Oracle® Developer Suite

Release Notes

10g (9.0.4) for Windows, Linux, Solaris, and HP-UX

Part No. B10668-03

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ORACLE®

Oracle Developer Suite Release Notes, 10g (9.0.4) for Windows, Linux, Solaris, and HP-UX

Part No. B10668-03

Contents

Part I   Product Release Notes

1   What's New in the *Oracle Developer Suite 10g Release Notes?*

2   Product Naming

3   Certification Information

4   Known Issues

Part II   Component Release Notes

5   Oracle9*i* JDeveloper

6   Oracle Business Intelligence Beans

7   Oracle Discoverer Administrator

8 Oracle Discoverer Desktop

9 Oracle Forms Developer

10 Oracle Reports

11   Oracle Designer

12   Oracle Software Configuration Manager

Part III   Other Release Notes

13   Oracle Application Server Containers for J2EE (OC4J)

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Oracle Developer Suite Release Notes, 10*g* (9.0.4) for Windows, Linux, Solaris, and HP-UX

Part No. B10668-03

Oracle 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?
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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: devsuitedocs_us@oracle.com
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  500 Oracle Parkway, M/S 2op11
  Redwood Shores, CA 94065
  U.S.A

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.

Preface

This document summarizes differences between Oracle Developer Suite 10*g* (9.0.4) and its documented functionality.

For recent updates to the release notes and other documentation, please visit Oracle Technology Network at http://otn.oracle.com

Intended Audience

This installation guide is intended for developers, database administrators, and others responsible for installing Oracle products. You should be familiar with client/server architecture/relationships and database concepts.

Documentation Accessibility

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

http://www.oracle.com/accessibility/

Accessibility of Code Examples in Documentation   JAWS, a Windows screen reader, may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, JAWS may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation   This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Organization

This document contains the following:

Part I, "Product Release Notes"

This part of the release notes contains information for the entire Oracle Developer Suite product.

The Part I chapters are:

- Chapter 2, "Product Naming"
- Chapter 3, "Certification Information"
- Chapter 4, "Known Issues"

Part II, "Component Release Notes"

This part of the release notes contains information for individual Oracle Developer Suite components.

The Part II chapters are:

- Chapter 5, "Oracle9i JDeveloper"
- Chapter 6, "Oracle Business Intelligence Beans"
- Chapter 7, "Oracle Discoverer Administrator"
- Chapter 8, "Oracle Discoverer Desktop"
- Chapter 9, "Oracle Forms Developer"
- Chapter 10, "Oracle Reports"
- Chapter 11, "Oracle Designer"
- Chapter 12, "Oracle Software Configuration Manager"

Part III, "Other Release Notes"

This part of the release notes contains information for server components that are installed with Oracle Developer Suite.

The Part III chapters are:

- Chapter 13, "Oracle Application Server Containers for J2EE (OC4J)"

Related Documents

For more information, see these Oracle resources:

- Oracle Developer Suite Documentation Library
- Oracle Developer Suite Platform Specific Documentation on Oracle Developer Suite Disk 1 CD-ROM or Oracle Developer Suite and Documentation DVD

Printed documentation is available for sale in the Oracle Store at

http://oraclestore.oracle.com/.

To download free release notes, installation documentation, white papers, or other collateral, please visit the Oracle Technology Network (OTN). You must register online before using OTN; registration is free and can be done at

http://otn.oracle.com/membership.

If you already have a user name and password for OTN, then you can go directly to the documentation section of the OTN Web site at

http://otn.oracle.com/documentation.

Conventions

The following conventions are also used in this manual:

Convention	Meaning
boldface text	Boldface type in text indicates a key or button that you press or click; it could also indicate labels and options that appear on installation dialogs.
Italics	Italic typeface indicates book titles or emphasis.
`code (lowercase monospace or fixed-width font)`	Lowercase monospace typeface indicates executables, file names, directory names, and sample user-supplied elements. Such elements include computer and database names, net service names, and connect identifiers, as well as user-supplied database objects and structures, column names, packages and classes, user names and roles, program units, and parameter values. Note: Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.
`boldface code`	Boldface monospace typeface indicates text that you enter in response to a command line prompt.
`italicized code`	Italicized code indicates placeholder text that you need to replace with an appropriate value.
`CODE (UPPERCASE monospace or fixed-width font)`	Uppercase monospace typeface indicates elements supplied by the system. Such elements include parameters, privileges, datatypes, RMAN keywords, SQL keywords, SQL*Plus or utility commands, packages and methods, as well as system-supplied column names, database objects and structures, usernames, and roles.
. . .	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.
...	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted.
[ ]	Brackets enclose optional clauses from which you can choose one or none.

Product Accessibility

To make the best use of the product's accessibility features, Oracle Corporation recommends the following software configuration:

- Microsoft Windows NT 4.0 (with Service Pack 6) or Windows 2000

- Sun Java Access Bridge 1.0.3

- JAWS

- Microsoft Internet Explorer 5.5

- JDK 1.4.1

Additional accessibility information for Oracle products can be found at

http://www.oracle.com/accessibility/

For the latest configuration information or information on addressing accessibility and assistive technology issues, see the Oracle Accessibility FAQ at

http://www.oracle.com/accessibility/faq.html

Part I

Product Release Notes

Part 1 of the release notes contains information for the entire Oracle Developer Suite product

Part 1 contains the following chapters:

- Chapter 1, "What's New in the Oracle Developer Suite 10g Release Notes?"
- Chapter 2, "Product Naming"
- Chapter 3, "Certification Information"
- Chapter 4, "Known Issues"

1

What's New in the *Oracle Developer Suite 10g Release Notes?*

This chapter provides a listing of new topics introduced with this version of the *Oracle Developer Suite 10g Release Notes*. The new topics are in the following chapters:

- Chapter 4 "Known Issues"
- Chapter 7 "Oracle Discoverer Administrator"
- Chapter 10 "Oracle Reports"

1.1 Chapter 4 "Known Issues"

- Section 4.5.1, "Linux Issues"
- Section 4.8.1, "Oracle Developer Suite 10g Installation Guide"

  Note that the second paragraph of the original section, which described revisions to Table 2-8 of the *Installation Guide,* has been removed. This information is superseded by Section 4.8.3, "Linux Operating Environment Software Requirements".

- Section 4.8.2, "Oracle Developer Suite 10g Quick Installation Guide"

  Note that the first paragraph of the original section, which described revisions to Table 8 of the *Quick Installation Guide*, has been removed. This information is superseded by Section 4.8.3, "Linux Operating Environment Software Requirements".

- Section 4.8.3, "Linux Operating Environment Software Requirements"

1.2 Chapter 7 "Oracle Discoverer Administrator"

- Section 7.6.5, "<ORACLE_HOME>\discoverer\util should read <ORACLE_HOME>\discoverer\sql"

1.3 Chapter 10 "Oracle Reports"

- Section 10.1.1, "Running a Simple Matrix Report to the Web"
- Section 10.1.2, "Opening / Running an encoded JSP report"
- Section 10.1.3, "Dynamically Embedding a Character Set in a JSP file"
- Section 10.1.4, "Running a Multibyte report containing an embedded Oracle Object"

2

Product Naming

Previous versions of Oracle Developer Suite 10*g* (9.0.4) were released under the
following product names:

- Oracle Internet Developer Suite

- Oracle9*i* Developer Suite (Oracle9*i*DS) Release 2 (9.0.2)

2.1 Windows Components

For Windows, the components of Oracle Developer Suite 10*g* (9.0.4) are:

Table 2–1   Windows Component Names

Oracle Developer Suite 10*g* Component	Release 2 (9.0.2) name	Oracle Internet Developer Suite name
Oracle9*i* JDeveloper (9.0.4)	Oracle9*i* JDeveloper (9.0.2)	Oracle JDeveloper
Oracle Forms Developer	Oracle9*i* Forms Developer	
Oracle Reports Developer	Oracle9*i* Reports Developer	
Oracle Discoverer Administrator[1]	Oracle9*i* Discoverer Administrator	Oracle Discoverer Administration Edition
Oracle Designer		
Oracle Software Configuration Manager		

[1] Oracle Discoverer Administrator includes Oracle Discoverer Desktop.

2.2 Linux, Solaris, and HP-UX Components

For Linux, Solaris, and HP-UX, the components of Oracle Developer Suite 10*g* (9.0.4)
are:

Table 2–2   Linux, Solaris, and HP-UX Component Names

Oracle Developer Suite 10*g* Component	Release 2 (9.0.2) name	Oracle Internet Developer Suite name
Oracle9*i* JDeveloper (9.0.4)	Oracle9*i* JDeveloper (9.0.2)	Oracle JDeveloper
Oracle Forms Developer	Oracle9*i* Forms Developer	
Oracle Reports Developer	Oracle9*i* Reports Developer	

3

Certification Information

This chapter lists certification information for Oracle Developer Suite.

3.1 Certification Information

Certification information is now maintained online. The most up-to-date certification information for Oracle Developer Suite is always available at Oracle*Metalink* (http://metalink.oracle.com).

4

Known Issues

This chapter discusses issues and workarounds that apply to the entire Oracle Developer Suite product. For component-specific issues and workarounds, please refer to the chapters in Part II, "Component Release Notes".

This chapter is divided into the following sections:

- Section 4.1, "Preinstallation Issues"

- Section 4.2, "Installation Issues"

- Section 4.3, "Postinstallation Issues"

- Section 4.4, "Deinstallation Issues"

- Section 4.5, "Platform-specific Issues"

- Section 4.6, "Configuration Issues"

- Section 4.7, "Administration Issues"

- Section 4.8, "Documentation Errata"

4.1 Preinstallation Issues

4.1.1 Oracle Business Intelligence Beans

Oracle Business Intelligence Beans (hereinafter referred to as "BI Beans") requires Oracle9*i* Enterprise Edition Release 2 (9.2.0.3 or later) with the OLAP Option. For specific patch set numbers, see the matrix of supported patch sets in the BI Beans product area on Oracle Technology Network (`http://otn.oracle.com/docs/products/bib/content.html`).

The OLAP Option requires configuration, as follows:

- Basic configuration is described in the *Oracle9i OLAP User's Guide*. This book is available on Oracle*MetaLink* (`http://metalink.oracle.com`). On the top-level page on Oracle*MetaLink*, click Top Tech Docs, then scroll to the Business Intelligence (BI) & Warehousing heading and click Oracle OLAP. Next, click Documentation, then Oracle OLAP, then the book title.

- For good performance and to ensure that BI Beans works as expected, you must follow the guidelines in *Oracle9i OLAP Best Practices for Tabular Cube Aggregation and Query Operations*. This document is available as patch set 2529822 on Oracle*MetaLink* (`http://metalink.oracle.com`).

4.1.2 Oracle9*i* Warehouse Builder

Oracle9*i* Warehouse Builder Release 9.2 is included in the Oracle Developer Suite 10*g* CD Pack as a separate CD-ROM disk with a separate installation program. All of the documentation for Oracle9*i* Warehouse Builder is included on its CD-ROM.

4.2 Installation Issues

There are no known suite-level installation issues.

4.3 Postinstallation Issues

4.3.1 Java Versions

The documentation for an individual component of Oracle Developer Suite may list a specific version of the JDK, JRE, J2SE, J2EE or other Java feature that is certified for that component. Nevertheless, the Java version that is supplied with Oracle Developer Suite 10*g* 9.0.4 is also fully certified for all components.

For example, the Java in Oracle Developer Suite 10*g* 9.0.4 for Linux is 1.4.2.x, while the Oracle Business Intelligence Beans (BI Beans) documentation says that BI Beans is only certified with 1.4.1. However, BI Beans is also certified with the Java SDK 1.4.2 that is installed with Oracle Developer Suite 10*g* for Linux.

4.4 Deinstallation Issues

There are no known suite-level deinstallation issues.

4.5 Platform-specific Issues

4.5.1 Linux Issues

4.5.1.1 Revised Linux Operating Environment Software Requirements

The following documented Linux operating environment software requirements have been revised:

- Section 2.3.4 "Linux Operating Environment" of the *Oracle Developer Suite Installation Guide 10g (9.0.4) for Windows, Linux, Solaris, and HP-UX*. The revisions are listed in Section 4.8.3, "Linux Operating Environment Software Requirements".

- Table 8 "Linux x86 Operating Environment Software Requirements" of the *Oracle Developer Suite 10g Quick Installation Guide 10g (9.0.4) for Windows, Linux, Solaris, and HP-UX*. The revisions are listed in Section 4.8.3, "Linux Operating Environment Software Requirements".

4.5.1.2 Setting the PATH environment variable in Linux

After you finish installing on a Linux computer, update the PATH variable of any shell that will be relinking Developer Suite executables via Makefiles, by inserting `/usr/bin` as the first entry of the variable.

4.6 Configuration Issues

There are no known suite-level configuration issues.

4.7 Administration Issues

There are no known suite-level administration issues.

4.8 Documentation Errata

4.8.1 Oracle Developer Suite 10*g* Installation Guide

In Table A-1, footnote 2 states that "Oracle9*i* Warehouse Builder Release 2 (9.0.4) is now available separately from Oracle Developer Suite." Oracle Developer Suite 10*g* now includes Oracle9*i* Warehouse Builder Release 9.2. as a separate CD-ROM. For more information, see Section 4.1.2, "Oracle9i Warehouse Builder".

In section 2.9.4.2.2, "Mounting CD-ROMs and DVDs to HP-UX", make the following changes:

- In step 2, change "ioscan" to "/etc/ioscan" so that the line reads

  ```
  # /etc/ioscan -fun -C disk
  ```

- In the Note within step 3, replace "an empty /mnt/cdrom directory" with "an empty /SD_CDROM directory".

- In step 5, replace "mount the CD-ROM" with "mount the CD-ROM or DVD".

4.8.2 Oracle Developer Suite 10*g* Quick Installation Guide

In Table 9 "Information Needed During Installation", make the following change:

- For the item "Java SDK Directory", change the value of "Install Type" from "All" to "All (HP-UX only)."

4.8.3 Linux Operating Environment Software Requirements

> **Note:** This section replaces the following sections:
>
> Section 2.3.4 "Linux Operating Environment" of the *Oracle Developer Suite 10g Installation Guide 10g (9.0.4) for Windows, Linux, Solaris, and HP-UX*.
>
> Table 8 "Linux x86 Operating Environment Software Requirements" of the *Oracle Developer Suite 10g Quick Installation Guide 10g (9.0.4) for Windows, Linux, Solaris, and HP-UX*.
>
> Please refer to Section 4.5.1.1, "Revised Linux Operating Environment Software Requirements" for more information.

This section describes the Linux operating environment software requirements for the following supported Linux distributions:

- Section 4.8.3.1, "Red Hat Linux 2.1 Requirements"

- Section 4.8.3.2, "Red Hat Linux 3.0 Requirements"

- Section 4.8.3.3, "UnitedLinux 1.0 Requirements"

> **Note:** Oracle does not support customized kernels or modules not supported by the Linux vendor.

You can install Oracle Developer Suite 10*g* on a Linux computer that is not on a network, and you can install Oracle Developer Suite 10*g* on a Linux computer that is configured to use DHCP. If you want to install Oracle Developer Suite 10*g* on a computer that is not on a network, you must configure the computer to use either a static IP address or a loopback IP address. Configure the computer to resolve its hostname to either a static IP address or a loopback IP address.

4.8.3.1 Red Hat Linux 2.1 Requirements

Table 4–1, " Red Hat 2.1 Operating Environment Software Requirements" lists the operating environment software requirements for Red Hat 2.1. The procedure that follows the table describes how to ensure your computer meets these requirements.

> **Note:** Check Oracle*MetaLink* (http://metalink.oracle.com) for the most current list of supported operating environment software.

Table 4–1   Red Hat 2.1 Operating Environment Software Requirements

Item	Requirement
Operating System	Red Hat Enterprise Linux AS/ES 2.1
	(for more information, see http://www.redhat.com)
Patches	Errata 25 kernel or a higher errata patch approved by Red Hat
	For example, you should have one of the following, depending on the type of Red Hat installation you have:
	- kernel-2.4.9-e.25
	- kernel-smp-2.4.9-e.25
	- kernel-enterprise-2.4.9-e.25
	The minimum supported version of the glibc package is glibc-2.2.4-32
Packages	- gcc-2.96-108.1
(check that the specified version or higher is installed.)	- pdksh-5.2.14-13
	- openmotif-2.1.30
	- compat-glibc-6.2-2.1.3.2
	- libstdc++-2.96-108.1

To ensure that your computer meets these requirements:

1. Log in as `root`.

2. Determine which distribution and version of Linux is installed, by entering the following command:

   # `cat /etc/issue`

   This will list out the version. For example, the response

   ```
   Red Hat Linux Advanced Server release 2.1AS/\m (Pensacola)
   ```

   indicates that you have Red Hat Linux AS version 2.1.

3. Determine which version of the Red Hat Linux kernel is installed, by entering the following command:

   # `uname -r`

   This lists the kernel version. For example, the response

   ```
   kernel-smp-2.4.9-e.25
   ```

   shows that you have kernel 2.4.9 with errata 25. If you need to upgrade your kernel, refer to your operating system documentation for instructions.

   > **Note:** For more information on Red Hat patches, see
   > http://www.redhat.com.

4. Check that the required software packages are installed. To do this, enter the command:

   # `rpm -q` *package_name*

   for each package listed in the "Packages" entry in Table 4–1, " Red Hat 2.1 Operating Environment Software Requirements".

   If a package is missing, download it and install it using the following command:

   # `rpm -i` *package_name*

4.8.3.2 Red Hat Linux 3.0 Requirements

Table 4–2, " Red Hat 3.0 Operating Environment Software Requirements" lists the operating environment software requirements for Red Hat 3.0. The procedure that follows the table describes how to ensure your computer meets these requirements.

> **Note:** Check Oracle*MetaLink* (`http://metalink.oracle.com`) for the most current list of supported operating environment software.

