensitive segments of a flexfield in the Oracle Applications database are available to an application or user. Used in defining configuration attributes.

**Contributes to**
A relation used to create a specific type of Numeric rule that accumulates a total value. See also Total.

**Consumes from**
A relation used to create a specific type of Numeric rule that decrementing a total value, such as specifying the quantity of a Resource used.

**count**
The number or quantity of something, such as selected options. Compare instance.

**CRM**
See Customer Relationship Management
CTO
Configure to Order

customer
The person for whom products are configured by end users of the Oracle Configurator or other ERP and CRM applications. Also the end users themselves directly accessing Oracle Configurator in a Web store or kiosk.

customer-centric extensions
See customer-centric views.

customer-centric views
Optional extensions to core functionality that supplement configuration activities with rules for preselection, validation, and intelligent views. View capabilities include generative geometry, drawings, sketches and schematics, charts, performance analyses, and ROI calculations.

Customer Relationship Management
The aspect of the enterprise that involves contact with customers, from lead generation to support services.

customer requirements
The needs of the customer that serve as the basis for determining the configuration of products, systems, and services. Also called needs assessment. See guided buying or selling.

CZ
The product short name for Oracle Configurator in Oracle Applications.

data import
Populating the Oracle Configurator schema with enterprise data from ERP or legacy systems via import tables.

Data Integration Object
Also known as the DIO, the Data Integration Object is a server in the runtime application that creates and manages the interface between the client (usually a user interface) and the Oracle Configurator schema.
data maintenance environment
The environment in which the runtime Oracle Configurator data is maintained.

data source
A programmatic reference to a database. Referred to by a data source name (DSN).

DBMS
Database Management System

default
A predefined value. In a configuration, the automatic selection of an option based on the preselection rules or the selection of another option.

Defaults rule
An Oracle Configurator Developer Logic rule that determines the logic state of Features or Options in a default relation to other Features and Options. For example, if A Defaults B, and you select A, B becomes Logic True (selected) if it is available (not Logic False).

defect
A failure in a product to satisfy the users' requirements. Defects are prioritized as critical, major, or minor, and fixes range from corrections or workarounds to enhancements. Also known as a bug.

defect tracking
A system of identifying defects for managing additional tests, testing, and approval for release to users.

deliverable
A work product that is specified for review and delivery.

demonstration
A presentation of the tested application, showing a particular usage scenario.

Design Chart
An Oracle Configurator Developer rule type for defining advanced Explicit Compatibilities interactively in a table view.
design review
A technical review that focuses on application or system design.

developer
The person who uses Oracle Configurator Developer to create a configurator. See also implementer and user.

Developer
The tool (Oracle Configurator Developer) used to create configuration models.

DHTML
Dynamic Hypertext Markup Language

DIO
See Data Integration Object.

distributed computing
Running various components of a system on separate machines in one network, such as the database on a database server machine and the application software on a Web server machine.

DLL
Dynamically Linked Library

DSN
See data source.

element
Any entity within a model, such as Options, Totals, Resources, UI controls, and components.

end user
The ultimate user of the runtime Oracle Configurator. The types of end users vary by project but may include salespeople or distributors, administrative office staff, marketing personnel, order entry personnel, product engineers, or customers directly accessing the application via a Web browser or kiosk. Compare user.

enterprise
The systems and resources of a business.
**environment**
The arena in which software tools are used, such as operating system, applications, and **server** processes.

**ERP**
Enterprise Resource Planning. A software system and process that provides automation for the customer's back-room operations, including order processing.

**Excludes rule**
An **Oracle Configurator Developer** Logic rule determines the logic state of **Features** or **Options** in an excluding relation to other Features and Options. For example, if A Excludes B, and if you select A, B becomes Logic False, since it is not allowed when A is true (either User or Logic True). If you deselect A (set to User False), there is no effect on B, meaning it could be User or Logic True, User or Logic False, or **Unknown**. See **Negates rule**.

**extended functionality**
A release after delivery of core functionality that extends that core functionality with **customer-centric views**, more complex proposal generation, discounting, quoting, and expanded integration with **ERP**, **CRM**, and third-party software.

**feature**
A characteristic of something, or a configurable element of a **component** at **runtime**.

**Feature**
An element of the **model structure**. Features can either have a value (numeric or Boolean) or enumerated **Options**.