Table 4–2 Red Hat 3.0 Operating Environment Software Requirements

Item	Requirement
Operating System	Red Hat Enterprise Linux AS/ES 3.0
	(for more information, see `http://www.redhat.com`)
Patches	The minimum supported kernel and glibc versions are:
	■ 2.4.21-4-EL
	■ glibc-2.3.2-95.3
Packages	■ gcc-3.2.3-20
(check that the specified version or higher is installed.)	■ setarch-1.3-1
	■ pdksh-5.2.14
	■ openmotif21-2.1.30-8
	■ gnome-libs-1.4.1.2.90-34.1
	■ compat-glibc-7.x-2.2.4.32.5
	■ compat-gcc-7.3-2.96.122
	■ compat-libstdc++-7.3-2.96.122
	■ compat-libstdc++-devel-7.3-2.96.122
	■ compat-gcc-c++-7.3-2.96.122

> **Note:** For Red Hat Linux 3.0, the equivalent version of openmotif 2.1.30-8 is openmotif21-2.1.30-8. Install the openmotif21-2.1.30-8 package from disk number 3 of the Red Hat Linux 3.0 distribution by entering:
>
> $ **rpm -ivh openmotif21-2.1.30-8**

To ensure that your computer meets these requirements:

1. Log in as `root`.

2. Determine which distribution and version of Linux is installed, by entering the following command:

   # **cat /etc/issue**

   This will list out the version. For example, the response

   Red Hat Enterprise Linux AS 3 (Taroon)

   indicates that you have Red Hat Linux AS version 3.0.

3. Check that the required software packages are installed. To do this, enter the command:

   # **rpm -q** *package_name*

   for each package listed in the "Packages" entry in Table 4–2, " Red Hat 3.0 Operating Environment Software Requirements".

   If a package is missing, download it and install it using the following command:

   # **rpm -i** *package_name*

4. Check for required symbolic links:

   a. Change to the directory /usr/bin:

      # **cd /usr/bin**

   b. List these symbolic links:

      # **ls -l gcc g++**

      The response should be:

      ```
      gcc -> gcc296

      g++ -> g++296
      ```

5. If the symbolic links do not exist, back up the existing files and then create the links:

   a. Back up the existing files:

      # **mv /usr/bin/gcc /usr/bin/gcc.backup**

      # **mv /usr/bin/g++ /usr/bin/g++.backup**

   b. Create the symbolic links:

      # **ln -s /usr/bin/gcc296 /usr/bin/gcc**

      # **ln -s /usr/bin/g++296 /usr/bin/g++**

   Note: After you have finished installing Oracle Developer Suite 10*g*, you can restore the original files. The installer requires the symbolic links during the relink phase of installation.

   ---

6. If you are using the hugemem kernel, set the architecture by running the following command:

   # **setarch i386**

7. Apply Oracle patch no. 3006854. You can download this patch from Oracle*MetaLink* (http://metalink.oracle.com). This patch creates the file /etc/libcwait.so and appends the following line to the file /etc/ld.so.preload:

   /etc/libcwait.so

4.8.3.3 UnitedLinux 1.0 Requirements

Table Table 4–3, " UnitedLinux 1.0 Operating Environment Software Requirements" lists the operating environment software requirements for UnitedLinux 1.0. The procedure that follows the table describes how to ensure your computer meets these requirements.

> **Note:** Check Oracle*MetaLink* (http://metalink.oracle.com) for the most current list of supported operating environment software.

Table 4–3 UnitedLinux 1.0 Operating Environment Software Requirements

Item	Requirement
Operating System	UnitedLinux 1.0
	(For more information, see http://www.unitedlinux.com)
Patches	SP2a and SP3 are certified for Oracle Developer Suite 10*g*.
	For UnitedLinux 1.0 SP2a, the minimum supported kernel and glibc versions are:
	■ 2.4.19
	■ glibc-2.2.5-179
	For UnitedLinux 1.0 SP3, the minimum supported kernel and glibc versions are:
	■ 2.4.21
	■ glibc-2.2.5-213
Packages	■ gcc_old-2.95.3
(check that the specified version or higher is installed.)	■ pdksh-5.2.14
	■ openmotif-2.1.30MLI4
	■ libstdc++-3.2.2-38

To ensure that your computer meets these requirements:

1. Log in as root.

2. Determine which distribution and version of Linux is installed, by entering the following command:

   # `cat /etc/issue`

   This will list out the version. For example, the response

   ```
   Welcome to UnitedLinux 1.0 (i586) - Kernel \r (\l)
   ```

   indicates that you have UnitedLinux version 1.0.

3. Determine the service pack version by entering the following command:

   # `rpm -qf /boot/vmlinuz`

   If the kernel version contains the string "2.4.19", SP2a is installed. If the kernel version contains the string "2.4.21", SP3 is installed.

4. Check that the required software packages are installed. To do this, enter the command:

rpm -q *package_name*

for each package listed in the "Packages" entry in Table 4–3, " UnitedLinux 1.0 Operating Environment Software Requirements".

If a package is missing, download it and install it using the following command:

rpm -i *package_name*

5. Create the following symbolic link for the Perl program if it does not already exist:

ln -sf /usr/bin/perl /usr/local/bin/perl

6. Create the following symbolic link for the fuser program if it does not already exist:

ln -sf /bin/fuser /sbin/fuser

7. Set up the compiler environment:

a. Install the package gcc_old-2.95.3. This installs GCC compiler version GCC 2.95.3 in the directory /opt/gcc295.

b. Display the symbolic links for gcc and cc by entering the following commands:

```
# cd /usr/bin
# ls -l gcc cc
gcc -> /opt/gcc295/bin/gcc
cc -> /opt/gcc295/bin/gcc
```

c. If these symbolic links do not exist, back up the existing files and then add the symbolic links:

```
# mv /usr/bin/gcc /usr/bin/gcc.backup
# mv /usr/bin/cc /usr/bin/cc.backup
# ln -s /opt/gcc295/bin/gcc /usr/bin/gcc
# ln -s /opt/gcc295/bin/gcc /usr/bin/cc
```

You must create these links so that Oracle Developer Suite 10*g* can relink during installation. Once your installation is complete, you can remove the links and restore the original files.

d. Create the following symbolic link if it does not already exist:

```
# ln -s /opt/gcc295/lib/gcc-lib/i486-suse-linux/2.95.3/libgcc.a \
/lib/libgcc.a
```

> **Note:** The actual path to libgcc.a that is listed in this command may be different for your UnitedLinux installation. You may need to replace the string "suse" with another value.

8. If the package `orarun` was installed, complete the following steps as user `oracle` to reset your environment:

   a. Enter the following commands:

   ```
   prompt> cd /etc/profile.d
   prompt> mv oracle.csh oracle.csh.bak
   prompt> mv oracle.sh oracle.sh.bak
   prompt> mv alljava.sh alljava.sh.bak
   prompt> mv alljava.csh alljava.csh.bak
   ```

   b. Using a text editor, edit the file `$HOME/.profile` and comment out the following line:

   ```
   . ./.oracle
   ```

   c. Log out of the `oracle` user account.

   d. Log in as user `oracle`. The changes now take effect.

9. If any Java packages are installed on the computer, unset Java environment variables such as `$JAVA_HOME`.

   Note: Oracle recommends that you do not install any of the Java packages supplied with your UnitedLinux distribution.

   ---

10. If you use Network Information Service (NIS):

    a. Ensure that the file `/etc/yp.conf` contains the following line:

    hostname.domainname broadcast

    b. Ensure that the file `/etc/nsswitch.conf` contains the following line:

    ```
    hosts: files nis dns
    ```

Part II

Component Release Notes

Part II of the release notes contains one chapter of component-specific information for each component of Oracle Developer Suite.

Part II contains the following chapters:

> **Note:** The documentation for an individual component of Oracle Developer Suite may list a specific version of the JDK, JRE, J2SE, J2EE or other Java feature that is certified for that component. Nevertheless, the Java version that is supplied with Oracle Developer Suite 10g 9.0.4 is also fully certified for all components.
>
> For example, the Java in Oracle Developer Suite 10g 9.0.4 for Linux is 1.4.2.x, while the Oracle Business Intelligence Beans (BI Beans) documentation says that BI Beans is only certified with 1.4.1. However, BI Beans is also certified with the Java SDK 1.4.2 that is installed with Oracle Developer Suite 10*g* for Linux.

- Chapter 5, "Oracle9i JDeveloper"
- Chapter 6, "Oracle Business Intelligence Beans"
- Chapter 7, "Oracle Discoverer Administrator"
- Chapter 8, "Oracle Discoverer Desktop"
- Chapter 9, "Oracle Forms Developer"
- Chapter 10, "Oracle Reports"
- Chapter 11, "Oracle Designer"
- Chapter 12, "Oracle Software Configuration Manager"

5

Oracle9*i* JDeveloper

This chapter discusses the following Oracle9*i* JDeveloper topics:

- Section 5.1, "General Issues and Workarounds"
- Section 5.2, "Platform-specific Issues and Workarounds"
    - Section 5.2.1, "Windows Platform Issues and Workarounds"
    - Section 5.2.2, "Linux, Solaris, and HP-UX Platform Issues and Workarounds"
- Section 5.3, "Configuration Issues and Workarounds"
- Section 5.4, "Administration Issues and Workarounds"
- Section 5.5, "Documentation Errata"

5.1 General Issues and Workarounds

5.1.1 Introduction

Oracle9*i* JDeveloper (JDeveloper) is a J2EE development environment with end-to-end support for developing, debugging, and deploying e-business applications and web services.

To maximize developer productivity, JDeveloper provides a comprehensive set of integrated tools to support the complete development lifecycle, from source control, modeling, and coding through debugging, testing, profiling, and deploying. JDeveloper simplifies J2EE development by providing wizards, editors, visual design tools, and deployment tools to create high-quality, standard J2EE components including applets, JavaBeans, JavaServer Pages (JSP), servlets, and Enterprise JavaBeans (EJB). JDeveloper also provides a public Extension SDK to extend and customize the development environment and to seamlessly integrate with external products.

For more information about this release, please visit the JDeveloper page on the Oracle Technology Network at `http://otn.oracle.com/products/jdev`. You will also find there the *Oracle9i JDeveloper Version 9.0.4 Release Notes Addendum* (`http://otn.oracle.com/products/jdev/htdocs/9.0.4.0/readme_9.0.4_addendum.htm`) which contains additional information not available at the time of this document's publication

To simplify the development of scalable, high-performance J2EE applications, JDeveloper offers an open and extensible J2EE framework called Business Components for Java (BC4J). BC4J implements Sun's J2EE design patterns and allows developers to quickly build sophisticated J2EE applications.

5.1.1.1 Support for Oracle9*i* Release 2 (9.2)

Oracle9*i* JDeveloper version 9.0.4 is distributed with drivers for Oracle9*i* Release 1. These drivers are compatible with the following database versions:

- Oracle9*i* Release 2 (9.2)

- Oracle9*i* Release 1 (9.0.1)

- Oracle8*i* (8.1.7)

Drivers for Oracle9*i* Release 2 can be installed in JDeveloper version 9.0.4, but are not supported.

5.1.2 Deploying to OC4J

5.1.2.1 OC4J Version Shipped with Oracle JDeveloper 9.0.4

By default, Oracle9*i* JDeveloper Version 9.0.4 lets you fully test your J2EE applications in JDeveloper using the embedded OC4J server before deploying to a target application server. The OC4J 9.0.4 embedded server resides in the following location in JDeveloper:

- **Windows single-user:** `oracle_home`\jdev\system####\oc4j-config

- **Linux, Solaris, and HP-UX**, **and multi-user**: `oracle_home`/
  jdev_user_dir/jdev/system####/oc4j-config

JDeveloper also ships a copy of OC4J 9.0.4, which you can run in standalone mode. The files for the OC4J 9.0.4 standalone server are located in

`oracle_home`/j2ee/home

Related files can be found in

`oracle_home`/j2ee/home/config

If you deploy your applications to standalone OC4J, make sure that you use the remote `admin.jar` file that was shipped with the remote OC4J. If you are using an `admin.jar` that doesn't match the version of OC4J to which you are deploying, deployment may fail. You can configure deployment to use the correct `admin.jar` for the OC4J standalone instance when you set up your connection using the JDeveloper Application Server Connection Wizard.

To view the version of OC4J that you are using, enter the following from your OC4J installation directory:

```
java -jar oc4j.jar -version
```

5.1.2.2 OC4J Memory Requirements

By default, OC4J preloads a large number of classes to improve performance. Because of this, you may get a `java.lang.OutOfMemoryError` when you attempt to deploy to OC4J.

If you get a `java.lang.OutOfMemoryError`, you have two options:

- If your computer lacks sufficient free memory to run OC4J with a larger maximum heap size, shut down the Java process that runs OC4J and restart it with the `-Doracle.j2ee.dont.use.memory.archive=true` flag to turn off class preloading, for example:

  ```
  Java -Doracle.j2ee.dont.use.memory.archive=true
  -jar oc4j.jar
  ```

- If your computer has at least 512 MB of free memory, OC4J will run more quickly if you leave preloading enabled, but startup time will increase considerably. Shut down the Java process that runs OC4J, and restart it with a larger maximum heap size using the `-mx` flag, for example:

  ```
  Java -mx512M -jar oc4j.jar
  ```

5.1.3 Deploying to Other Application Servers

5.1.3.1 Problems Running UIX Web Applications (including the BC4J JSP Admin Page) Deployed to Non-Oracle Application Servers (2577293)

You may get the following error when running a UIX web application deployed to a non-Oracle application server, or clicking the BC4J Admin link on a BC4J JSP application deployed to a non-Oracle application server:

```
[INFO] RequestProcessor - -Processing a 'GET' for Path...
Root cause of ServletException
java.lang.NullPointerException...
```

To avoid this error, you must make changes to the `uix-config.xml` file.

If you are running a BC4J JSP application with an Admin page, make the change on the server:

1. Find and unzip the `bc4j.ear` file on the server.

2. Unzip the `webapp.war` file that is extracted.

3. Open the extracted file `WEB-INF/uix-config.html` in a text editor.

4. Uncomment the `<default-configuration>` element.

5. Set the value of the `<full-uri>` element to the URL of your application server, including the port number.

6. Set the value of the `<full-path>` element to the full local path to the parent directory of the cabo directory on your application server.

   Note: Be sure to use the parent directory, not the cabo directory itself.

7. Repackage the `webapp.war` file.

8. Repackage the `bc4j.ear` file.

9. Redeploy the modified `bc4j.ear` file.

If you are running a full BC4J UIX application, make the changes inside JDeveloper:

1. In the **System Navigator**, find the file `uix-config.html` and open it in the **Code Editor**.

2. Uncomment the `<default-configuration>` element.

3. Set the value of the `<full-uri>` element to the URL of your application server, including the port number.

4. Set the value of the `<full-path>` element to the full local path to the parent directory of the cabo directory on your application server.

   Note: Be sure to use the parent directory, not the cabo directory itself.

5. Save the file and redeploy the application to the non-Oracle application server.

5.1.3.2 Deploying Web Applications to Apache Tomcat 4.1

If you are deploying to Apache Tomcat 4.1, you will have to copy the BC4J runtime libraries into *tomcat_install*/`common/lib`, not *tomcat_install*/`lib`. See the help topic "Deploying Web Applications to Apache Tomcat" for more information.

5.1.3.3 Problems in JSP Applications Deployed to Tomcat (2615358)

Due to a Tomcat bug, you may get the following error message when running a JSP application deployed to tomcat:

```
Only one of the two parameters ... or ... should be defined.
```

This is caused by an error in Tomcat's tag pooling mechanism. Because Tomcat does not release tags after pooling, subsequent uses of the same tag with incompatible attributes defined will cause this error.

To avoid the error, you must disable tag pooling in Tomcat:

1. Open the file *tomcat_home*/`conf/web.xml` in a text editor.

2. Find the following element:

   ```
   <init-param>
     <param-name>enablePooling</param-name>
     <param-value>true</param-value>
   </init-param>
   ```

3. Change the value of `<param-value>` to `false`.

5.1.3.4 XSQL Page Processor Cannot Read Pages from Unexpanded Servlet 2.2 WAR File (1552039)

You cannot run XSQL pages in WebLogic 6.1/7.0, JBoss 3.0.4, or Tomcat 4.1.12.

5.1.3.5 Type Incompatibilities when Deploying to WebLogic

Some applications deployed to WebLogic may have type incompatibilities if you use the BEA supplied Oracle classes. To ensure that you don't have these problems, replace the supplied `classes12.zip` and `classes12.jar` file in your server's `lib` directory with `classes12.jar` in the *oracle_home*/`jdbc/lib` directory.

5.1.3.6 WebLogic6.1 Fails to Understand Windows-1252 Encoding in XML Files

WebLogic6.1 fails to understand 'Windows-1252' encoding in the xml files. This is a bug in the xmlparser in WebLogic6.1. To deploy applications in JDeveloper to WebLogic6.1 change encoding to an IANA encoding that WebLogic6.1 recognizes. It is recommended to use UTF-8 encoding. Japanese users need to use Shift_JIS:

For example, to use UTF-8 encoding, do the following:

1. In JDeveloper, choose the menu item **Tools > Preferences**.

2. In the **Environment** panel change the Encoding field to **UTF-8**.

3. Click **OK**.

Now create a new project and your application.

5.1.3.7 CORBA Requires JDK 1.3 at Runtime (2685103)

Although you can develop a CORBA application for Visibroker using the JDeveloper 9.0.4 default JDK 1.4, in order to deploy or run the application, you must make sure these changes are made:

■ Run the Visibroker server using JDK 1.3.

■ Before deployment, configure the project to use JDK 1.3, and add these items to the Java command line, which you can do in **Project > Default Settings**:

```
-Dorg.omg.CORBA.ORBClass=com.inprise.vbroker.orb.ORB
-Dorg.omg.CORBA.ORBSingletonClass=com.inprise.vbroker.orb.ORBSingleton
-Djavax.rmi.CORBA.StubClass=com.inprise.vbroker.rmi.CORBA.StubImpl
-Djavax.rmi.CORBA.UtilClass=com.inprise.vbroker.rmi.CORBA.UtilImpl
-Djavax.rmi.CORBA.PortableRemoteObjectClass=com.inprise.vbroker.rmi.CORBA.
PortableRemoteObjectImpl
```

These options are only required for client JSP projects. We recommend specifying the settings in your default settings for ease of use.

5.1.4 Miscellaneous Deployment Issues

5.1.4.1 ejb-ref in web.xml not Updated if the Bean Type is Changed from Remote to Local (2589997)

Creating a JSP application for a BC4J session facade results is an `ejb-ref` entry in the `web.xml` of the that project. If you change the interface type of that facade, from local to remote or vice versa, then you must update the `ejb-ref` entry in `web.xml`. For example if you change the bean type from remote to local then you must replace the `<ejb-ref>` section in `web.xml` with the appropriate `<ejb-local-ref>` tags.

5.1.5 BC4J Issues

5.1.5.1 Available Tables not Visible Under Java Type Map and SQL92 SQL Flavor (2693168)

In the BC4J Package Wizard, if you are using the Java Type Map and the SQL92 SQL flavor, you may not initially see any tables in the Available Tables list. To fix this problem, uncheck and then recheck the Tables checkbox.

5.1.5.2 902 Projects with VO or Attribute Names Containing $ do not Migrate (2701773)

If your BC4J project has component names or attribute names containing a "$" character, you need to rename the attributes or components and remove the "$" before migrating your project to a later release of JDeveloper. BC4J names cannot contain "$" in JDeveloper 9.0.3 and later.

5.1.5.3 JDeveloper 9.0.4 *.jpr File Format Not Backward Compatible with 9.0.3 (2682921)

If you have JDeveloper projects created with a previous release, after opening these projects in JDeveloper 9.0.4 and saving the `.jpr` file in the 9.0.4 format, you no longer can re-open the same `.jpr` file in JDeveloper 9.0.3. Specifically in the case of 9.0.3 projects containing BC4J components, after saving their JPR file in the JDeveloper 9.0.4 format, any attempt to reopen them in 9.0.3 will no longer load/build the project correctly. If you are using JDeveloper 9.0.4 to test the release on an existing project, please make a backup copy of your JDeveloper 9.0.3 `.jpr` files in case you want to go back to using JDeveloper 9.0.3.

5.1.5.4 Migrated Project: Export Interface is Removed but Still Implemented in IMPL Class (2676186)

This issue only applies if you have a 9.0.2 BC4J project containing an empty export interface and you want to migrate the project to a later release of JDeveloper. You would have an empty export interface if you exported client methods in an application module or view object, and then removed all methods from the export list. If you migrate this type of project to a later release of JDeveloper the empty export interface is removed but the class that implements it is not removed, causing compilation errors.

The workaround is to delete the "implements" clause (for example, "implements EmpView") from the class declaration in your class file. You can do this before or after migrating the project, although it is probably easier to do it after because the compilation errors will tell you what needs to be fixed.

5.1.5.5 Bean Name in <EJB-LOCAL-REF> not Updated when Underlying Entity is Renamed (2587916)

You should not rename entity beans that have BC4J entity facades depending on them. Doing so will cause a `NullPointerException` because the deployment profile is not updated properly.

5.1.5.6 Setting Current Database Time Using Entity Facades (2525437)

Entity facades (both BMP and CMP) must override `getDbCurrentTime()` in the generated `xxxFacadeCollImpl.java` to return the database current time. This is necessary because `getDbCurrentTime()` in `oracle.jbo.server.ejb.facade.EntityFacadeCollImpl` uses Java system time; the SQL flavor and connection details are not known for the entity facade.

5.1.5.7 Replace qView with getRowSet in Migration Documentation (2723075)

In the migration documentation, replace qView with getRowSet.

5.1.5.8 Documentation Refers to BC4J "Wizards"

The help documentation that is displayed when you click **Help** in one of the component editors refers to a component "wizard" when it should refer to a "wizard or editor". For example, the help text that is displayed when you click **Help** in the Entity Object Editor has the title "Entity Object Wizard"; the title should be "Entity Object Wizard and Editor".

5.1.5.9 Unable to Run a BC4J JSP in OC4J in VB Bind Mode (2594776)

When accessing the BC4J CORBA server you need to set some properties before initializing the ORB. These properties are set internally but in this case it's too late because OC4J initializes the ORB at startup.

The workaround is to manually add the following system properties to the OC4J command line. If you are using the embedded server then add these to the VM settings of the project from which the embedded OC4J instance is started:

```
-Dorg.omg.CORBA.ORBClass=com.inprise.vbroker.orb.ORB
-Dorg.omg.CORBA.ORBSingletonClass=com.inprise.vbroker.orb.ORBSingleton
-Djavax.rmi.CORBA.UtilClass=com.inprise.vbroker.rmi.CORBA.UtilImpl
-Djavax.rmi.CORBA.PortableRemoteObjectClass=com.inprise.vbroker.rmi.CORBA
.PortableRemoteObjectImpl
```

5.1.5.10 Problem Running Struts Actions in 9.0.3 Project After Upgrade (2756440)

After opening a 9.0.3 JDeveloper project containing a `struts-config.xml` file and Struts Actions, if you try to select one of the actions and choose **Run...** from the context menu, you may get the error:

```
The target /your action cannot be started because it does not
exist.
```

The workaround is to edit the `struts-config.xml` file in some way (for example, by adding a space somewhere, then deleting that space, and re-saving). After resaving the edited `struts-config.xml` file, then the actions can again be run.

5.1.5.11 Help Sometimes Not Available for Business Component Browser

You can only access the help system from the Business Component Browser if you launch the browser by right-clicking an application module and choosing **Test**. If you invoke the Business Component Browser by running, debugging, or profiling your model project, help will not be available.

5.1.5.12 jbo.debugoutput Property can Take Value of "file"

In addition to the documented values of "silent", "console", and "routing_classname", you can set the value of `jbo.debugoutput` to "file" to log BC4J debugging information to a text file.

5.1.6 EJB Issues

5.1.6.1 Cannot Run EJB in Embedded OC4J Server if Workspace Has Two Projects (2096700, 2591173)

You may encounter errors if you try to run an EJB application with a CMP entity bean in JDeveloper's embedded OC4J server, if the workspace containing your application contains two or more projects. To avoid errors, make sure that the output directory path is different for the different projects to avoid a naming collision. To specify an output directory path, select a project and right click **Project Settings > Configuration > Development > Paths**, then specify a directory name in the **Output Directory** text field that is different from other projects in the same workspace.

5.1.7 JClient Issues

5.1.7.1 JTree Binding is not Editable (2061405)

When you create a Java Tree control you can define the property EDITABLE in the property inspector. If this property is set to TRUE and you edit a node on the tree, you will receive an exception. The binding for the tree control does not support this being editable.

5.1.7.2 Cannot Run JClient Applications in EJB Mode Running in Webstart 1.2 (2699458)

Due to a missing signed entry in resource `J2EE/HOME/LIB/JAAS.JAR` it is not possible to run JClient applications in EJB mode running in Webstart 1.2.

5.1.7.3 Webstart not Launched in IE 5.5 Due to Mimetype Problems (2573655)

When attempting to run a JClient webstart application in Internet Explorer 5.5 using the `local.jsp` link generated by the JClient Web Start Wizard, Java Web Start does not get launched. Instead IE 5.5 will prompt you to open a file.

The workaround is to create a new mime type using `regedit` and associate it to the `.jnlp` extension. For example, in `regedit`, locate `HKEY_CLASSES_ROOT\ MIME\Database\Content_Type\application\ x-java-jnlp-file;charset=ISO-8859-1` and set property `Extension` to value `.jnlp`.

5.1.7.4 SpinnerNumberModel for JSpinner Control does not Work for oracle.jbo.domain.Number (2738858)

If you intend to represent an Integer field (such as Commission) using a Spinner control which should be able to "spin" through all integer values, then you would use the SpinnerNumberModel to represent the value, min value, max value and step.

However, in BC4J the default mapping for an numeric attribute is `oracle.jbo.domain.Number`. JUSpinnerBinding currently only supports the following types: `Double`, `Float`, `Long`, `Integer`, `Short` or `Byte` .

So, the underlying attribute should be mapped to `java.lang.Integer`.

5.1.8 Source Control Support Issues

5.1.8.1 Oracle SCM: JDeveloper Does Not Share Folder Mappings with the Oracle SCM RON

If the Oracle Software Configuration Manager (SCM) Repository Object Navigator is used to download or synchronize files to the file system, JDeveloper does not recognize the downloaded files as SCM files. This is because mapping information stored by the RON is not available to JDeveloper.

To download SCM files to the file system for use in JDeveloper, use one of the following options:

- Use the Workarea Wizard in JDeveloper to create your workarea. The files in the workarea will be automatically downloaded to the workarea download folder.

- Use the Folder Mappings tool in JDeveloper to specify a workarea download folder and map folders you want to download to the file system. You can use Folder Mappings to download files in a workarea created in the RON.

5.1.8.2 Oracle SCM: Using JDeveloper and the Oracle SCM VHV

After performing source control operations using JDeveloper, such as merging or checking files in or out, you should not use the VHV to perform further operations on these files.

5.1.8.3 Oracle SCM: Connecting to Oracle Software Configuration Manager 6i Release 4.1.1 or Above

Oracle JDeveloper is certified to work with the Oracle Software Configuration Manager which is part of Oracle9iDS Release 2 version 9.0.2. Note that Oracle JDeveloper will not prevent you from connecting to Oracle Software Configuration Manager 6i Release 4.1.1 or above, but this is not a certified combination.

5.1.9 Modeling Issues: General

5.1.9.1 Performing Source Control Operations On Model Element and Diagram Files (2211605)

If you store model element or diagram files in a source control system, Oracle recommends that you perform any source control operations on those files before you load them into memory. If you perform a source control operation on a model element or diagram file while it is currently held in memory, any changes to the copy of the file currently held in memory could be overwritten. To ensure that a model element or diagram file is not currently being held in memory, restart JDeveloper, then perform the source control operation before opening the model element or diagram.

5.1.9.2 Exceptions on Startup if Install Directory Has a Space in Name (2709528)

If you install JDeveloper into a directory that has a space in its name, you will get exceptions on startup and will not be able to create a new UML diagram.

5.1.10 Modeling Issues: Modeling Java Classes, BC4J or EJB Components

5.1.10.1 Deleting Modeled Java Classes (2706800)

If you delete from the Navigator a modeled Java class that has associations to other Java classes, then the associations are not removed from the model. If you then drag any of these orphaned associations onto a diagram, an exception is thrown. To prevent this, if you need to delete a modeled Java class that has associations, do so from the diagram.

5.1.11 Modeling Issues: Modeling Activities for E-Business Integration

5.1.11.1 E-Business Integration Generator Generates Propagations Using Public Database Links (2063917)

A bug in AQ propagation (2146152) means that remote propagations fail when using private database links to specify the destination. The E-Business Integration Generator presently generates and deploys remote propagations that use public database links in order to circumvent this problem.

This bug will be fixed in later versions of the database. After applying this patch, the public database links can be manually replaced with private database links, by querying the contents of the ALL_DB_LINKS view and creating private database links in the appropriate schema, with the same details as the public links being replaced.

5.1.11.2 Using HTTP Propagation on a 9.0.1 Database

If you use a 9.0.1 database and wish to use HTTP propagation, you must download and install an upgrade to the XML Developer's Kit for Java from OTN, version 9.0.2.0.0C. Instructions on how to install this upgrade into the database are provided in the download itself. The `xsu12.jar` file in the `lib` subdirectory of the download should also replace any existing version of `xsu.jar` in the classpath of the web server that runs the AQ propagation servlet.

5.1.12 Web Services Issues

5.1.12.1 Renaming a Method on a Modeled Web Service Fails to Expose It (2702659)

When you have a modeled web service created from a modeled Java class, and you rename a method by editing the modeled web service or the modeled Java class, the renamed method will seem to vanish from the web service although the modeled Java class will display the new method name.

You have to reselect the method for publication as a web service. Double-click the modeled web service, and on the Exposed Methods page select the method and click **OK**.

5.1.12.2 SOAP Web Service Does Not Start New Session (2218102)

When you have a SOAP web service created using JDeveloper that uses a scope of "session", it does not start a new session when accessed by a different client.

5.1.12.3 Using JMS Web Services with OC4J

OC4J/JMS is not supported in Oracle9*i*AS 9.0.3 or OC4J 9.0.3. OJMS is the JMS interface onto Oracle AQ in the database, and it is Oracle's J2EE 1.3 compliant JMS provider.

To run a JMS web service deployed to OC4J 9.0.3 or Oracle9*i*AS 9.0.3, you should configure OC4J to hand over the JMS implementation to OJMS. For more information, refer to "Oracle9iAS Containers for J2EE (OC4J) - Java Message Service (JMS) - Frequently Asked Questions" on the Oracle Technology Network, http://otn.oracle.com/tech/java/oc4j/htdocs/OC4J-JMS-FAQ.html.

5.1.12.4 Creating JMS Web Services that Use Both Send and Receive Operations

When you create a JMS web service that uses both a send and a receive operation you must explicitly specify different connection factories and destinations for the send operation and the reply-to operation, unless you are certain that the web service client wants to send to and receive from the same destination.

In Step 3 of the JMS Web Service Wizard, select **Receive operation uses separate JMS destination**, and enter the connection factory and the destination for the receive operation. These must be different to the connection factory and destination for the send operation.

5.1.12.5 Running the PL/SQL Web Service Generator with JDK 1.4

To work properly under JDK 1.4, the PL/SQL web service generator needs to be run with Oracle's JDK 1.4-specific JDBC drivers. These can be downloaded from Oracle Technology network (http://otn.oracle.com). Extract them into the *oracle_home*/jdbc/lib directory.

To configure JDeveloper to use the JDK 1.4 JDBC drivers, you must amend the oracle_home/jdev/bin/jdev.conf file. Replace the line

```
AddJavaLibFile ../../jdbc/lib/classes12.jar
```

with

```
AddJavaLibFile ../../jdbc/lib/ojdbc14.jar
```

JDeveloper will now use the JDK 1.4 version of the JDBC drivers, for all JDBC operations.

5.1.12.6 Runtime Error Calling a Web Service from a Generated Stub (2389203)

If you receive a runtime error when calling a web service from a generated stub, and the returned value is an unrecognized XML type, you should use a command similar to the following to deserialize the XML type into a string:

```
m_smr.mapTypes(Constants.NS_URI_SOAP_ENC, new QName("",
"return"), null, null,
new org.apache.soap.encoding.soapenc.StringDeserializer());
```

5.1.12.7 Cannot Model Web Services Based on PL/SQL Packages (2466833)

Modeled web services on class diagrams cannot be based on PL/SQL or JMS web services.

5.1.12.8 Creating a Stub with Overloaded Methods to a .NET Web Service (2689939)

When you create a stub to a .NET web service which contains more than one method with the same name, the stub is generated with just one method present, for example:

```
public Float Add(Float a, Float b) throws Exception;
```

You must manually edit the stub to add the additional overloaded methods, for example:

```
public Float Add(Float a, Float b) throws Exception;

public Integer Add(Integer a, Integer b) throws Exception;
```

5.1.12.9 Web Service Stub if Generated from JDeveloper Install Path has Space (3068701)

If you install JDeveloper in a path where any of the folders have a space in the name and then generate a web service which you run on the embedded OC4J server or on an external instance of the OC4J server, you will find that a stub to the service will fail when the web service is called.

The workaround is to install JDeveloper in a path without a space in any folder name.

5.1.12.10 Generating Stubs for WSDL Files That Refer to Other WSDL Files (2627242)

If you want to generate a stub for a WSDL file that refers to, or imports, another WSDL file, the Web Service Stub/Skeleton Wizard will not be able to finish as it incorrectly identifies the WSDL file as invalid.

5.1.13 Using WebDAV Connections in JDeveloper

Web-based Distributed Authoring and Versioning (WebDAV) is a set of extensions to the HTTP protocol that enables access to files on remote Web servers.

> **Note:** Before using WebDAV Connections in Oracle JDeveloper, you must first install the WebDAV extension from the Extension Exchange on OTN. For more information, refer to the *Oracle Developer Suite 10g Installation Guide*.

5.1.14 Miscellaneous Issues

5.1.14.1 PL/SQL Compilation Errors Not Displayed (2688533)

If the name of the PL/SQL unit contains the schema name or is surrounded with quotes (or both), JDeveloper will not report compilation errors in the Log window. For example, you should write:

```
PROCEDURE my_proc IS
```

instead of

```
PROCEDURE scott.my_proc IS
```

or

```
PROCEDURE "MY_PROC" IS
```

5.1.14.2 Allowable Values for Columns Must be Given a Display Sequence (2717508)

Generated JDeveloper modules will be invalid if the Designer table definitions from which they were derived contain columns with allowable values whose Display Sequence property is set to NULL.

For JDeveloper 9.0.4, you must always provide non-NULL values for the Display Sequence properties. You do this through the properties palette of Oracle Designer.

This behavior will change for JDeveloper 9.0.5, when a NULL value will be acceptable for a Display Sequence property.

5.1.14.3 Toystore Demo Contains Obsolete bc4jstruts.jar File

The Toystore demo included with JDeveloper contains the file `bc4jstruts.jar`. This copy of `bc4jstruts.jar` is obsolete, and the demo will not run properly until the file is updated.

To update the file, remove it from your project, and replace it with the copy of `bc4jstruts.jar` found in *oracle_home*/BC4J/jlib.

5.1.14.4 Right Mouse Menu "Go to Source" no Longer Working (3146584)

The context menu item **Go to Source** for an element in the Show Dependency window no longer works. Instead, double-click the item to open the proper editor for the Java element.

5.1.14.5 Passivation/Activation of interMedia Domain Objects with Media Content to Upload does not Work in 3 Tier Environment (2887647)

When you build a BC4J JSP application that uploads media content to interMedia columns and you select "EJB Entity Facades" when asked for what type of Business Entities will be modeled, the media content upload will fail if the BC4J JSP application is running in the "Stateful" mode with the "failover" option set to true.

5.2 Platform-specific Issues and Workarounds

5.2.1 Windows Platform Issues and Workarounds

5.2.1.1 Updated JDK Required for Windows Preview Oracle9*i* JDeveloper

If you are using Oracle9*i* JDeveloper (9.0.4) as part of the Windows Preview version of Oracle Developer Suite 10*g* (9.0.4), you must upgrade JDeveloper's JDK to version 1.4.1_05. You can download this version from the Sun Microsystems site http://java.sun.com. Look in JDeveloper's online help system for instructions on upgrading to this version.

5.2.2 Linux, Solaris, and HP-UX Platform Issues and Workarounds

> **Note:**   Platform-specific issues are only reported for the platform
> on which they were first detected; an issue that is listed as
> "platform-specific" may actually occur on several platforms. Unless
> the notes say otherwise, you should only use a platform-specific
> workaround on the stated platform.

5.2.2.1 General Linux, Solaris, and HP-UX Platform Issues and Workarounds

Sun Java Bug 4751177: Ignore Error Messages

You can safely ignore these error messages which may occur if you run JDeveloper on
Linux, Solaris, or HP-UX:

```
java.lang.SecurityException: Could not lockSystem" or "Oct 23, 2002 4:16:55 PM
java.util.prefs.FileSystemPreferences
checkLockFile0ErrorCodeWARNING: Could not lock System prefs.Unix error code 0.Oct
23, 2002 4:16:55 PM java.util.prefs.FileSystemPreferences syncWorld
WARNING: Couldn't flush system prefs:
java.util.prefs.BackingStoreException:
Couldn't get file lock.
```

These errors are caused by a new system preferences feature in JDK 1.4. Details are
provided in Sun Java bug 4751177.