**Functional Companion**
An extension to the **configuration model** beyond what can be implemented in Configurator Developer.

An object associated with a **Component** that supplies methods that can be used to initialize, validate, and generate **customer-centric views** and outputs for the **configuration**.

**functional specification**
Document describing the functionality of the application based on **user** requirements.
**guided buying or selling**

Needs assessment questions in the runtime UI to guide and facilitate the configuration process. Also, the model structure that defines these questions. Typically, guided selling questions trigger configuration rules that automatically select some product options and exclude others based on the end user’s responses.

**host application**

An application within which Oracle Configurator is embedded as integrated functionality, such as Order Management or iStore.

**HTML**

Hypertext Markup Language

**ICX**

Inter-Cartridge Exchange

**implementation**

The stage in a project between defining the problem by selecting a configuration technology vendor, such as Oracle, and deploying the completed configuration application. The implementation stage includes gathering requirements, defining test cases, designing the application, constructing and testing the application, and delivering it to end users. See also developer and user.

**implementer**

The person who uses Oracle Configurator Developer to build the model structure, rules, and UI customizations that make up a runtime Oracle Configurator. Commonly also responsible for enabling the integration of Oracle Configurator in a host application.

**Implies rule**

An Oracle Configurator Developer Logic rule that determines the logic state of Features or Options in an implied relation to other Features and Options. For example, if A Implies B, and you select A, B becomes Logic True. If you deselect A (set to User False), there is no effect on B, meaning it could be User or Logic True, User or Logic False, or Unknown. See Requires rule.

**import server**

A database instance that serves as a source of data for Oracle Configurator’s Populate, Refresh, and Synchronization concurrent processes. The import server is sometimes referred to as the remote server.
import tables
Tables mirroring the Oracle Configurator schema Item Master structure, but without integrity constraints. Import tables allow batch population of the Oracle Configurator schema’s Item Master. Import tables also store extractions from Oracle Applications or legacy data that create, update, or delete records in the Oracle Configurator schema Item Master.

incremental construction
The process of organizing the construction of the application into builds, where each build is designed to meet a specified portion of the overall requirements and is unit tested.

initialization message
The XML message sent from a host application to the Oracle Configurator Servlet, containing data needed to initialize the runtime Oracle Configurator. See also termination message.

install program
Software that sets up the local machine and installs the application for testing and use.

Instance
An Oracle Configurator Developer attribute of a component’s node that specifies a minimum and maximum value. See also instance.

instance
A runtime occurrence of a component in a configuration. See also instantiate. Compare count.
Also, the memory and processes of a database.

instantiate
To create an instance of something. Commonly, to create an instance of a component in the runtime user interface of a configuration model.

integration
The process of combining multiple software components and making them work together.
integration testing
Testing the interaction among software programs that have been integrated into an application or system. Compare unit test.

intelligent views
Configuration output, such as reports, graphs, schematics, and diagrams, that help to illustrate the value proposition of what is being sold.

IS
Information Services

item
A product or part of a product that is in inventory and can be delivered to customers.

Item
A Model or part of a Model that is defined in the Item Master. Also data defined in Oracle Inventory.

Item Master
Data stored to structure the Model. Data in the Item Master is either entered manually in Oracle Configurator Developer or imported from Oracle Applications or a legacy system.

Item Type
Data used to classify the Items in the Item Master. Item Catalogs imported from Oracle Inventory are Item Types in Oracle Configurator Developer.

Java
An object-oriented programming language commonly used in internet applications, where Java applications run inside Web browsers and servers. See also applet and servlet.

LAN
Local Area Network

LCE
Logical Configuration Engine. Compare Active Model.
**legacy data**
Data that cannot be imported without creating custom extraction programs.

**load**
Storing the configuration model data in the Oracle Configurator Servlet on the Web server. Also, the time it takes to initialize and display a configuration model if it is not preloaded.

The burden of transactions on a system, commonly caused by the ratio of user connections to CPUs or available memory.

**log file**
A file containing errors, warnings, and other information that is output by the running application.

**Logic rules**
Logic rules directly or indirectly set the logical state (User or Logic True, User or Logic False, or Unknown) of Features and Options in the Model.

There are four primary Logic rule relations: Implies, Requires, Excludes, and Negates. Each of these rules takes a list of Features or Options as operands. See also Implies rule, Requires rule, Excludes rule, and Negates rule.