**Cannot create SOAP Server connections on Linux, Solaris, and HP-UX with Oracle9*i*
JDeveloper (9.0.4) installed with Oracle Developer Suite 10*g* (9.0.4)(3042893)**

After creating a SOAP Server connection from Oracle9*i* JDeveloper (9.0.4) installed
with Oracle Developer Suite 10*g* (9.0.4), the following java exception occurs:

```
java.lang.Exception: SOAP-ENV:Server: service
'urn:xml-soap-service-management-service' unknown
```

> **Note:**   This only occurs with Oracle9*i* JDeveloper 9.0.4 installed
> with Oracle Developer Suite 10*g* (9.0.4). It occurs on Linux, Solaris,
> and HP-UX. It does not occur with standalone Oracle 9*i* JDeveloper
> 9.0.4 on any platform.

5.2.2.2 Solaris-specific Issues and Workarounds

Unable to Select from the Code Insight List by Mouse-Click (2671418)

On Solaris, using the mouse to select from Code Insight results in the Code Insight list
being dismissed without retaining the selection. The workaround is to use the
keyboard to select from Code Insight.

**Solaris Only: Long Delay Showing Database Objects in Entity Beans from Tables
Wizard (2691427)**

You may experience long delays seeing database objects in entity beans from the Table
Wizard. This typically happens if you start with an empty workspace and there are no
database connections defined in the IDE. The workaround to this is to click the **Back**
button in the wizard panel which is waiting to show the database objects and then
click the **Next** button. All available tables should then be displayed.

Publishing a Diagram as a JPEG or PNG Remotely on Solaris (3142729)

When you publish a diagram as a JPEG or PNG graphic remotely on a Solaris computer, the operation to publish the diagram can take a very long time to complete and it may appear that JDeveloper has frozen. You can work around this problem by either performing the publish operation directly on the Solaris computer or by publishing the diagram as SVG.

5.2.2.3 Linux-specific Issues and Workarounds

`ClassNotFoundException` exception when deploying EBI files on Linux (3168559)

When you try to deploy EBI generated files on Linux, the deployment dialog does not appear, and the JVM throws the following exception:

```
java.lang.ClassNotFoundException: EBIDeploymentProfileDt.m_deploy at
java.net.URLClassLoader$1.run(URLClassLoader.java:199)
at java.security.AccessController.doPrivileged(Native Method)
at java.net.URLClassLoader.findClass(URLClassLoader.java:187)
at java.lang.ClassLoader.loadClass(ClassLoader.java:289)
at oracle.ideimpl.IdeClassLoader.loadClass(IdeClassLoader.java:152)
```

This issue occurs intermittently and retrying the deployment will usually succeed.

5.2.2.4 HP-UX Issues and Workarounds

JDeveloper requires `-Dsun.nio.cs.map="Windows-31J/Shift_JIS"` when using HP Java2 SDK 1.4.1.05 for PA-RISC (3238704)

HP Java2 SDK 1.4.1.05 for PA-RISC has an issue (JAGae96995) that causes the following exception when JDeveloper is started on HP-UX:

```
java.lang.NullPointerException
        at java.nio.charset.Charset.put(Charset.java:437)
        at java.nio.charset.Charset.access$200(Charset.java:243)
        at java.nio.charset.Charset$3.run(Charset.java:476)
        at java.security.AccessController.doPrivileged(Native Method)
        at java.nio.charset.Charset.availableCharsets(Charset.java:469)
```

Oracle has notified HP of this issue, and HP plans to fix it in HP Java2 SDK version 1.4.1.06.

Since Oracle Developer Suite 10*g* uses HP Java2 SDK 1.4.1.05 for PA-RISC, the *oracle_home*/jdev/bin/jdev shell script that starts JDeveloper has been modified to work around this issue. Because of this workaround, the two Japanese character sets Windows-31J and Shift_JIS cannot be used with JDeveloper. Comments in the shell script *oracle_home*/jdev/bin/jdev describe the workaround and how to enable and disable it.

5.3 Configuration Issues and Workarounds

There are no known configuration issues.

5.4 Administration Issues and Workarounds

There are no known administration issues.

5.5 Documentation Errata

5.5.1 Replace qView with getRowSet in Migration Documentation (2723075)

In the migration documentation, replace qView with getRowSet.

5.5.2 Documentation Refers to BC4J "Wizards"

The help documentation that is displayed when you click Help in one of the component editors refers to a component "wizard" when it should refer to a "wizard or editor". For example, the help text that is displayed when you click Help in the Entity Object Editor has the title "Entity Object Wizard"; the title should be "Entity Object Wizard and Editor"

6

Oracle Business Intelligence Beans

This chapter discusses the following Oracle Business Intelligence Beans (BI Beans) topics:

- Section 6.1, "Introduction"
- Section 6.2, "General Issues and Workarounds"
- Section 6.3, "Platform-specific Issues and Workarounds"
- Section 6.4, "Configuration Issues and Workarounds"
- Section 6.5, "Administration Issues and Workarounds"
- Section 6.6, "Documentation Errata"

6.1 Introduction

Oracle Business Intelligence Beans (hereinafter referred to as "BI Beans") is a set of standards-based JavaBeans that provides analysis-aware application building blocks designed for Oracle OLAP. Using Oracle JDeveloper and BI Beans, you can build Web applications quickly and easily. These applications expose the advanced analytic features of the Oracle database both to casual information viewers and to high-end users who require complete ad-hoc query and analysis functionality. For more information, consult the following:

- The *Oracle Developer Suite 10g Installation Guide* -- available from the Oracle Developer Suite product CD-ROM or DVD, or the Oracle Developer Suite Documentation Library.

- *Certification and System Requirements* -- can be downloaded from the BI Beans product area on Oracle Technology Network (http://otn.oracle.com/products/bib/); includes database versions and patch sets that are certified for this release as well as certified deployment environments.

- "Getting Started with BI Beans" -- a topic in the JDeveloper Help system; includes links to tutorials.

- BI Beans API Reference -- accessible from the JDeveloper Help menu.

- BI Beans samples -- published on the BI Beans product area on Oracle Technology Network; designed to assist you in coding common application tasks.

> **Note:** BI Beans release 10*g* (9.0.4) is certified with J2SE 1.4.1. There are issues with this configuration in the areas of keyboard and mouse navigation and of dialog focus, as well as other minor issues, which will be addressed in a later release.

6.2 General Issues and Workarounds

6.2.1 Tutorials and samples

When you install the sample database schema, you might get an error that says the SH account is locked. If you want to remove the SH metadata and use only that from BIBDEMO, then the DBA must unlock the account. If you do not want to remove the SH metadata, then you can ignore this error and allow the installation script to continue. BI Beans will then display both BIBDEMO and SH metadata.

6.2.2 QueryBuilder and queries

- If you attempt to update a query that uses the NASuppression option, then an OLAP API exception might be generated. This problem does not exist when running against Oracle OLAP 9.2.0.4 or higher.

- BI Beans does not support the interspersing of symmetric and asymmetric drill operations. That is, the `AsymmetricDrilling` property of a `Query` object should not be changed during that object's lifetime.

- In DataDirector, if you set the `SuppressionState` method to either `DataDirector.ZERO_SUPPRESSION` or `DataDirector.NA_ZERO_SUPPRESSION`, then the result is the same: both zeros and nulls are suppressed in the results.

- You cannot save a favorite that references both a calculation and another favorite. Attempting to do so results in a null pointer exception.

- When you use QueryBuilder to create an asymmetric query, changes that you make on the Layout panel should be applied to the presentation before making changes to the Dimensions panel. Otherwise an exception will occur.

- In a query, if you create an asymmetric top/bottom step whose selection depends on a dimension that is on the page edge, then an error is generated. This problem does not exist in Oracle OLAP 9.2.0.4 and higher. If you are running against an earlier version of Oracle OLAP, then you can work around the problem by qualifying the measure to a specific dimension member from the page edge.

- If a query that you save in BI Beans 9.0.3 or 9.0.4 includes a favorite that references a custom measure, then that query cannot be used with BI Beans 9.0.2.

- In an Oracle9*i* (9.2.0.3) database, if you query for dimension members that have a sibling relationship, then you might encounter error number BIB-9509. To avoid this error, set the following parameter in the database's `init.ora` file: `_multi_join_key_table_lookup=false`.

6.2.3 Presentations

- Because of Sun J2SE 1.4 regression bug 4749538, pie graphs and other graphs with circular components may not render optimally. You can resolve this issue by using graphic anti-aliasing on the graph and removing 3D effect, if it has been applied.

- To ensure that HTML presentations work as expected when they are placed in frames, you must configure the EventTarget of the BIConstants.PAGE_ EVENT of the FindMember bean to target the frame that contains the presentation. For example, if the presentation frame is named *pres_frame*, then you would add code such as the following to the FindMember JSP page:

```
<%@ page import="oracle.dss.thin.beans.BIConstants"%>
<%@ page import="oracle.dss.thin.beans.EventTargetImpl"%>
<%@ page import="oracle.dss.thin.beans.dataView.FindMember"%>
...
/orabi:BIThinSession>
<%
FindMember f = (FindMember)pageContext.findAttribute("findMember");
EventTargetImpl target=(EventTargetImpl)f.getEventTarget(BIConstants.PAGE_
EVENT);
target.setTargetFrame("pres_frame");
%>
```

- If a number format includes a locale-based ISO currency symbol, then that symbol will not be saved. When you load the presentation, the standard locale-based symbol (such as "$") will be displayed instead.

6.2.4 BI Beans Catalog

- Previous releases of the BI Beans Catalog did not save presentations or selections that have long dimension names. If you encounter this problem, then you can install the 9.0.3.2 (or higher) release of the Catalog to correct it. Alternatively, if you want to continue using an earlier version of the Catalog, then you can use the following workaround. Copy the SQL*Plus commands that are provided below into a script named bi_fixcolumnwidth.sql. You can then call this script with the @bi_fixcolumnwidth command:

```
alter table bism_objects modify comp_subtype1 varchar2(256);
alter table bism_objects modify comp_subtype2 varchar2(512);
alter table bism_objects modify comp_subtype3 varchar2(1333);
drop type bism_objects_table_t;
drop type bism_objects_table_new_t;
create or replace type bism_objects_obj_t as object
(
USER_VISIBLE varchar2(1),
OBJECT_TYPE_ID number(5),
VERSION number(6),
TIME_DATE_CREATED date,
TIME_DATE_MODIFIED date,
OBJECT_ID raw(16),
CONTAINER_ID raw(16),
FOLDER_ID raw(16),
CREATED_BY raw(16),
LAST_MODIFIED_BY raw(16),
OBJECT_NAME varchar2(1333),
TITLE varchar2(128),
APPLICATION varchar2(256),
DATABASE varchar2(256),
DESCRIPTION varchar2(1333),
```

```
                    KEYWORDS varchar2(1333),
                    XML clob,
                    APPLICATION_SUBTYPE1 varchar2(32) ,
                    COMP_SUBTYPE1 varchar2(256),
                    COMP_SUBTYPE2 varchar2(512) ,
                    COMP_SUBTYPE3 varchar2(1333)
                    );
                    /
                    create or replace type bism_objects_obj_new_t as object
                    (
                    USER_VISIBLE varchar2(1),
                    OBJECT_TYPE_ID number(5),
                    VERSION number(6),
                    TIME_DATE_CREATED date,
                    TIME_DATE_MODIFIED date,
                    OBJECT_ID raw(16),
                    CONTAINER_ID raw(16),
                    FOLDER_ID raw(16),
                    CREATED_BY VARCHAR2(64),
                    LAST_MODIFIED_BY VARCHAR2(64),
                    OBJECT_NAME varchar2(1333),
                    TITLE varchar2(128),
                    APPLICATION varchar2(256),
                    DATABASE varchar2(256),
                    DESCRIPTION varchar2(1333),
                    KEYWORDS varchar2(1333),
                    XML clob,
                    APPLICATION_SUBTYPE1 varchar2(32) ,
                    COMP_SUBTYPE1 varchar2(256),
                    COMP_SUBTYPE2 varchar2(512) ,
                    COMP_SUBTYPE3 varchar2(1333)
                    );
                    /
                    create or replace type bism_objects_table_t as table of bism_objects_obj_t;
                    /
                    create or replace type bism_objects_table_new_t as table of bism_objects
                    obj_new_t;
                    /
```

- When you use JDeveloper to copy objects to the BI Beans Catalog, you specify the Catalog User in the first page of the Copy Objects to Remote Catalog wizard. This user must have WRITE (or higher) access to the root folder of the runtime Catalog.

- The following characters are not allowed in object names: \ / : * ? < > |.

- If you encounter performance issues on a WAN during the copying of objects to and from the BI Beans Catalog, then Oracle recommends that you use the Oracle9*i* OCI drivers instead of the thin JDBC drivers, as described in Section 6.4.1, "JDBC Drivers".

- You must ensure that the Oracle database is compatible with the character set that is being used for the names of objects that are being saved and restored to the BI Beans Catalog. That is, the database character set must be the same as or a superset of the Catalog character set.

- If a folder in the BI Beans Catalog contains an OLAP Catalog object (that is, a metadata object from the OLAP Catalog), then if you save a BI Beans object with the same name into that same folder, you create a naming conflict. Although the new object is saved, when you run the application, you will not see the newly-saved object in the BI Beans Explorer and it will not be loaded. You must either rename the object or remove it from the appropriate BI Beans Catalog (that is, local or remote).

- You should use the BI Beans Explorer for file operations in the local file-based Catalog, rather than using your operating system's methods for performing such operations. Each BI Designer has its own local Catalog. To run the BI Beans Explorer to show the local Catalog for one BI Designer, follow these steps:

  1. Open a command prompt and navigate to *oracle_home*/bibeans/bin.

  2. Enter `bi_explorer.bat` (on Windows) or `bi_explorer.csh` (Linux, Solaris, and HP-UX). BI Beans Explorer starts.

  3. In BI Beans Explorer, from the **File** menu, choose **Connect**. The Connect to Catalog dialog appears.

  4. Select **Choose**. The Choose Catalog wizard starts.

  5. In the first wizard page, specify **File** as the Catalog Type, then choose **Next**.

  6. In the second page, specify the root directory. To locate the correct directory to enter, start JDeveloper. In your current project, right-click the BI Designer that contains the local file-based Catalog, and choose **Settings**. Click the Design Settings tab. The root directory is the path that is specified in the Directory field.

  7. Choose **Finish** to return to the Connect to Catalog dialog.

  8. Specify a name in the Username field. This is the name that will appear in the Last modified by field in BI Beans Explorer.

  9. Choose **OK**. The local catalog appears. You can use BI Beans Explorer to manipulate objects in this catalog.

6.2.5 General deployment issues

In HTML-client applications, requirements for image generation on Linux, Solaris, and HP-UX differ depending on which JDK you use, as follows:

- JDK 1.3 -- X server must be running on the middle tier. One option is to use X Virtual Frame Buffer (XVFB), which can run in "headless" environments -- that is, on computers that lack frame buffer hardware. You can download XVFB for Sun Solaris from Oracle Technology Network (http://otn.oracle.com/products/ias/ias_utilities.html). XVFB for other platforms must be downloaded from the platform vendor's Web site.

- J2SE 1.4 -- X server is not required. However, you must add the following Java `Option -Djava.awt.headless=true,` as described in the Help topic "Requirements for the Deployment Environment."

- You can deploy BI Beans applications to BEA WebLogic Server. For details, see *Deploying Applications to BEA WebLogic Server*, which is available from the BI Beans product area on Oracle Technology Network (http://otn.oracle.com/products/bib/)

6.2.6 Configuration steps for deploying HTML-client applications

6.2.6.1 Deploying to OC4J

You must ensure that you are using the correct JDBC files, as follows:

■ **OC4J in Oracle Application Server (9.0.3 or 10g)** -- You cannot deploy a BI Beans application to the OC4J instance that is part of Oracle Application Server 10*g* without first configuring it as described in the technical note *Setting Up a Separate OC4J Instance for a BI Beans Application*, which is available from the BI Beans product area on Oracle Technology Network (`http://otn.oracle.com/products/bib/`). There are two versions of this technical note. Refer to the one that is appropriate for your platform.

■ **OC4J that was downloaded from Oracle Technology Network** -- If you are deploying to a standalone OC4J instance that you downloaded from Oracle Technology Network, then you must reconfigure OC4J as follows:

   1. Stop OC4J.

   2. Rename *oc4j_home*/jdbc/lib to *oc4j_home*/jdbc/lib.old.

   3. Create a new directory named *oc4j_home*/jdbc/lib.

   4. Copy the files classes12.jar, classes12dms.jar, and nls_charset12.jar from the *oracle_home*/bibeans/jdbc/lib_92 directory to the new directory that you created in the previous step.

   5. You can now start OC4J and deploy and run a BI Beans application.

6.2.6.2 Migrating Applications Deployed to OC4J

If you have an Oracle BI Beans 9.0.3 application that you want to deploy to OC4J 10*g* (9.0.4), then you must perform the following steps:

1. Copy the BITags.tld file from the public_html/webapp directory to the public_html/WEB-INF directory.

2. Open web.xml and change the value of the <taglib-location> element to the new location of BITags.tld. For example:

```
<taglib>
  <taglib-uri>http://xmlns.oracle.com/bibeans/</taglib-uri>
  <taglib-location>/WEB-INF/BITags.tld</taglib-location>
</taglib>
```

> **Note:**   If you use Oracle9*i* JDeveloper (9.0.4) to insert a new tag into the existing 9.0.3 Oracle BI Beans application, then the preceding changes happen automatically.

6.2.6.3 Deploying to Tomcat

Before you package a BI Beans application for deployment to Tomcat, you must edit the application's `web.xml` file to add a leading forward slash (/) to the `url-pattern` element. The following example shows the `servlet-mapping` element in the application's `web.xml` file. The forward slash (shown with emphasis) has been added to the `url-pattern`:

```
<servlet-mapping>
    <servlet-name>webapp</servlet-name>
    <url-pattern>/webapp</url-pattern>
</servlet-mapping>
```

6.2.6.4 Deploying to JBoss

Before you package a BI Beans application for deployment to JBoss, you must edit the application's `application.xml` file to add a leading forward slash (/) to the `context-root` element. The following example shows the `web` element in the application's `application.xml` file, which is packaged in the generated EAR file. The forward slash (shown with emphasis) has been added to the `context-root`:

```
<web>
    <web-uri>uixappz.war</web-uri>
    <context-root>/uixapp</context-root>
</web>
```

6.2.7 Deploying to Java Web Start

Java applet deployments are not supported for this release. However, you can use Java Web Start to deploy a BI Beans Java-client application, as shown in the following outline. References apply to version 1.4.2; check the Sun Web site for updates. You can access documentation for version 1.4.2 from `http://java.sun.com/products/javawebstart/developers.html`.

> **Note:** To deploy to Java Web Start successfully, you must compile the application using Sun's JDK.

1. Configure your Web server for Java Web Start, as described in the Java Web Start Developer's Guide (`http://java.sun.com/j2se/1.4.2/docs/guide/jws/developersguide/contents.html`).

2. Use JDeveloper to deploy the Java-client application, as usual. In the deployment profile, you must:

    ■   Deploy the application as a JAR file.

    ■   Include the following libraries: BIBEANS Runtime, BC4J Runtime, OLAP API 92, and Oracle JDBC 92.

3. You must sign the application JAR file. For more information, see (for Solaris) `http://java.sun.com/j2se/1.4.2/docs/tooldocs/solaris/jarsigner.html` or (for Windows) `http://java.sun.com/j2se/1.4.1/docs/tooldocs/windows/jarsigner.html`.

4. Generate the JNLP file (the configuration file for Java Web Start) for the application, then set all permissions for the `<security>` element.

5. Still in the JNLP file, set `<j2se version>` to 1.3. For example:

```
<resources> <j2se version="1.3"/> <jar .../> </resources>
```

Note: This step is necessary to work around a bug in Java Web Start with J2SE 1.4. If you must use J2SE 1.4, then you must use JDK version 1.4.2 or higher, which fixes this bug.

6. Copy the signed JAR file and the JNLP file to your Web server.

7. Create an HTML page that opens the JNLP file.

6.2.8 Internationalization issues

- The default character set for exporting data is UTF-8. To use a different character set, you must specify the export character encoding, as follows:

  - **Generated JSP application** -- Set export encoding using the `setExportCharacterEncoding` method in the `BIThinSession` tag on the export page. For example:

    ```
    <orabi:BIThinSession id="BIThinSession1"
    configuration="/Project1BIConfig1.xml">
    <orabi:Presentation id="untitled1_Presentation1"
    location="Presentation1"/>
    <orabi:DialogLink id="untitled1_DialogLink1"
    presentationId="untitled1_Presentation1"
    targetPage="untitled2.jsp" targetToolId="untitled2_ExportOptions1"
    text="Export" />
    <% untitled1_Presentation1.setExportCharacterEncoding("SJIS"); %>
    </orabi:BIThinSession>
    ```

  - **Generated uiXML application** -- Modify the `biuixappn.java` file, where *n* is a unique number in the JDeveloper project, by setting `dataview.setExportCharacterEncoding` in the `Analyze_preRendering()` method. For example:
    ```
    dataview.setExportCharacterEncoding("SJIS")
    ```

  - **Generated servlet application** -- Include the `exportCharacterEncoding` parameter in the `web.xml` file on the project node. Use the IANA encoding name, such as Shift-JIS. For example:
    ```
    exportCharacterEncoding=Shift-JIS
    ```

- When you run a JSP, if the value of the `charset` attribute in the JSP encoding does not match the value in the BIThinSession tag, then an error is generated. You can work around this problem either by ensuring that the values match or by removing the `charset` value from the BIThinSession.

- Due to a bug in the OLAP option of Oracle9*i* Release 2 (9.2.0.4), if the character set of the Oracle database is a multibyte character set, then an exception occurs when you attempt to access data. If your schema requires a multibyte character set, then contact Oracle Support for information about the availability of a patch to correct this problem.

6.2.9 Accessibility limitations

■ The current version of the JAWS screen reader does not identify and read tables in Java applications. This problem occurs in the JDeveloper Help system, which incorporates the BI Beans Help system. You can access both the standalone BI Beans Help system and the integrated JDeveloper Help system from Oracle Technology Network, where they are published in a format that allows tables to be read correctly by JAWS.

■ Other accessibility issues include the following:

  ■ Keyboard access does not work in the Hidden Items panel of the QueryBuilder.

  ■ If you are using J2SE 1.4.1, then you cannot access toolbar buttons with the keyboard.

  ■ In some cases, the Esc key does not dismiss the panel.

  ■ For combo boxes in which you choose a line thickness, JAWS reads the label incorrectly. Instead of reading "Line Thickness combo box *<number of pixels>*," JAWS reads "Line Width combo box *<number of pixels>*."

  ■ JAWS does not read the description for some of the panels in the OLAP Connection wizard.

  ■ If you are using J2SE 1.4.1, then shortcut keys do not work correctly in the New Presentation wizard.

  ■ In all graph axis UI panels, pressing the Tab key does not move the focus correctly.

6.3 Platform-specific Issues and Workarounds

There are no known platform-specific issues.

6.4 Configuration Issues and Workarounds

6.4.1 JDBC Drivers

6.4.1.1 Upgrading the drivers automatically

BI Beans requires the Oracle9*i* Release 2 JDBC drivers, which ship with BI Beans. However, because JDeveloper ships with the Release 1 drivers, you cannot perform any BI Beans-related action until you have run the upgrade program, which you are prompted to do whenever you attempt to access a BI Beans designtime wizard or to open an object from a BI Designer.

> **Note:** Because the location of the JDBC JAR files has changed in BI Beans 10*g* (9.0.4), you must upgrade even if you did so in release 9.0.3.

The upgrade program performs these steps:

- It copies the Release 2 JDBC JAR files from the *oracle_home*/`bibeans/jdbc/lib_92` directory to the *oracle_home*/`jdev/lib/patches` directory. This change affects the entire JDeveloper environment.

- The Project Settings are handled automatically for projects to which you add BI Beans objects.

These automatic steps ensure that you have the right drivers and the right designtime settings for any new BI Beans projects that you might create and for any existing projects to which you have made additions.

6.4.1.2 Upgrading the drivers manually

If you have projects that are not upgraded automatically, then follow these steps to run and deploy them:

- **To run** -- Before you run the application, edit its Project Settings, as follows. For step-by-step instructions, see the *Oracle Developer Suite 10g Installation Guide*.

  - For Linux, Solaris, and HP-UX platforms, add `-Djava.ext.dirs=`*oracle_home*/`jdev/lib/patches` to the Java Options, replacing *oracle_home* with the full path. For Windows, add *oracle_home*`\jdev\lib\patches`. This setting is critical for HTML-client applications, less so for Java-client applications.

  - Substitute **Oracle JDBC 92** for **Oracle JDBC** in the Selected Libraries list.

- **To deploy** -- Before you create a deployment profile in JDeveloper, do one of the following:

  - For HTML-client applications, consult the technical note *Setting Up a Separate OC4J Instance for a BI Beans Application*, which is available from the BI Beans product area on Oracle Technology Network (http://otn.oracle.com/docs/products/bib/). There are two versions of this technical note. Refer to the one that is appropriate for your platform.

  - For Java-client applications, if you already edited the Projects Settings to substitute **Oracle JDBC 92** for **Oracle JDBC**, then no additional changes are needed. If not, then edit the Project Settings, as described above.

6.4.1.3 Restoring the original drivers

To restore the original drivers, follow these steps:

1. Delete `classes12.jar`, `classes12dms.jar`, and `nls_charset12.jar` from the *oracle_home*/`jdev/lib/patches` directory.

2. Remove the Java Option `-Djava.ext.dirs`.

3. Remove **Oracle JDBC 92** from the selected libraries list and replace it with **Oracle JDBC**.

6.4.2 Changing from the thin to the thick drivers

If you want an application to use the Oracle JDBC Thick (OCI) driver rather than the default Oracle JDBC Thin (Pure Java) driver, and you are using the default pluggable connection drivers that ship with BI Beans, then you must edit the application configuration file. You can do this in either of two ways, as follows:

- **By editing the file in JDeveloper, where the configuration file was generated by the BI Designer** -- Right-click the BI Designer and choose **Settings**. Select the Run Settings tab, then choose either **New** or **Edit** for the connection that you want to change and follow the wizard that appears. The driver type is part of the connection definition. You can specify a connection for either or both the BI Beans Catalog and Data Source.

- **By editing the file by hand** -- Open the file, which you will find in the `src` directory under the `project` directory. Its filename will be *project_namebiconfig#*.xml, where # is the unique number in the JDeveloper project. Locate the `<PersistenceConnection>` element (for the BI Beans Catalog connection) and the `<OLAPConnection>` element (for the data connection). For either or both, change the value of `JdbcDriverType` to `"oci8"`.

6.4.3 BI Beans configuration diagnostic utility

BI Beans includes a utility that examines and reports on the configuration of your client environment. The purpose of the configuration diagnostic utility is to gather information about your configuration in order to diagnose problems. It displays information such as the release numbers for BI Beans, JDeveloper, and the Oracle database, and it runs diagnostic tests against the OLAP Catalog metadata. For additional information, see *oracle_home*/bibeans/bin/ bi_checkconfig.html.

Note that you must upgrade to the new version of the JDBC drivers before you run the utility. For instructions on how to do this, see Section 6.4.1, "JDBC Drivers". For additional information, consult the technical note that describes the utility and is installed with it: *oracle_home*/bibeans/bin/bi_checkconfig.html.

6.4.4 Connections

- Because of an OLAP bug, the `executeCommand` method of the `Connection` object might not work in BI Beans applications that connect to 64-bit Linux, Solaris, or HP-UX server instances. If you encounter this problem, then you can use the DBMS_AW PL/SQL package through a JDBC connection.

- Because of changes in J2SE 1.4, the `getCause` method of the `BIException` class and its subclasses was renamed to `getBIRootCause` in BI Beans release 9.0.3.

6.5 Administration Issues and Workarounds

There are no known administration issues.

6.6 Documentation Errata

There are no known documentation errors.

7

Oracle Discoverer Administrator

This chapter discusses issues and workarounds for Oracle Discoverer Administrator (Discoverer Administrator).   The chapter includes the following topics:

- Section 7.1, "General Issues and Workarounds"

- Section 7.2, "Platform-specific Issues and Workarounds"

- Section 7.3, "Configuration Issues and Workarounds"

- Section 7.4, "Administration Issues and Workarounds"

- Section 7.5, "Useful Information"

- Section 7.6, "Documentation Errata"

7.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Discoverer Administrator.

7.1.1 "Cannot find a required file : dcmresus.msb." When Trying to Launch Oracle Discoverer 9.0.2 after Installing 9.0.4

If you install Oracle Discoverer Administrator 9.0.4 on the same computer as Discoverer Administrator 9.0.2, the following error message will be displayed if you attempt to start Discoverer Administrator 9.0.2 from the Windows **Start** menu:

Cannot find a required file : dcmresus.msb.

The message is displayed because of a problem loading certain libraries on a computer with multiple Oracle homes. The same message will also be displayed if you attempt to start Discoverer Administrator 9.0.2 by double-clicking on dis51adm.exe in Windows Explorer.

To work around this problem, do one of the following:

- **Workaround 1:** Run Discoverer Administrator 9.0.2 from the Windows command line, as follows:

    1. From the Windows **Start** menu, choose **Command Prompt** to display the **Command Prompt** window.

    2. Enter the following at the command prompt:

        902_oracle_home\discoverer902\bin\dis51adm.exe

        where *902_oracle_home* is the directory in which Discoverer Administrator 9.0.2 was installed.

■ **Workaround 2:** Run Discoverer Administrator 9.0.2 from a batch file, as follows:

1. Open a new file in a text editor (for example, Notepad).

2. Enter the following in the new text file:

   `dis51adm.exe`

3. Save the file in the directory *902_oracle_home*\discoverer902\bin, and give the file a .bat suffix (for example, startdiscoadmin902.bat).

4. To start Discoverer Administrator 9.0.2, you can do either or both of the following:

   – Double click the new .bat file in Windows Explorer.

   – Replace the existing shortcut to Discoverer Administrator 9.0.2 in the **Programs** menu with a shortcut to the new .bat file.

> **Note:** The above workarounds assume that you have already used the Oracle Home Selector (typically required for any computer with multiple Oracle homes).

7.1.2 ORA-3113 Errors when Using Heterogeneous Data Services with Oracle Discoverer Administrator

If you are accessing data from a non-Oracle data source using Discoverer Administrator (for example to create a business area) and ORA-3113 errors are displayed, do one of the following:

■ Use a more recent version of the Oracle database (version 9.0.1.4 or later).

■ Contact Oracle Support to determine the availability of patches for earlier versions of the Oracle database.

7.1.3 JOB_QUEUE_INTERVAL Settings and Oracle Applications Users

The *Oracle Discoverer Administrator Administration Guide* recommends setting the JOB_QUEUE_INTERVAL parameter to 600. However, 600 is only suitable if you are not using Discoverer with Oracle Applications. If you are using Discoverer with Oracle Applications, keep the JOB_QUEUE_INTERVAL parameter set to the default value of 90.

7.1.4 Recommended Update for Batch Repository Created with Oracle Discoverer 9.0.2

The BATCHUSR.SQL script (located in *oracle_home*\discoverer\sql) creates a schema in which to store the results of scheduled workbooks (referred to as the batch repository user in earlier versions of Discoverer).

The BATCHUSR.SQL script (located in *oracle_home*\discoverer\sql) has changed between Discoverer 9.0.2 and 9.0.4.

The updated BATCHUSR.SQL script provides two benefits:

■ The script tightens the database security surrounding the creation and management of the scheduled workbook results schema. The script simply removes certain privileges that were found to be unnecessary.

- The script increases the size limit for the SQL statement used by scheduled workbooks from 32KB to 64KB. The increased size limit reflects the increased limit supported by the Oracle database. The increase specifically benefits users who receive the error message "Exceeded Maximum query size" when scheduling a workbook.

The above updates are non-destructive and do not affect any currently scheduled workbooks.

Oracle recommends that all customers using an EUL created with Discoverer 9.0.2 apply these fixes. Simply connect to the database as a database administrator (for example, SYSTEM) and run the BATCHUSR.SQL script.

No action is required for customers using an EUL created with Discoverer 9.0.4, because you will use the updated BATCHUSR.SQL script when you create the scheduled workbook results schema.

7.2 Platform-specific Issues and Workarounds

There are currently no known platform-specific issues.

7.3 Configuration Issues and Workarounds

There are currently no known configuration issues.

7.4 Administration Issues and Workarounds

There are currently no known administration issues.

7.5 Useful Information

This section describes useful information for Oracle Discoverer Administrator.

7.5.1 Upgrading from Oracle Discoverer 3.1

If you are upgrading from Oracle Discoverer 3.1, the *Oracle Discoverer Administrator Administration Guide* documents the requirement to upgrade the EUL to Discoverer 4.1 as an intermediate step.

For the purposes of this upgrade, if you are not already in possession of Oracle Discoverer Administration Edition 4.1, it will be made available on the Oracle Technology Network (http://otn.oracle.com).

7.5.2 Manually Editing the End User Layer Tables

Do NOT manually edit the End User Layer (EUL) tables or their contents (for example by using SQL*Plus), unless specifically directed to do so by Oracle Support or Development. Manual editing of the EUL tables is not supported and any manual changes can result in a corrupt EUL.

7.5.3 Availability of HWOnline files

Previous versions of Oracle Discoverer shipped with the files `HWOnline.htm` and `Memo.doc`, which were used to demonstrate "drill out" functionality. To reduce disk space requirements and installation time, these files and instructions for their use will be made available from the Oracle Technology Network (`http://otn.oracle.com`).

7.5.4 Setting Oracle Discoverer Registry Variables for Use by Oracle Discoverer EUL Command Line for Java Commands

When using some of the commands provided by the Oracle Discoverer EUL Command Line for Java, you might want to explicitly set certain Discoverer registry variables, as shown below:

Command	Discoverer Registry Variable
-export	■ ArchiveCacheFlushInterval ■ FormatXML ExportJoinFromMaster
refresh_*object*	■ DefaultPreserveDisplayPropertyForRefresh ■ EnableTriggers
-import	■ FormatXML
-connect -apps_user	■ AppsFNDNAM ■ AppsGWYUID
-load	■ SetNULLItemHeadingOnBulkLoad ■ MaxNumberJoinPredicates
all commands	■ SqlTrace

On Windows platforms, Discoverer registry variables are stored in the Windows Registry. On Linux, Solaris, and HP-UX platforms, Discoverer registry variables are stored in the `.reg_key.dc` file.

To set these Discoverer registry variables, do one of the following:

- **For Windows only:** Specify values for registry variables as required by editing the Windows Registry using `regedit` or `regedt32`.

- **For Windows, Linux, Solaris, and HP-UX:** Specify values for registry variables as required by entering the following at a command prompt:

  `dis51pr -setadminpref registry_variable_name value`

For more information about Discoverer registry variables (including descriptions, default values and allowable values), see:

- *Oracle Discoverer Administrator Administration Guide*

- *Oracle Application Server Discoverer Configuration Guide*

7.5.5 Additional Oracle Discoverer Registry Variables

The following Discoverer registry variables are available, in addition to those documented in the *Oracle Discoverer Administrator Administration Guide* and the *Oracle Application Server Discoverer Configuration Guide*:

Category	Discoverer registry variable	Description	Default	Valid Values
Database	DefaultPreserve DisplayProperty ForRefresh	When refreshing, specifies whether an updated item description is discarded and replaced with the original description, or whether the updated description is retained	0	■ 0 = Use updated description ■ 1 = Use original description
Database	EnableTriggers	Specifies whether database triggers are disabled. For example, Discoverer attempts to make a database call for every new column found during a refresh. If this value is set to 0, Discoverer will not make the database call.	0	■ 0 = Disable database triggers ■ 1 = Enable database triggers
Database	ExportJoinFrom Master	When exporting a business area, specifies whether joins from the master folder are also exported.	0	■ 0 = Do export joins from Master Folder ■ Any value other than 0 = Do not export joins from the Master Folder
Database	SetNULLItem HeadingOnBulk Load	When performing a bulk load, specifies whether item headings are set to the same value as item display names, or set to null.	0	■ 0 = Set item headings to item display names ■ 1 = Set item headings to null

7.5.6 Required Privileges For the Scheduled Workbook Results Schema

7.5.6.1 How to grant the SELECT privilege on the synonym v$parameter to enable you to run scheduled workbooks

To run scheduled workbooks, the scheduled workbook results schema requires SELECT privilege on the synonym v$parameter. SELECT privilege on the synonym v$parameter is gained by having SELECT privilege on the underlying view v_$parameter.