**maintainability**
The characteristic of a product or process to allow straightforward maintenance, alteration, and extension. Maintainability must be built into the product or process from inception.

**maintenance**
The effort of keeping a system running once it has been deployed, through defect fixes, procedure changes, infrastructure adjustments, data replication schedules, and so on.

**Metalink**
Oracle’s technical support Web site at:
http://www.oracle.com/support/metalink/

**Model**
The entire hierarchical “tree” view of all the data required for configurations, including model structure, variables such as Resources and Totals, and elements in...
support of intermediary rules. Includes both imported BOM Models and Models created in Configurator Developer. May consist of BOM Option Classes and BOM Standard Items.

**model**
A generic term for data representing products. A model contains elements that correspond to items. Elements may be components of other objects used to define products. A configuration model is a specific kind of model whose elements can be configured by accessing an Oracle Configurator window.

**model-driven UI**
The graphical views of the model structure and rules generated by Oracle Configurator Developer to present end users with interactive product selection based on configuration models.

**model structure**
Hierarchical "tree" view of data composed of elements (Models, Components, Features, Options, BOM Models, BOM Option Class nodes, BOM Standard Item nodes, Resources, and Totals). May include reusable components (References).

**MS**
Microsoft Corporation

**Negates rule**
A type of Oracle Configurator Developer Logic rule that determines the logic state of Features or Options in a negating relation to other Features and Options. For example, if one option in the relationship is selected, the other option must be Logic False (not selected). Similarly, if you deselect one option in the relationship, the other option must be Logic True (selected). See Excludes rule.

**node**
The icon or location in a Model tree in Oracle Configurator Developer that represents a Component, Feature, Option or variable (Total or Resource), Connector, Reference, BOM Model, BOM Option Class node, or BOM Standard Item node.

**Numeric rule**
An Oracle Configurator Developer rule type that express constraint among model elements in terms of numeric relationships. See also, Contributes to and Consumes from.
OC
See Oracle Configurator.

ODBC
Open Database Connectivity. A database access method that uses drivers to translate an application’s data queries into DBMS commands.

OCD
See Oracle Configurator Developer.

opportunity
The workspace in Oracle Sales Online in which products, systems, and services are configured, quotes and proposals are generated, and orders are submitted.

option
A logical selection made by the end user when configuring a component.

Option
An element of the Model. A choice for the value of an enumerated Feature.

Oracle Configuration Interface Object (CIO)
A server in the runtime application that creates and manages the interface between the client (usually a user interface) and the underlying representation of model structure and rules in the Active Model.

The CIO is the API that supports creating and navigating the Model, querying and modifying selection states, and saving and restoring configurations.

Oracle Configurator
The product consisting of development tools and runtime applications such as the Oracle Configurator schema, Oracle Configurator Developer, and runtime Oracle Configurator. Also the runtime Oracle Configurator variously packaged for use in networked or Web deployments.

Oracle Configurator architecture
The three-tier runtime architecture consists of the User Interface, the Active Model, and the Oracle Configurator schema. The application development architecture consists of Oracle Configurator Developer and the Oracle Configurator schema, with test instances of a runtime Oracle Configurator.
Oracle Configurator Developer
The suite of tools in the Oracle Configurator product for constructing and maintaining configurators.

Oracle Configurator engine
Also LCE. Compare Active Model.

Oracle Configurator schema
The implementation version of the standard runtime Oracle Configurator data-warehousing schema that manages data for the configuration model. The implementation schema includes all the data required for the runtime system, as well as specific tables used during the construction of the configurator.

Oracle Configurator Servlet
Vehicle for Oracle Configurator containing the UI Server.

Oracle Configurator window
The user interface that is launched by accessing a configuration model and used by end users to make the selections of a configuration.

Oracle SellingPoint Application
No longer available or supported.

output
The output generated by a configurator, such as quotes, proposals, and customer-centric views.

performance
The operation of a product, measured in throughput and other data.

Populator
An entity in Oracle Configurator Developer that creates Component, Feature, and Option nodes from information in the Item Master.

preselection
The default state in a configurator that defines an initial selection of Components, Features, and Options for configuration.

A process that is implemented to select the initial element(s) of the configuration.
product
Whatever is ordered and delivered to customers, such as the output of having configured something based on a model. Products include intangible entities such as services or contracts.

project manager
A member of the project team who is responsible for directing the project during implementation.

project plan
A document that outlines the logistics of successfully implementing the project, including the schedule.

Property
A named value associated with a node in the Model or the Item Master. A set of Properties may be associated with an Item Type. After importing a BOM Model, Oracle Inventory Catalog Descriptive Elements are Properties in Oracle Configurator Developer.

Property-based Compatibility rule
A kind of compatibility relationship where the allowable combinations of Options are specified implicitly by relationships among Property values of the Options.

prototype
A construction technique in which a preliminary version of the application, or part of the application, is built to facilitate user feedback, prove feasibility, or examine other implementation issues.

PTO
Pick to Order

publication
A unique deployment of a configuration model (and optionally a user interface) that enables a developer to control its availability from hosting applications such as Oracle Order Management or iStore. Multiple publications can exist for the same configuration model, but each publication corresponds to only one Model and User Interface.
**publishing**
The process of creating a publication record in Oracle Configurator Developer, which includes specifying applicability parameters to control runtime availability and running an Oracle Applications concurrent process to copy data to a specific database.

**QA**
Quality Assurance

**RAD**
Rapid Application Development

**RDBMS**
Relational Database Management System

**reference**
The ability to reuse an existing Model or Component within the structure of another Model (for example, as a subassembly).

**Reference**
An Oracle Configurator Developer node type that denotes a reference to another Model.

**regression test**
An automated test that ensures the newest build still meets previously tested requirements and functionality. See also incremental construction.

**Requires rule**
An Oracle Configurator Developer Logic rule that determines the logic state of Features or Options in a requirement relation to other Features and Options. For example, if A Requires B, and if you select A, B is set to Logic True (selected). Similarly, if you deselect A, B is set to Logic False (deselected). See Implies rule.

**resource**
Staff or equipment available or needed within an enterprise.

**Resource**
A variable in the Model used to keep track of a quantity or supply, such as the amount of memory in a computer. The value of a Resource can be positive or zero,
and can have an Initial Value setting. An error message appears at runtime when the value of a Resource becomes negative, which indicates it has been over-consumed. Use Numeric rules to contribute to and consume from a Resource.

Also a specific node type in Oracle Configurator Developer. See also node.

**reusable component**

*See reference and model structure.*

**reusability**

The extent to and ease with which parts of a system can be put to use in other systems.

**RFQ**

Request for Quote

**ROI**

Return on Investment

**rules**

Also called business rules or configuration rules. Constraints applied among elements of the product to ensure that defined relationships are preserved during configuration. Elements of the product are Components, Features, and Options. Rules express logic, numeric parameters, implicit compatibility, or explicit compatibility. Rules provide preselection and validation capability in Oracle Configurator.

*See also Comparison rule, Compatibility rule, Design Chart, Logic rules and Numeric rule.*

**runtime**

The environment and context in which applications are run, tested, or used, rather than developed.

The environment in which an implementer (tester), end user, or customer configures a product whose model was developed in Oracle Configurator Developer. See also configuration session.

**sales configuration**

A part of the sales process to which configuration technology has been applied in order to increase sales effectiveness and decrease order errors. Commonly identifies customer requirements and product configuration.
schema
The tables and objects of a data model that serve a particular product or business process. See Oracle Configurator schema.

SCM
Supply Chain Management

server
Centrally located software processes or hardware, shared by clients.

servlet
A Java application running inside a Web server. See also Java, applet, and Oracle Configurator Servlet.

SFA
Sales Force Automation

document
The deployed system as a response to a problem or problems.

SQA
Software Quality Assurance

SQL
Structured Query Language

system
The hardware and software components and infrastructure integrated to satisfy functional and performance requirements.

termination message
The XML message sent from the Oracle Configurator Servlet to a host application after a configuration session, containing configuration outputs. See also initialization message.

test case
A description of inputs, execution instructions, and expected results that are created to determine whether a specific software feature works correctly or a specific requirement has been met.
Total
A variable in the Model used to accumulate a numeric total, such as total price or total weight.
Also a specific node type in Oracle Configurator Developer. See also node.

UI
See User Interface.