However, the v_$parameter view does not have public access and is owned by the SYS user. Therefore, to grant SELECT privilege on v_$parameter (and, by extension, on the v$parameter synonym) to the scheduled workbook results schema, you must log in as the SYS user and explicitly grant the privilege.

For more information about the scheduled workbook results schema, see the section "How to specify the owner of the tables containing scheduled workbooks results" in chapter 7 of the *Oracle Discoverer Administrator Administration Guide*.

How you grant the SELECT privilege on v_$parameter will depend on the version of the Oracle database that you are using, as follows:

- **If you using an Oracle9*i* database:**

  1. Start SQL*Plus (if it is not already running) and connect as the SYS user (or as a user to which the SYSDBA privilege has been granted).

     For example, if SQL*Plus is already running, you might type the following at the command prompt:

     SQL> **CONNECT SYS/*sys_pw@database* AS SYSDBA;**

     where *sys_pw* is the password of the SYS user. If you are unable to login as the SYS user or are unsure about the SYS password, see your database administrator.

  2. Type the following at the command prompt:

     SQL> **grant SELECT on v_$parameter to *user*;**

     where *user* is the name of the scheduled workbook results schema.

- **If you are using a version of the Oracle database earlier than Oracle9*i*:**

  1. On the database server computer, start the DBA facility and login as the SYS user (for example, on a Windows computer, choose **Run...** from the Windows **Start** menu and enter SVRMGRL).

  2. In the DBA facility, enter connect internal.

  3. Enter the following at the command prompt:

     SQL> **grant SELECT on v_$parameter to *user*;**

     where *user* is the name of the scheduled workbook results schema.

To verify that the scheduled workbook results schema has been granted SELECT privilege on v_$parameter:

1. Start SQL*Plus (if it is not already running) and connect as the scheduled workbook results schema.

   For example, if SQL*Plus is already running, you might type the following at the command prompt:

   SQL> **CONNECT *user/user_pw@database*;**

   where *user* is the user name of the scheduled workbook results schema and *user_pw* is the password of the scheduled workbook results schema.

2. Type the following at the command prompt:

```
SQL> select count (*) from v$parameter;
```

If SELECT privilege on the v_$parameter view has been successfully granted to the scheduled workbook results schema, SQL*Plus displays the number of rows from the v$parameter synonym.

If SELECT privilege on the v_$parameter view has not been successfully granted to the scheduled workbook results schema, SQL*Plus displays the message:

```
ORA - 01031 Insufficient privileges
```

7.5.7 Running the Oracle Discoverer EUL Command Line for Java (Linux, Solaris, and HP-UX only)

To run the Oracle Discoverer EUL Command Line for Java on Linux, Solaris, or HP-UX, a number of environment variables must be set correctly. You can either set the environment variables explicitly using the `discwb.sh` script or implicitly using the `eulapi` script, as described below:

- to explicitly set the environment variables before issuing Discoverer EUL Command Line for Java commands, enter the following at the command line prompt from which you will be issuing those commands:

  `oracle_home_path/discoverer/discwb.sh`

  Subsequently, you can enter Discoverer EUL Command Line for Java commands as follows:

  `java -jar oracle_home_path/discoverer/lib/eulbuilder.jar -command_list`

  For example, to refresh a folder called "Sales1", you might enter the following:

  `java -jar oracle_home_path/discoverer/lib/eulbuilder.jar -connect jchan/12345@my_database -refresh_folder Sales1`

- to implicitly set the environment variables when you run Discoverer EUL Command Line for Java commands, use the `eulapi` script in the directory `oracle_home_path/bin` to run commands. For example, to refresh a folder called "Sales1", you might enter the following:

  `oracle_home_path/bin/eulapi -connect jchan/12345@my_database -refresh_folder Sales1`

  Hint: To avoid entering `oracle_home_path/bin` each time you run the `eulapi` script, run `discwb.sh` first.

7.5.8 Oracle Discoverer and Real Application Clusters (RAC)/Transparent Application Failover (TAF)

Oracle Discoverer's support for Transparent Application Failover (TAF) on a Real Application Cluster (RAC) computer requires a failover mode of "select", as shown in the example `tnsnames.ora` entry below:

```
NAME =
    (DESCRIPTION=
        (ADDRESS=
            (PROTOCOL=tcp)
            (HOST=servername)
            (PORT=1521))
        (CONNECT_DATA=
        (SERVICE_NAME= NAME)
        (FAILOVER_MODE=
                (TYPE=select)
                (METHOD=basic)
                (RETRIES=4)
                (DELAY=15)))))
```

Oracle Corporation recommends that you should initially set RETRIES and DELAY to the values given in the example above (that is, 4 and 15 respectively). However, you may need to increase these values for your own computer.

In certain rare scenarios, end users may see an error message if failover occurs. When they acknowledge the error message, their sessions will continue as normal. A fix for these scenarios is planned for release as a patch to the 9.0.4 release.

7.6 Documentation Errata

This section describes known errors in the documentation.

7.6.1 Item Class Wizard: Choose Attributes dialog description

The "Notes" section in the Item Class Wizard: Choose Attributes dialog description on page 24-78 of the *Oracle Discoverer Administrator Administration Guide* should contain an extra bullet point as shown below:

- A one-to-one relationship must exist between the item used for the list of values and the item used for the sort order

7.6.2 Correction to /export (EUL Objects) Example

The example provided for the /export (EUL Objects) command on page 21-20 of the *Oracle Discoverer Administrator Administration Guide* should read as follows:

To export two business areas named "Test BA" and "Final BA", residing in an EUL named "eul_sales", into a file named `export.eex`, and write to a log file named `export.log`, enter:

```
dis51adm.exe /connect me/mypassword /export export.eex
/business_area "Test BA" /business_area "Final BA" /all /eul
eul_sales /log export.log
```

7.6.3 Missing '-jar' in Example Syntax given for Running Oracle Discoverer EUL Command Line for Java commands

The examples in sections 1.7 and 1.9 of the *Oracle Discoverer EUL Command Line for Java User's Guide* are missing the "-jar" part of the command line syntax. When running the command line for Java, use the following syntax:

```
java –jar eulbuilder.jar -command list
```

7.6.4 About Scheduled Workbooks and Compatibility Between the Current Version of Oracle Discoverer and Previous Releases

The section "About scheduled workbooks and compatibility between the current version of Discoverer and previous releases" on page 7-15 of the *Oracle Discoverer Administrator Administration Guide* contains the following statement:

In this case you must install the new version of the batch PL/SQL package (EUL5_BATCH_USER) using the SQL script `batchusr.sql`.

The above statement should read:

In this case you must install the new version of the batch PL/SQL package (EUL5_BATCH_REPOSITORY) using the SQL script `batchusr.sql`.

7.6.5 <ORACLE_HOME>\discoverer\util should read <ORACLE_HOME>\discoverer\sql

All references in the *Oracle Discoverer Administrator Administration Guide* and the *Oracle Discoverer Administrator Tutorial* to files located in the `<ORACLE_HOME>\discoverer\util` directory should instead specify the `<ORACLE_HOME>\discoverer\sql` directory.

For example, the path `<ORACLE_HOME>\discoverer\util\eul5_id.sql` should read `<ORACLE_HOME>\discoverer\sql\eul5_id.sql`.

8

Oracle Discoverer Desktop

This chapter discusses issues and workarounds for Oracle Discoverer Desktop (Discoverer Desktop).   The chapter includes the following topics:

- Section 8.1, "General Issues and Workarounds"
- Section 8.2, "Platform-specific Issues and Workarounds"
- Section 8.3, "Configuration Issues and Workarounds"
- Section 8.4, "Administration Issues and Workarounds"
- Section 8.5, "Useful Information"
- Section 8.6, "Documentation Errata"

8.1 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle Discoverer Desktop.

8.1.1 "Cannot find a required file : dcmresus.msb." When Trying to Run Oracle Discoverer 9.0.2 after Installing 9.0.4

If you install Oracle Discoverer Desktop 9.0.4 on the same computer as Oracle Discoverer Desktop 9.0.2, the following error message will be displayed if you attempt to start Discoverer Desktop 9.0.2 from the Windows **Start** menu:

Cannot find a required file : dcmresus.msb.

The message is displayed because of a problem loading certain libraries on a computer with multiple Oracle homes. The same message will also be displayed if you attempt to start Discoverer Desktop 9.0.2 by double-clicking on dis51usr.exe in Windows Explorer.

To work around this problem, do one of the following:

- **Workaround 1:** Run Discoverer Desktop 9.0.2 from the Windows command line, as follows:

  1. From the Windows **Start** menu, choose **Command Prompt** to display the **Command Prompt** window.

  2. Enter the following at the command prompt:

     902_ORACLE_HOME\discoverer902\bin\dis51usr.exe

     where *902_ORACLE_HOME* is the directory in which Discoverer Desktop 9.0.2 was installed.

- **Workaround 2:** Run Discoverer Desktop 9.0.2 from a batch file, as follows:

    1. Open a new file in a text editor (for example, Notepad).

    2. Enter the following in the new text file:

       `dis51usr.exe`

    3. Save the file in the directory *902_ORACLE_HOME*\discoverer902\bin, and give the file a .bat suffix (for example, startdiscodesktop902.bat).

    4. To start Discoverer Desktop 9.0.2, you can do either or both of the following:

       – Double click the new .bat file in Windows Explorer.

       – Replace the existing shortcut to Discoverer Desktop 9.0.2 in the **Programs** menu with a shortcut to the new .bat file.

> **Note:** The above workarounds assume the user has already used the Oracle Home Selector (typically required for any computer with multiple Oracle homes).

8.2 Platform-specific Issues and Workarounds

There are currently no known platform-specific issues.

8.3 Configuration Issues and Workarounds

There are currently no known configuration issues.

8.4 Administration Issues and Workarounds

There are currently no known administration issues.

8.5 Useful Information

This section describes useful information for Oracle Discoverer Desktop.

8.5.1 Manually Editing the End User Layer Tables

Do NOT manually edit the End User Layer (EUL) tables or contents (for example, by using **SQL*Plus**), unless specifically directed to do so by Oracle Support or Development. Manual editing of the EUL tables is not supported and any manual changes can result in a corrupt EUL.

8.5.2 Refresh Query For Users Only Able to Run Scheduled Workbooks

For end users who are only able to run scheduled workbooks, note that the **Refresh** button in the **Scheduling Manager** dialog will not re-run the query from the base tables, but from the table that stores the scheduled workbook results. This is also the case for the "Run query automatically" option on the **General** tab of the **Options** dialog.

8.5.3 Availability of HWOnline files

Previous versions of Oracle Discoverer shipped with the files `HWOnline.htm` and `Memo.doc`, which were used to demonstrate "drill out" functionality. To reduce disk space requirements and installation time, these files and instructions for their use will be made available from the Oracle Technology Network (http://otn.oracle.com).

8.5.4 Additional Oracle Discoverer Registry variables

The following Oracle Discoverer registry variables are available, in addition to those documented in the *Oracle Discoverer Administrator Administration Guide* and the *Oracle Application Server Discoverer Configuration Guide*:

Category	Discoverer registry variable	Description	Default	Valid Values
Database	DefaultPreserve DisplayProperty ForRefresh	When refreshing, specifies whether an updated item description is discarded and replaced with the original description, or whether the updated description is retained	0	■ 0 = Use updated description ■ 1 = Use original description
Database	EnableTriggers	Specifies whether database triggers are disabled. For example, Discoverer attempts to make a database call for every new column found during a refresh. If this value is set to 0, Discoverer will not make the database call.	0	■ 0 = Disable database triggers ■ 1 = Enable database triggers
Database	ExportJoinFrom Master	When exporting a business area, specifies whether joins from the master folder are also exported.	0	■ 0 = Do export joins from Master Folder ■ Any value other than 0 = Do not export joins from the Master Folder
Database	SetNULLItem HeadingOnBulk Load	When performing a bulk load, specifies whether item headings are set to the same value as item display names, or set to null.	0	■ 0 = Set item headings to item display names ■ 1 = Set item headings to null

8.5.5 Oracle Discoverer and Real Application Clusters (RAC)/Transparent Application Failover (TAF)

Oracle Discoverer's support for Transparent Application Failover (TAF) on a Real Application Cluster (RAC) computer requires a failover mode of "select", as shown in the example `tnsnames.ora` entry below:

```
NAME =
    (DESCRIPTION=
        (ADDRESS=
            (PROTOCOL=tcp)
            (HOST=servername)
            (PORT=1521))
        (CONNECT_DATA=
        (SERVICE_NAME= NAME)
        (FAILOVER_MODE=
                (TYPE=select)
                (METHOD=basic)
                (RETRIES=4)
                (DELAY=15))))
```

Oracle Corporation recommends that you should initially set RETRIES and DELAY to the values given in the example above (that is, 4 and 15 respectively). However, you may need to increase these values for your own computer.

In certain rare scenarios, end users may see an error message if failover occurs. When they acknowledge the error message, their sessions will continue as normal. A fix for these scenarios is planned for release as a patch to the 9.0.4 release.

8.6 Documentation Errata

There are currently no known documentation issues.

9

Oracle Forms Developer

This chapter contains the following Oracle Forms Developer topics:

These topics include information about Oracle Forms Developer (Forms Developer), the Oracle Forms Builder program (Form Builder), and the entire Oracle Forms environment (Forms).

9.1 General Issues and Workarounds

This section contains general issues and workarounds for Oracle Forms Developer (Forms Developer).

9.1.1 No Need To Recompile Forms When Upgrading To Oracle Forms 10g (9.0.4)

When upgrading to Oracle Forms 10*g* (9.0.4) from a previous version of Oracle9*i* Forms, you do not need to recompile your Forms Applications.

9.1.2 Forms Cannot Handle Multibyte CLOB Data Correctly

(3148851 and 1480307) When running such a module and when it fetches records from database, FRM-40505 error will occur.

9.1.3 Embedded Fonts in Forms Developer

(2972738) Oracle Forms has several places where text is displayed, but where the object in question is not exposed through the Builder, or does not expose a Font Property.

For example:

- Window Titles

- Console Line

- Cancel Query dialog

- LOV window Search Box

- Field Help Dialog

It is not obvious where the font comes for these objects and in several cases (e.g. Console line, Help dialog) the value is hardcoded into the Forms Applet. This hard-coded font in the Console and Field Help Dialog is 12pt Sans Serif.

9.1.4 Iconic Push Buttons

Forms Developer allows you to create iconic push buttons. That is, an image is used instead of text for the push button. In Forms 6*i*, you could specify an "Icon Filename" in the property palette. According to the documentation, this filename should not contain the ".ico" extension.

There is also a variable UI_ICON. This variable is not changing, and will work with all changes.

Oracle Forms supports image types that work on the web. In order to see these images at design time, there is now a new, optional, environment/registry variable UI_ICON_ EXTENSION. You can set this variable as:

- "gif" (case insensitive): In this case, the extension that will be added to "Icon Filesname" is ".gif"

- "jpg": ".jpg"

- "ico": ".ico"

- not set, or set incorrectly: ".ico"

9.1.5 Restriction For Data Block Wizard

(2217028) Oracle database allows you to create objects with names that start with invalid characters, such as numbers, if you enclose them in double-quotes, for example, `'create table "123" (c char)'`. For these kinds of database objects, you should create a block or item manually instead of using the Data Block Wizard because the Data Block Wizard will cause ORA-00911, ORA-00931 or ORA-04043.

9.1.6 When-Mouse-Click Doesn't Fire For Right Mouse Click

(3208500) The when-mouse-click trigger does not fire if the user clicks on an item with the right mouse button (Button 3 in Windows, Button 2 in Linux, Solaris, or HP-UX).

9.2 Platform-specific Issues and Workarounds

9.2.1 Windows Platform Issues and Workarounds

9.2.1.1 FRM-18113 Error When Clicking On Design Capture

(3071580) Clicking on Design Capture triggers "FRM-18113: Form Builder failed to Initialize the Oracle Designer as an Automation Server." This error occurs because the appropriate Windows registry settings do not exist.

To import the appropriate registry settings, double click <ORACLE_ HOME>\CGENF61\de9i.reg, then exit and restart Oracle Forms.

9.2.1.2 Location of JAWS Scripts

JAWS scripts are now installed with Forms Developer. The location for these scripts is `oracle_home`/forms90/ScreenReader/, and are also available at Oracle Technology Network (OTN) at http://otn.oracle.com/.

9.2.1.3 Java Related Dialogs And Windows Are Not Read By Jaws

(3032246) You need to add access-bridge.jar and jaccess-1_3.jar to the CLASSPATH.

9.2.1.4 Graphics Fails Against Database 9.0.1.4.0 (64bit)

(3080826) Due to a limitation in the 8.0.6 RSF, Oracle Graphics 6i on Windows cannot connect to a 64-bit database. Thus, if you are using Oracle Forms 10g (9.0.4) to connect to a 64-bit database, and want to integrate with Oracle Graphics, you will need to upgrade your Oracle 6i Home (where Graphics is installed) to include an RSF version that contains a fix to bug 3088708. Please contact Oracle Support regarding availability of such an RSF.

9.2.2 Linux, Solaris, and HP-UX Platform Issues and Workarounds

9.2.2.1 General Linux, Solaris, and HP-UX Platform Issues and Workarounds

9.2.2.1.1 USER_EXIT in Linux, Solaris, and HP-UX The USER_EXIT directory is not available when you install Oracle Developer Suite on Linux, Solaris, or HP-UX.

Starting with Forms 9*i*, the demo user exit is not shipped. However, the makefiles are available in `oracle_home`/lib.

1. You'll have to copy the following files from the Forms 6*i* (`oracle_home`/forms60/USEREXIT):

   - `UE.H`: Header file with definitions; do not change.

   - `UE_SAMP.H`: Header file with prototype of the user exit function.

   - `UE_SAMP.PC`: The code of the demo user exit; you can use this as a template for your own user exits.

   - `UE_XTB.C`: This file holds the table of user exits.

   - Precompile and compile the user exit code as follows:

     ```
     proc ue_samp.pc

     cc -c ue_samp.c
     ```

2. Compile the file `ue_xtb.c` which holds the table of user exits:

   ```
   cc -c us_xtb.c
   ```

3. Relink the Forms executables with user exit:

   ```
   make -f ins_forms.mk f90webmx EXITS="ue_xtb.o ue_samp.o"
   ```

   The makefile assumes that your user exit source code is in `ue_samp.pc`. If your file has a different name, you can either change the makefile (line `EXITS=ue_xtb.o ue_samp.o`) or pass the file names on the command line.