Unknown
The logic state that is neither true nor false, but unknown at the time a configuration session begins or when a Logic rule is executed. This logic state is also referred to as Available, especially when considered from the point of view of the runtime Oracle Configurator end user.

unit test
Execution of individual routines and modules by the application implementer or by an independent test consultant to find and resolve defects in the application. Compare integration testing.

update
Moving to a new version of something, independent of software release. For instance, moving a production configurator to a new version of a configuration model, or changing a configuration independent of a model update.

upgrade
Moving to a new release of Oracle Configurator or Oracle Configurator Developer.

user
The person using a product or system. Used to describe the person using Oracle Configurator Developer tools and methods to build a runtime Oracle Configurator. Compare end user.

User Interface
The part of Oracle Configurator architecture runtime architecture that is generated from the model structure and provides the graphical views necessary to create configurations interactively. Interacts with the Active Model and data to give end users access to customer requirements gathering, product selection, and customer-centric views.
**user interface**
The visible part of the application, including menus, dialog boxes, and other on-screen elements. The part of a system where the user interacts with the software. Not necessarily generated in Oracle Configurator Developer.

**user requirements**
A description of what the configurator is expected to do from the end user's perspective.

**user's guide**
Documentation on using the application or configurator to solve the intended problem.

**validation**
Tests that ensure that configured components will meet specific criteria set by an enterprise, such as that the components can be ordered or manufactured.

**Validation**
A type of Functional Companion that is implemented to ensure that the configured components will meet specific criteria.

**VAR**
Value-Added Reseller

**variable**
Parts of the Model that are represented by Totals, Resources, or numeric Features.

**VB**
Microsoft Visual Basic. Programming language in which portions of Oracle Configurator Developer are written.

**verification**
Tests that check whether the result agrees with the specification.

**WAN**
Wide Area Network

**Web**
The portion of the Internet that is the World Wide Web.
WIP
Work In Progress

XML
Extensible Markup Language, a highly flexible markup language for transferring data between Web applications. Used for the initialization message and termination message of the Oracle Configurator Servlet.
Symbols
$APPL_TOP, 2-3

A
Add button
   expanding new instances, 2-23
adpatch, 1-2, 1-13
Alias, 2-4
   settings, 2-4
Apache, 2-1
   configuration files
      httpd.conf, 2-4
      jserv.conf, 2-5
      jserv.properties, 2-6
      zone.properties, 2-8
   installation location, 2-3
   parameters
      Alias, 2-4
      ApJServManual definition, 3-8
      ApJServMount, 3-8
      ApJServVMTTimeout, 3-8
      DocumentRoot, 2-4
      Port, 2-4
      repositories, 2-8
      ServerRoot, 2-4
      troubleshooting installation, 3-1, 3-5
Apache Web listener
   HTTPD, 2-9
   apache_install
      installation location, 2-3
   ApJServ.jar, 2-7, 2-12
   ApJServManual, 3-8

with load balancing, 2-10
ApJServMount, 3-8
ApJServVMTTimeout, 3-8
APPLID
   parameter in spx.ini, 4-15
apps.zip, 2-7, 2-12, 2-13
ASO:Configurator URL
   profile option, 1-7
ASO:Enable Configure Model Item
   profile option, 1-7

B
BOM:Configurator URL of UI Manager
   profile option, 1-8

C
caching
   Models, 2-37
CLASSPATH, 2-6, 2-11
client/server environment
   diagram, 4-5
   requirements for Oracle Configurator
      Developer, 4-7
   requirements for Oracle Configurator
      window, 4-8
config.jar, 2-13
configuration file
   modifying the database configuration file, 1-4
   configurations
      restoring saved configurations, 1-13
   customer support
      Metalink, xvi
before testing, 4-19
Generate New UI
  procedure, 4-19
GMA:Default Language
  profile option, 1-12
graphics
  OC Servlet directory, 2-30
green threads, 2-6
  Xss8m option, 2-6
guided buying or selling
  support for user interface, 2-26
gwypass
  parameter in spx.ini, 4-14
gwyuid
  parameter in spx.ini, 4-14

H
heap size
  recommended maximum value, 2-6
  setting maximum heap size, 2-9
heartbeat mechanism
  for interface management, 2-26
Hello test class, 3-5
host application
  determining host information, 3-2
  test message, 3-2
HTML
  html_zpath, 2-3
  URL of template
    in Netscape, 2-38
html_zpath
  internet server parameter, 2-3
httpd.conf file, 2-4

I
iAS (Oracle Internet Application Server)
  installing, 2-1
ias_install
  installation location, 2-3
ICX:Language
  profile option, 1-12
images
  OC Servlet directory, 2-30
initArgs file, 2-16
InitClassID
  parameter in spx.ini, 4-15
InitCodeBaseURL
  in spx.ini Test section, 4-14
InitCodeBaseUrl
  parameter in spx.ini file, 4-14
InitServletURL
  parameter in the spx.ini file, 4-14
InitVersion
  parameter in spx.ini file, 4-15
installing
  Oracle Configurator, 1-1
  Oracle Configurator Developer, 4-2
instances
  expanding, 2-23
internet
  configuring server parameters, 2-2
See also iAS

J
Java
  green threads, 2-6
  interpreter, 2-8, 2-15
JDK
  verifying version information, 2-6
  version, 2-6
  native threads, 2-6
  recommended JDK version, 2-2
  system properties, 2-8
  Xss8m option, 2-6
Java applet
  client and server requirements, 4-8
Java Virtual Machine, 2-6
JDBC
  drivers
    modifying the database configuration
      file, 1-5
      property for setting, 2-34
  jdbc111.zip, 2-7, 2-12, 2-13
  JdbcUrl
    parameter in spx.ini, 4-14
    thin client, 4-14
  JDK, 2-6
recommended version, 2-2
verifying version information, 2-6
Jinitiator
default and supported versions, 4-15
jInitVersion
definition, 4-15
jsdk.jar, 2-7, 2-12
JServ, 2-1, 2-9
installation location, 2-3
jserv_install
installation location, 2-3
gserv.conf file
verifying, 2-5
gserv.log
verifying parameters, 2-7
gserv.properties file
verifying, 2-6
JVM (Java Virtual Machine)
maximum heap size, 2-9

languages
Multiple Language Support, 1-13
Launch
parameter in spx.ini file, 4-14
LD_LIBRARY_PATH, 2-7
listening port
for JServ, 2-5
for Web server, 2-4
load balancing
definition, 2-9
procedure, 2-10
script, 2-14
vendor information, 2-9
log files
configuration session log, 2-35
exception log, 2-23
servlet log, 2-35

maximum heap size
recommended value, 2-6
setting, 2-9

media_vpath
Web server parameter, 2-3
memory
requirements, 2-6
Merlin
section in spx.ini file, 4-13
Metalink
URL for technical support, xvi
MLS (Multiple Language Support)
hiding the Item column at runtime, 2-31
relevant servlet properties, 2-31
setup considerations, 1-13
Model
caching, 2-37
mount point
for servlet zone, 2-5
Multiple Language Support
See MLS

languages
Multiple Language Support, 1-13
Launch
parameter in spx.ini file, 4-14
LD_LIBRARY_PATH, 2-7
listening port
for JServ, 2-5
for Web server, 2-4
load balancing
definition, 2-9
procedure, 2-10
script, 2-14
vendor information, 2-9
log files
configuration session log, 2-35
exception log, 2-23
servlet log, 2-35

maximum heap size
recommended value, 2-6
setting, 2-9

media_vpath
Web server parameter, 2-3
memory
requirements, 2-6
Merlin
section in spx.ini file, 4-13
Metalink
URL for technical support, xvi
MLS (Multiple Language Support)
hiding the Item column at runtime, 2-31
relevant servlet properties, 2-31
setup considerations, 1-13
Model
caching, 2-37
mount point
for servlet zone, 2-5
Multiple Language Support
See MLS

native threads
and Java version, 2-6
required for guided selling, 2-27
Navigation Tree
expanding new instances, 2-23
expanding Option Classes, 2-25

OA_HTML
e a m p le o f h t m l v p a t h p l a c e h o l d e r , 2 - 3
OA_MEDIA, 2-3
in httpd.conf, 2-4
OC Servlet
allow test message property, 2-38
installation, 2-1
properties
cz.activemodel, 2-19
cz.activemodel.lazyloadlistprice, 2-21
cz.html.source.display, 2-21
cz.html.source.formtreeview, 2-22
cz.html.source.treeview, 2-22
cz.scrolling.treeview, 2-22

cz.uiserver.add_instance_expansion_ policy, 2-23

specifying URL, 2-38

verifying server response, 3-5

ODBC

See DSN

OM:Use Configurator

profile option, 1-12

operating systems

system requirements, 1-2

Option Classes

expanding at runtime, 2-25

Oracle Configurator

installing, 1-1

servlet

See OC Servlet

Oracle Configurator Developer

installing, 4-2

login, 4-17

parameterized startup, 4-15

running, 4-17

setup, 4-8

Oracle Configurator schema

graphic of server configuration, 4-5

overview, 1-1

version

expected by UI Servlet, 3-2

Oracle Internet Application Server

See iAS

Oracle Net8 Easy Config

for database connectivity, 4-9

Oracle Rapid Install, 2-8

installing the OC Servlet, 2-1

overview, 1-1

verifying successful installation, 3-7

Oracle8 Client

installation, 4-7

requirements, 4-5

Oracle8i Enterprise Edition

requirements, 4-5

P

parameters

Apache Web server, 2-14

configuring Apache and JServ, 2-2

in httpd.conf, 2-4

in jserv.conf, 2-5

in jserv.properties, 2-6

in the spx.ini file, 4-12

in zone.properties, 2-8

modify database configuration file

parameters, 1-4

See also OC Servlet

patches

adpatch, 1-2

for Oracle Configurator, 1-2

for Oracle Configurator Developer, 1-2, 4-3

tcpatch, 4-3

performance

caching model, 2-32, 2-37

impact of pricing, 2-21
preloading servlet, 2-37
pictures
OC Servlet directory, 2-30
platforms
supported operating systems and system requirements, 1-2
Port
Apache parameter, 2-4
pricing
performance impact, 2-21
product support
Metalink, xvi
profile options
ASO:Configurator URL, 1-7
ASO:Enable Configure Model Item, 1-7
BOM:Configurator URL of UI Manager, 1-8
CZ: Report All Baseline Conflicts, 1-10
CZ: Suppress Baseline Errors, 1-11
CZ: Automatically Validate on Exit, 1-8
CZ: Configurator Install Base, 1-8
CZ: Populate Decimal Quantity Flags, 1-9
CZ: Publication Lookup Mode, 1-10
CZ: Publication Usage, 1-10
CZ: Use Simple Configurator, 1-12
for Oracle Configurator, 1-6
GMA: Default Language, 1-12
ICX: Language, 1-12
OM: Use Configurator, 1-12
Proxy Frame, 2-37
restoring
configurations, 1-13
return_url
servlets, 2-8
runtime Oracle Configurator client requirements, 4-8
login, 4-17
running, 4-17
spx.ini file requirements, 4-12
saving configurations
restoring in new Oracle Configurator version, 1-13
security
risk (bindaddress parameter), 2-11
server
environment
requirements for Configurator Developer, 4-4
kinds of, 4-4
ServerRoot, 2-4
servlet
See Oracle Servlet
servlet_vpath
internet server parameter, 2-3
servlets.default.initArgs, 2-14
recommended for setting parameters, 2-15
SHLIBPATH, 2-7
spx.ini file
example, 4-12
parameters for development and testing, 4-12
support
Metalink, xvi
technical support
Metalink, xvi
Terminal Server
installing Configurator Developer, 4-6
testing
control for OC Servlet, 2-38
Hello test class, 3-5
Launch parameter description, 4-14
Oracle Configurator Developer installation, 4-17
test message, 3-1
test page, 3-3
unit testing a configuration model, 4-19
thin client
See also jdbcUrl
threads
green, 2-6
native, 2-6
Timeout parameter in httpd.conf, 2-5
translations
Multiple Language Support, 1-13

U
upgrading from a previous 11i release, 1-13
URL
for OC Servlet, 2-38
Oracle Configurator window requirement, 4-14
runtime Oracle Configurator requirement, 4-8
See also InitServletURL
See also relative URL
users
See end users

V
version
determining build version, 3-2
property that accepts or rejects test message, 2-38
recommended JDK version, 2-2
test message, 3-2

W
Web server
collection files
parameters, 2-14
Windows
supported operating systems, 1-2
wrapper.bin.parameters, 2-14
wrapper.classpath, 2-7
wrapper.env, 2-7
xmlparserv2.zip, 2-7, 2-12, 2-13
zone.properties file
verifying, 2-8