For example:

```
make -f ins_forms.mk f90webmx EXITS="ue_xtb.o myexit.o"
```

4. After creating f90webmx,you should specify a Listener Servlet initialization parameter in the `web.xml` file.

5. Create a form to test your user exit. The demo user exit adds two items, `BLOCK1.ITEM1` and `BLOCK1.ITEM2`, and puts the result into `BLOCK1.ITEM3`.

   1. Create a form called `ue_samp.fmb` with a non-basetable block called `BLOCK1`, and three text items `ITEM1`, `ITEM2` and `ITEM3`.

   2. Create a button with a `WHEN-BUTTON-PRESSED` trigger with the following code:

   ```
   user_exit('UE_SAMP');
   ```

   The test form does not need a connection to the database.

   3. Create an ON_LOGON trigger on form level with the following code:

   ```
   null;
   ```

6. Save and generate the form.

RESTRICTIONS: The required version of the pre-compiler to use must match the Required Support Files (RSF) version of Forms. Pro*C 9.0.1 is bundled with Oracle Developer Suite 10*g*.

If you encounter FRM-40800, try renaming `f90webmx` to `f90webm`.

9.2.2.2 Using TK90_UNKNOWN

(3193143) In a Linux, Solaris, or HP-UX environment, Forms Developer picks up `Tk2Motif.rgb` under `$ORACLE_HOME/guicommon9/tk90/admin/<language>` based on the language portion of your `NLS_LANG` environment variable by default. For example if your `NLS_LANG` is set to `AMERICAN_AMERICA.JA16EUC`, `$ORACLE_HOME/guicommon9/tk90/admin/Tk2Motif.rgb` is picked up. However, since `$ORACLE_HOME/guicommon9/tk90/admin/Tk2Motif.rgb` is not designed for JA16EUC character set, you may encounter FRM-91111 or FRM-10039.

You can specify the location of your `Tk2Motif.rgb` file by setting `TK90_UNKNOWN` environment variable. For instance, `TK90_UNKNOWN` environment variable can be set to `$ORACLE_HOME/guicommon9/tk90/admin/JA`.

9.2.3 HP-UX Issues and Workarounds

If you want to use Forms in the HP-UX Japanese environment with `NLS_LANG=JAPANESE_JAPAN.JA16SJIS`, you'll need to modify these files before using Forms because these files contain EUC encoded Japanese resources.

Convert this file to SJIS encoding, or remove the last 7 entries from this file. Otherwise, Forms may fail (FRM-91500):

■ `$ORACLE_HOME/guicommon9/tk90/admin/JA/Tk2Motif.rgb`

Convert these files to SJIS encoding:

■ `$ORACLE_HOME/forms90/admin/resource/JA/fmrweb.res`

■ `$ORACLE_HOME/forms90/admin/resource/JA/fmrpcweb.res`

Otherwise, the following error occurs when running Forms:

```
Error opening Oracle*Terminal file frmweb
```

9.3 Configuration Issues and Workarounds

9.3.1 SSO Dynamic Resource Creation Fails When 904 BI-Forms Uses 902 Infrastructure on the Same Machine

(3231685) When you install BI-Forms and Infrastructure on the same computer, URL rewriting doesn't work once Forms has re-directed to DAS. You'll see "FRM-92102: A network error has occurred. The Forms Client has attempted to reestablish its connection to the Server 5 time(s) without success." This only happens if you're running 9.0.4 Forms against a 9.0.2 infrastructure (installed on the same machine) and using Internet Explorer.

This can affect SSO support in Forms. If a user tries to run Forms with SSO enabled, and connects using an existing Forms configuration, there is no issue.

However, when a user attempts to run Forms without providing an existing Forms configuration, Forms redirects to DAS to allow the user to dynamically create a resource for this configuration. When this happens, the resource is created properly by DAS but Forms fails to connect after DAS redirects back to the Forms servlet. If the user copies the same URL at that point and runs it in a different browser, there is no issue. This is a one-time issue, and if administrators have correctly created DAS resources, users will never experience this issue.

Similarly, if you don't have DAS (part of an Infrastructure installation) and BI-Forms installed on the same machine, you won't encounter this issue.

9.3.2 Forms and Reports Integration

9.3.2.1 Cannot Invoke Reports Builder from Form Builder

(2228305) To set up Oracle Forms and Oracle Reports integration in the Forms Builder, modify the file f90desm.sh by uncommenting the line that calls reports.sh.

9.3.2.2 Restarting OPMN In-process Reports Server Raises Error

(3148596) Perform the following to correctly setup Reports/Graphics for Forms/Reports/Graphics integration:

1. In the `g90runm.sh` script enter the following:

    ```
    ORACLE_GRAPHICS6I_HOME=location_forms6i

    export ORACLE_GRAPHICS6I_HOME

    TK_PRINTER=real_printer
    ```

2. In the `reports.sh` script enter the following:

    ```
    ORACLE_GRAPHICS6I_HOME=location_forms6i

    export ORACLE_GRAPHICS6I_HOME

    REPORTS_DEFAULT_DISPLAY=NO

    export REPORTS_DEFAULT_DISPLAY

    DISPLAY=machine_name:0.0; export DISPLAY
    ```

9.3.2.3 Forms Migration Assistant: RUN_PRODUCT(Reports) rp2rro Reports Object Is Not Created in Object Library

(3151894) When an Oracle Forms 6*i* module has a RUN_PRODUCT Built-in that calls Reports, the Forms Migration Assistant creates 11 parameters and RP2RRO Reports objects after the conversion.

However, when a Forms 6*i* Object Library that contains the same Built-in is converted with the Forms Migration Assistant, then a new Object Library tab with the rp2rro parameters that contain all 11 parameters is created but the Reports object RP2RRO is not.

9.4 Documentation Errata

9.4.1 Oracle Forms Services Deployment Guide

P60: 4.3.4.1
connectionDisallowedURL required

Should Read:
connectionDisallowedURL optional

P60: 4.3.4.1
HTML delimiter

Should Read:
HTMLdelimiter

P75: 4.9.1
Registry.dat file in the forms90/java/oracle/forms/registry directory.

Should Read:
Registry.dat file in the forms90/java/oracle/forms/registry directory.

P87: 5.3.0.2
MaxClient

Should Read:
MaxClients

P119: 7.2.2
```
<ORACLE_HOME>/j2ee/OC4J_BI_FORMS/application-deployments/forms90/1_default_
island/application.log
```

Should Read:
```
<ORACLE_HOME>/j2ee/OC4J_BI_FORMS/application-deployments/forms90app/OC4J_BI_Forms_
default_island_1/application.log
```

P119: 7.2.2

```
<ORACLE_HOME>/j2ee/OracleDS/application-deployments/forms90/application.log
```

Should Read:

```
<ORACLE_HOME>/j2ee/DevSuite/application-deployments/forms/application.log
```

P140: 8.4

2. In the navigator pane, select "General Configuration" | "Session Management" | "Session Binding".

3. In the "Session Binding Configuration" screen, select "Default Session Binding" and then select "Edit".

4. The "Change/Add Session Binding" dialog box appears.

5. ... select "Administration" | "Monitoring" | "Health Monitor".

Should Read:

2. In the navigator pane, select "Origin Servers, Sites, and Load Balancing" | "Session Binding".

3. In the "Session Binding" screen, select "Default Session Binding" and then select "Edit Selected".

4. The "Edit Session Binding" dialog box appears.

5. ... select "Monitoring" | "Health Monitor".

P143, A.1.4.0.1

Netscape Navigator 4.7.3

Netscape Navigator 4.7.8

Should Read:

Netscape Navigator 4.7.x

Netscape Navigator 7.0.x

Page 149: 3.5.2

Internet Explorer 5.x or 6*   native VM**   baseie.htm

Internet Explorer 5.x or 6*   jinitiator   basejini.htm

Should Read:

Internet Explorer 5.x or 6*   native**   baseie.htm

Internet Explorer 5.x or 6   jinitiator   basejini.htm

P150: B.1

```
jinit_classid=clsid:CAFECAFE-0013-0001-0009-ABCDEFABCDEF
# Parameter related to the version of JInitiator
jinit_exename=jinit.exe#Version=1,3,1,9
# Parameter related to the version of JInitiator
jinit_mimetype=application/x-jinit-applet;version=1.3.1.9
```

Should Read:

```
jinit_classid=clsid:CAFECAFE-0013-0001-0013-ABCDEFABCDEF
# Parameter related to the version of JInitiator
jinit_exename=jinit.exe#Version=1,3,1,13
# Parameter related to the version of JInitiator
jinit_mimetype=application/x-jinit-applet;version=1.3.1.13
```

Page153: B.2.1:

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_<ORACLE_HOME><percent> with the correct <ORACLE_HOME>
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $<ORACLE_HOME>/jdk).
```

Should Read:

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_ORACLE_HOME<percent> with the correct ORACLE_HOME
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $ORACLE_HOME/jdk).
```

Page155: B.2.2

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_<ORACLE_HOME><percent> with the correct <ORACLE_HOME>
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $<ORACLE_HOME>/jdk).
```

Should read:

```
# 1/ The Forms installation process should replace all occurrences of
# <percent>FORMS_ORACLE_HOME<percent> with the correct ORACLE_HOME
# setting, and all occurrences of <percent>O_JDK_HOME<percent> with
# the location of the JDK (usually $ORACLE_HOME/jdk).
```

P157: B.2.2

```
# (/cdm/solaris/o_jdk/1_2_2_0_0/jre/lib/sparc)
# - Forms needs two paths to the jre, for libjvm.so and libhpi.so
# - In ojdk 1.3.1 the location of libjvm.so is lib/sparc (there is no
```

Should Read:

```
# (.../jre/lib/sparc)
# - Forms needs two paths to the jre, for libjvm.so and libhpi.so
# - In JDK 1.4.1 the location of libjvm.so is lib/sparc (there is no
```

P169: B.5

```
<ORACLE_HOME>/forms90/html
```

Should Read:

```
<ORACLE_HOME>/tools/web90/html
```

10

Oracle Reports

This chapter discusses issues and workarounds for Oracle Reports, including Oracle Reports Developer (Reports Developer) and Oracle Application Server Reports Services (Reports Services). The chapter includes the following topics:

- Section 10.1, "General Issues and Workarounds"
- Section 10.2, "Platform-specific Issues and Workarounds"
    - Section 10.2.1, "Windows Platform Issues and Workarounds"
    - Section 10.2.2, "Linux, Solaris, and HP-UX Platform Issues and Workarounds"
- Section 10.3, "Configuration Issues and Workarounds"
- Section 10.4, "Administration Issues and Workarounds"
- Section 10.5, "Documentation Errata"

The notes in this chapter cover issues and workarounds that are not documented in Oracle Reports 10*g* manuals and online help. For information about the new features in this release, refer to the Oracle Reports 10*g* page on OTN (`http://otn.oracle.com/products/reports/index.html`), and to the "About this release" topic in the Reports Builder online help.

> **Note:** You can also download the latest version of the Reports Builder online help from the Oracle Reports 10*g* OTN page.

10.1 General Issues and Workarounds

This section describes general issues and workarounds for Oracle Reports.

10.1.1 Running a Simple Matrix Report to the Web

Problem

If you try to create a simple matrix report and run it to Web by using the Run to Web functionality, the report does not display correctly.

Workaround

To fix this issue, download and install the patch for your operating environment. The patches are at `http://metalink.oracle.com`:

- Windows ARU number: 5147374
- Solaris ARU number: 5147755
- HP-UX ARU number: 5158238

10.1.2 Opening / Running an encoded JSP report

Description

If your JSP report's character encoding (for example, `EUC-JP`) differs from the character set portion of the `NLS_LANG` environment variable (for example, `JA16SJIS`), then you will get the following errors:

- when running the JSP file:

  ```
  REP-6106 or 6104 with javax.servlet.jsp.JspException  (multibyte)
  REP-0495 Unable to tokenize the query (singlebyte)
  ```

- when opening the JSP file using Reports Builder:

  ```
  REP-0069 Internal Error or REP-6106
  ```

Workaround

To work around this issue, you must ensure that your JSP report's character encoding matches the IANA encoding corresponding to Reports Builder's character set portion of the `NLS_LANG` variable.

For example, the JSP report encoding

```
<%@ page contentType="text/html;charset=EUC-JP" %>
<META http-equiv="Content-Type" content="text/html;charset=EUC-JP">
```

uses the IANA character encoding `EUC-JP`. For this report, you should use the `NLS_LANG` setting

```
NLS_LANG=JAPANESE_JAPAN.JA16EUC.
```

The JSP report's encoding (`EUC-JP`) will then correspond to the character encoding part of the NLS_LANG environment variable (`JA16EUC`).

10.1.3 Dynamically Embedding a Character Set in a JSP file

In Oracle Reports, Web-report templates are configured by default for Western European character encoding. For other languages, you must specify the character encoding for a JSP file by using both the `charset` attribute of the `<meta>` tag and the `<%@page%>` page directive.

To dynamically associate the appropriate character encoding with the JSP file, you can make the following modifications:

1. In the directory *oracle_home*/`reports/templates/`, edit the files `rw*.html` and `blank_template.jsp`:

   a. Modify the page directive to read

   ```
   <%@ page contentType="text/html;charset=yourIANAencoding" %>
   ```

   where

   yourIANAencoding is the IANA character encoding that corresponds to the character encoding part of your `NLS_LANG` environment variable.

   b. Modify the `<meta>` tag inside the `<head>` tag to read:

   ```
   <meta http-equiv="Content-Type"
   content="text/html;charset=yourIANAencoding" />
   ```

2. In the directory *oracle_home*/reports/templates/, edit the file
template.xsl:

a. Modify the <xsl:output> tag to read:

```
<xsl:output
    method="jsp"
    indent="yes"
    encoding="yourIANAencoding"
 />
```

where

yourIANAencoding is the IANA encoding that corresponds to the character
encoding part of your NLS_LANG environment variable.

b. Add the following page directive:

```
<%@ page contentType="text/html;charset=yourIANAencoding" %>
```

c. Add or modify the <meta> tag inside the <head> tag:

```
<meta http-equiv="Content-Type"
content="text/html;charset=yourIANAencoding" />
```

where

yourIANAencoding is the IANA encoding that corresponds to the character
encoding part of your NLS_LANG environment variable.

10.1.4 Running a Multibyte report containing an embedded Oracle Object

On Windows and Linux platforms, Reports Builder stops responding when you run a
multibyte report containing an embedded Oracle Object type. This issue will be fixed
in a later release.

10.1.5 Viewing Oracle Enterprise Manager screens in non European languages

Oracle In the Enterprise Manager Application Server Control, you may see garbled
titles on the following Reports Server pages for non-Western European languages:

- Engine
- Configuration
- Edit Configuration File

This is a known problem and will be fixed in a later release.

10.1.6 Specifying the encoding of an XML PDS Report

When you create a report against an XML data source, you must ensure that the
encoding of the data source and its DTD matches the encoding of Reports Builder.

For example, when you create an XML report against a table encoded in a Japanese
character set, the group element name is encoded in Japanese. To match the data
source, you should encode the group's element name in the DTD in Japanese. The
XML and DTD files can be in any encoding that supports Japanese, such as Shift_JIS,
EUC-JP, or UTF-8.

If you do not match the XML data source and DTD encoding to the Reports Builder encoding, you will see the following error:

```
ERR-063001 xxx.dtd null
```

> **Note:** You will not see this error if you use a XML schema instead of a DTD.

To avoid this problem, ensure that both the XML data source and DTD for your XML report use the same encoding that you have in the character encoding part of the `NLS_LANG` environment variable in effect for your Reports Runtime.

For example, if `NLS_LANG=JAPANESE_JAPAN.JA16SJIS` for your Reports Runtime, then both your XML data source and DTD should use Shift_JIS.

10.1.7 FTP and WebDaV Destinations Not Supported from Reports Builder

Currently there is no support for FTP and WebDaV destinations from the Reports Builder environment. However, they are supported from the Reports Runtime and the Reports Server environments.

10.1.8 Oracle9*i* JDeveloper Integration

10.1.8.1 Deadlock When Debugging JSP Reports in Oracle9*i* JDeveloper

When you are debugging an OracleAS Reports Services JSP in Oracle9*i* JDeveloper (JDeveloper), you must disable any breakpoints that are not of source type. If you do not disable these breakpoints, a deadlock occurs. You can disable breakpoints that are not of source type in the Breakpoints window.

10.1.8.2 Graph Not Appearing in Oracle9*i* JDeveloper

When you run a JSP report with the `rw:graph` tag in JDeveloper, the graph image is not visible in the browser. To fix this problem, set the `IMAGEURL` parameter in the `rwservlet.properties` file in *oracle_home*/reports/conf:

```
IMAGEURL=http://host:port/Workspace-Project-context-root/servlet/
oracle.reports.rwclient.RWClient
```

10.1.8.3 Reports in-process server

If you set the JDeveloper Java Virtual Machine (JVM) to `ojvm`, `minimal`, or `vanilla` (**Project Settings** > **Runner** > **Virtual Machine**), the rwservlet's in-process server is not killed when you terminate JDeveloper's embedded OC4J server. As a result, a port conflict occurs the next time you start OC4J. To avoid this problem, do one of the following:

- Set the JVM to `hotspot`.

- Disable the in-process server in *oracle_home*/reports/conf/rwservlet.properties by setting `server_in_process=no`.

- Use the standalone Reports Server instead.

10.2 Platform-specific Issues and Workarounds

This section contains issues and workarounds that apply to specific operating environment platforms supported by Oracle Developer Suite.

10.2.1 Windows Platform Issues and Workarounds

This section contains issues and workarounds that apply specifically to supported Microsoft Windows platforms.

10.2.1.1 Using osfind with JDK 1.4

Oracle Reports's architecture uses VisiBroker's `osagent` to find the various servers running in the network.

You use osfind to find various `osagent` instances running on the network. However, `osfind` does not work with the JDK version used by Oracle Application Server (version 1.4). To work around this issue and find `osagent` instances running on the network, you must run `osfind` with the following settings:

```
osfind -J-Xbootclasspath /p:oracle_home\vbroker4\lib\vbjboot.jar
```

10.2.1.2 Invoking the Getting Started Page From Reports Builder

If you open the **Getting Started** page from Reports Builder using Netscape 7.0, you might get a `Failed to locate browser` error. To correct this problem:

1. Open the Windows registry using a registry editor (for instance, `regedit.exe`).

> **Note:** Create a backup of the registry before proceeding to edit it.

2. Navigate to the following key:

   ```
   HKEY_CURRENT_USER\Software\Oracle\Toolkit\Tkbrowser
   ```

3. Delete all other values except `Default`.

4. Run Reports Builder and select **Getting Started**.

5. Click **OK**. The Information Navigator Preferences dialog box appears.

6. Select **Netscape Navigator 7.0+** as the browser. Ensure that the path and the browser program name are accurate. To change the browser location (if the path or the program name is incorrect):

   a. Click **Browse**.

   b. Navigate to the location and program name you want.

   c. Click **OK**.

7. In the Information Navigator Preferences dialog box, click **OK**.

10.2.1.3 Printing Reports Without Hardware-based Left Margins

Oracle Reports 10*g* (9.0.4) has been changed to generate the report output relative to the top-left corner of the physical paper. Earlier, the printer's printable area was used, causing inconsistencies in the location of the report output when used across different printer models.

If required, you can revert to the earlier behavior by setting the registry key `REPORTS_ADD_HWMARGIN` to `YES`.

To set the REPORTS_ADD_HWMARGIN registry key to YES:

1. Back up the Windows registry, then edit it using a registry editor such as regedit.exe.

> **Note:** Refer to Windows online help for instructions on how to back up the registry.

2. Navigate to the key HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE, then find the HOME*n* key that contains the directory for the Oracle home that contains Reports.

3. With this key selected, add a new String sub-key named REPORTS_ADD_HWMARGIN and set its value to YES.

By default, the non-printable left margin of the printer is ignored. The printing origin starts from the top-left corner (0,0) of the physical paper and not the printable area. If you have set the registry key value to YES and then want to switch to the default, you can set the key value to NO, or you can delete the key.

You must provide enough margin in your report's layout to put the data within the printable area. The margin fields in the Page Setup dialog box of Reports Builder have been disabled to ensure consistency with OracleAS Reports Services.

10.2.2 Linux, Solaris, and HP-UX Platform Issues and Workarounds

> **Note:** Platform-specific issues are only reported for the platform on which they were first detected; an issue that is listed as "platform-specific" may actually occur on several platforms. Unless the notes say otherwise, you should only use a platform-specific workaround on the stated platform.

10.2.2.1 General Linux, Solaris, and HP-UX Platform Issues and Workarounds

This section contains issues and workarounds specifically for all supported SPARC Solaris, HP HP-UX, and Linux x86 platforms.

10.2.2.1.1   Running a Report to DelimitedData on OracleAS Portal If you have registered your Reports Server in Oracle Application Server 10*g* Portal, then you cannot run a report to DESFORMAT=DELIMITEDDATA using that Reports Server.

Workaround

To work around this issue, you must either unregister your Reports Server from Oracle Application Server 10*g* Portal or use a standalone Reports Server to run the report to DESFORMAT=DELIMITEDDATA.

10.2.2.1.2   Providing the location to a character set-specific Tk2Motif.rgb file The file Tk2Motif.rgb file contains resource settings for the Motif version of the Oracle Toolkit. For example, it specifies the font mapping between the character set used by Oracle Reports, specified in NLS_CHARACTERSET, and X fonts.

Oracle Reports looks for this file in the directory *oracle_home*/guicommon9/tk90/admin/*language*, where *language* is derived from the language setting in NLS_LANG.

If the file does not exist, then Oracle Reports looks for the default version in `oracle_home`/guicommon9/tk90/admin. This version is configured for `WEISO8859P1`, the Western European character set.

If your `NLS_LANG` or `NLS_CHARACTERSET` specifies a character set that is not normally used for the language you have set in `NLS_LANG`, then you will get an error.

For example, if you have set `NLS_LANG=AMERICAN_AMERICA.JA16EUC`, then Oracle Reports locates `Tk2Motif.rgb` in the directory `oracle_home`/guicommon9/tk90/admin/. The language setting in `NLS_LANG` is `AMERICAN`, and there is no *language* subdirectory associated with `AMERICAN`, so Oracle Reports uses the default file. Since this version is designed for `WE8ISO8859P1`, and your `NLS_LANG` character set is `JA16EUC`, you get the error `REP-3000`.

To workaround this problem, set the value of the environment variable `TK90_UNKNOWN` to the location of your character set-specific `Tk2Motif.rgb` file.

For example, if you have `NLS_LANG=AMERICAN_AMERICA.JA16EUC`, then set `TK90_UNKNOWN=oracle_home`/guicommon9/tk90/admin/JA. Even though your language is set to `AMERICAN`, Oracle Reports will use the `Tk2Motif.rgb` file in the `JA` language subdirectory.

10.2.2.1.3 Implementing removal of DISPLAY and printer dependencies With Oracle Reports 10*g* (9.0.4), it is no longer necessary to have the DISPLAY environment variable or a valid printer defined at runtime.

The `REPORTS_DEFAULT_DISPLAY` environment variable specifies whether to implement the following features:

- The elimination of the dependency on the `DISPLAY` environment variable, which was required in prior releases to define the windowing system display surface for creating images and getting pixel resolution.

- The elimination of the dependency on having a valid printer defined for font information (`PRINTER` and `TK_PRINTER` environment variables set to a valid printer, or a valid entry in `uiprint.txt`).

- Using `screenprinter.ppd` for surface resolution for images and font information.

- Enhanced imaging support

> **Note:**
>
> - For existing customers upgrading to Oracle Reports 10*g* (9.0.4), the default setting (`YES`) may impact the appearance, number of pages, output file size, or performance of existing reports.
>
> - Even when the `DISPLAY` environment variable is set, it will not be used unless `REPORTS_DEFAULT_DISPLAY` is set to `NO`.

See Also:

■ *Oracle Application Server Reports Services Publishing Reports to the Web* and the Reports Builder online help for more information on the REPORTS_DEFAULT_DISPLAY environment variable and screenprinter.ppd.

■ The section "Fonts in Report Output" in the chapter "Managing Fonts in Oracle Reports" in *Oracle Application Server Reports Services Publishing Reports to the Web*.

10.2.2.2 Solaris Issues and Workarounds

> **Note:** Although these issues were seen on Solaris, they may also exist on Linux and HP-UX.

10.2.2.2.1 Reports Builder stops responding on Solaris 2.9 On Solaris 2.9, Reports Builder stops responding if you invoke either the Report Wizard or the Data Wizard after accessing any of the following:

■ Reports Builder online help

■ Data Model Editor

■ Text Query Editor

■ JDBC Query Editor

■ OLAP Query Editor

Reports Builder may stop responding when you use the query editor from the Report Wizard's data panel.

To fix this issue, download and install the patch from http://metalink.oracle.com. The ARU patch number is: 5188895.

After you have installed the patch, you must enable it by setting the environment variable REPORTS_SOLARIS_9=YES.

10.2.2.2.2 Invoking the Graph Wizard in a multibyte environment On Solaris, invoking the Graph Wizard in a multibyte (Japanese, Simplified Chinese, and Korean) environment causes Reports Developer to stop responding.

To work around this issue, you must:

1. Install J2SE Version 1.4.2 on your computer. You can download J2SE 1.4.2 from Sun Microsystem's Java web site (http://java.sun.com).

2. Set the path to the J2SE home in the reports.sh file:

```
PATH=$J2SEHOME/bin:$ORACLE_HOME/jdk/bin:
$ORACLE_HOME/bin:${PATH};export PATH
```

3. Modify LD_LIBRARY_PATH in reports.sh to point to the location of the J2SE home:

```
LD_LIBRARY_PATH=$J2SEHOME/lib/sparc:
$ORACLE_HOME/jdk/jre/lib/sparc:$ORACLE_HOME/lib:
${LD_LIBRARY_PATH}; export LD_LIBRARY_PATH
```

10.2.2.3 Linux Issues and Workarounds

This section contains issues and workarounds specifically for supported Linux x86 platforms.

10.2.2.3.1   Radio box selection using mouse in New Program Unit dialog box does not take effect (3209858) Reports Builder has a known issue with selecting a radio button with your mouse.

When you select a radio button in the New Program Unit dialog box, close the dialog box (for example, by clicking on **Cancel**) and then reopen the New Program Unit dialog box, you cannot select the same radio button.

For example, if you select the **Function** radio button, close the New Program Unit dialog box, and then reopen it, you cannot select the **Function** radio button.

You can work around this using either of the following methods:

- Select a radio button other than the one you selected previously, then select the one you want. For example, to select the **Function** radio button, first select the **Procedure** radio button. You can then select the **Function** radio button.

- Use your keyboard to select the radio button. Navigate to the radio button using the **Tab**, **Up**, and **Down** keys, then use the space bar to select the radio button.

For further details, please refer to bug 3209858: RWBUILDER: NEW PROGRAM UNIT: CANNOT MAKE RADIO BUTTON SELECTION WITH MOUSE

10.2.2.4 HP-UX Issues and Workarounds

10.2.2.4.1   Running Oracle Reports in a Japanese Environment on HP-UX If you want to use Oracle Reports in the HP-UX Japanese environment with `NLS_LANG=JAPANESE_JAPAN.JA16SJIS`, you will need to modify the appropriate `Tk2Motif.rgb` file before using Oracle Reports because this file contains `EUC` and not `SJIS` encoded Japanese resources.

To do this, edit the file `oracle_home/guicommon9/tk90/admin/JA/Tk2Motif.rgb`. Either convert the entries to `SJIS` encoding, or remove the last seven entries. Otherwise, Oracle Reports may fail.

10.3 Configuration Issues and Workarounds

This section contains issues and workarounds for Oracle Reports Developer configuration.

10.3.1 Repairing Fonts Not Appearing Correctly in Web Source View

Text in the user interface of Reports Builder, such as the window title, uses fonts taken from the system resource files for the current language. These system resource files are supplied with the Oracle Reports installation. In Oracle Reports, you can map these fonts in the [RWBUILDER] section of `uifont.ali`. If found, the mapped font is used instead of the original font; if not, Oracle Reports uses the original font.

> **Note:**   The mapped font needs to be a fixed-width font.

In the Web Source view of the Report Editor, the following languages may appear garbled: Arabic, Central European languages, Cyrillic, Greek, Hebrew, Japanese, Thai, and Turkish. To work around this issue, you can set the font names for Reports Builder in `uifont.ali` as follows:

```
[rwbuilder]
.....AR8MSWIN1256="Courier New"
.....CL8MSWIN1251="Courier New"
.....EE8MSWIN1250="Courier New"
.....EL8MSWIN1253="Courier New"
.....IW8MSWIN1255="Courier New"
.....JA16SJIS="MS Gothic"
.....TH8TISASCII="Andale Duospace WT"
.....TR8MSWIN1254="Courier New"
```

You can download a copy of the Andale Duospace WT (fixed-width) font from Oracle*Metalink* (http://metalink.oracle.com). The ARU number is 2638552.

10.3.2 Optimizing the Deployment of Reports

Before you deploy a report on a computer that is either slow or is running on a load, you may want to configure the following:

- **Ping timeout (OPMN-side)**: Ping timeout is the measure that OPMN uses to determine the time that it must wait for a callback from an in-process Reports Server (in OC4J_BI_FORMS), before considering it as a timeout.

  The default timeout period is 150. This period is calculated from: ping timeout, ping interval, and number of retries. The default values for these are:

  - ping timeout = 30 seconds
  - ping interval = 20 seconds
  - number of retries = 3

  > **Note:** The number of retries is applicable only when OPMN successfully connects to OC4J and receives regular ONS notifications from the process.

  Based on these values, there will be three ping attempts with a timeout of 30 seconds each at 20 second intervals. The first ping is done after the specified ping interval. Thus, from the time the OC4J is started by OPMN, approximately 150 (20 + 3*30 + 2*20) seconds will elapse before the process is considered unresponsive and restarted. However, if after OPMN connects to OC4J but OC4J is too slow in sending regular ONS notifications then the 30 second timeout is applicable.

  > **See Also:** *Oracle Application Server Reports Services Publishing Reports to the Web* for more information on the `opmn.xml` file.

- **Callback timeout (Reports Server-side)**: Callback timeout is the measure that Reports Server uses to determine the time that it must wait for a response from the engine before timing out. You can specify this value in the Reports Server configuration file, *server_name*.conf. This time out period is in milliseconds.

For example:

```
<engine id="rwEng" class="oracle.reports.engine.EngineImpl" initEngine="1"
maxEngine="1" minEngine="0" engLife="50" maxIdle="30"
callbackTimeOut="80000">
```

> **Note:** Increase the timeout when the machine is very slow.

10.3.3 Improving Image Resolution of Graphs Displayed in a PDF File or on a Printer

The `REPORTS_GRAPH_IMAGE_DPI` environment variable specifies a dots per inch (DPI) value for graphs displayed to a PDF file or on a printer. The default value for this environment variable is 72 DPI, which minimizes the time it takes to generate the report and reduces the report file size.

If you specify a value higher than 72 DPI, you will see an improvement in the image resolution. However, this increases the time it takes to generate the report and increases the report file size.

For instance, setting the value to 250:

- Increases the time to generate a report by 5 to 6 times that of a report generated at 72 DPI.

- Increases the PDF file size by 5 to 6 times that of a report generated at 72 DPI.

Usage Notes

- The valid values are 72 through 300.

- The default value is 72.

- For Windows, set the value in the Windows registry key `HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME`*n*`\`
  `REPORTS_GRAPH_IMAGE_DPI`. Refer to Section 10.2.1.3, "Printing Reports Without Hardware-based Left Margins" for instructions on how to set a registry key value.

- For Linux, Solaris, and HP-UX, set the value by setting the environment variable in `reports.sh`.

- When you set a DPI value greater than 250 and your chart is bigger than 5"x5", you may also need to change the JVM heap size value using `REPORTS_JVM_OPTIONS` to avoid an `Out Of Memory` error in the JVM.

- This variable is currently not supported in Oracle Reports distribution functionality as this is specific to PDF and printer outputs only.

> **See Also:** *Oracle Application Server Reports Services Publishing Reports to the Web* for more information on setting the JVM options.

10.3.4 Specifying the Values for Oracle Reports' Java Virtual Machine

You may want to set Oracle Reports' Java Virtual Machine (JVM) options explicitly to get certain specific behaviors from the JVM that aren't enabled by default. To do this, use the command line option `JVMOPTIONS`.

You can use `JVMOPTIONS` to set options for Reports Runtime, Reports Builder, or Reports Converter's JVM. For example, you can use the following command line to start Reports Builder with a 512MB heap space:

```
rwbuilder jvmoptions=-Xmx512M
```

You can set more than one option by enclosing the value in quotes:

```
rwbuilder jvmoptions="-Xmx256M -Xms=128M"
```

The syntax of `JVMOPTIONS` is

JVMOPTIONS=*option* | "*option* [*option*]"

where `option` is a valid option for a Reports JVM.

The default value for JVMOPTIONS is `-Xmx256M`.

> **Note:** The value of `JVMOPTIONS` overrides the value in the `REPORTS_JVM_OPTIONS` environment variable.

10.3.5 Resolving Reports-Portal Integration Error When Attempting OID Create Resource

In OracleAS Portal, when you have configured Oracle Reports Security settings for Reports Definition File Access by editing a reports definition file, you may encounter the following error when you click **Run** or **Run as Portlet**:

```
500 Internal Server Error
Unexpected Error. Please contact Administrator
```

This error occurs when all of the following conditions are true:

- You have an Interop deployment (which allows for a mixed 9.0.2/9.0.4 environment), with 9.0.4 MT (mid-tier), 9.0.4 IM (Identity Management), and 9.0.2 MR (metadata repository) configured to run together.

- You are running Oracle Reports within OracleAS Portal, using the SSOCONN parameter.

- The connection resource you specify in the SSOCONN parameter was not created in the Oracle Internet Directory (OID) server.

To work around this issue, do the following:

1. In the 9.0.4 IM Oracle home, open the following file in a text editor:

   oracle_home/Apache/Apache/conf/mod_osso.conf

2. Add the following line to the file:

   OssoRedirectByForm on

   For example:

   ```
   <IfModule mod_osso.c>
   OssoIpCheck off
   OssoIdleTimeout off
   OssoConfigFile
   /private1/iasinst/install_set1/904infra/Apache/Apache/conf/osso/osso.conf
   OssoRedirectByForm on
   </IfModule>
   ```

10.3.6 Running to Web Layout on Reports Builder

You can preview a report from Reports Builder by using the Run To Web Layout functionality. You do not need to have the Reports Server configured in order to use this functionality, because Reports Builder includes an embedded Oracle Application Server Containers for J2EE(OC4J) server.

After you upgrade to Oracle Reports 10*g* (9.0.4) from Oracle9*i* Reports Release 2 (9.0.2), you must ensure that the location in the environment variables `CLASSPATH` or `REPORTS_CLASSPATH` refer only to the `oc4j.jar file` in the 10*g* (9.0.4) Oracle home. You must remove the path to the 9.0.2 Oracle home `oc4j.jar` if it exists in either `REPORTS_CLASSPATH` or `CLASSPATH`.

If you include the 9.0.2. `oc4j.jar` file path in either `CLASSPATH` or `REPORTS_CLASSPATH`, the Run to Web Layout functionality will fail with the following error:

```
The major.minor version '48.0' is too recent for this tool to
understand
```

10.4 Administration Issues and Workarounds

This section describes administration issues and their workarounds for Oracle Reports Developer.

10.4.1 Authenticating EM Access to Reports Server Information

The `identifier` element in *server_name*`.conf` contains a new value called `SERVERACCESSKEY`. This value is used to ensure that the Reports Server information in Oracle Enterprise Manager (EM) is secure. The following authentication is implemented:

- The value of the identifier element in the *server_name*`.conf` file is encrypted and is of the form `%SERVERACCESSKEY_USER%/%SERVERACCESSKEY_PASSWORD%`. For example:

```
<identifier confidential="yes" encrypted="no">
  %SERVERACCESSKEY_USER%/%SERVERACCESSKEY_PASSWORD%
</identifier>
```

- The corresponding entries in the `targets.xml` file are:

```
<Property NAME="UserName" VALUE="%SERVERACCESSKEY_USER%" ENCRYPTED="FALSE"/>
<Property NAME="Password" VALUE="%SERVERACCESSKEY_PASSWORD%"
ENCRYPTED="FALSE"/>
```

The default installation ensures that the install time values of `%SERVERACCESSKEY_USER%` and `%SERVERACCESSKEY_PASSWORD%` match those in `targets.xml`.

> **Note:** `%SERVERACCESSKEY_USER%` and `%SERVERACCESSKEY_PASSWORD%` in *server_name*`.conf` and `targets.xml` must match for the Reports Server pages in EM to display data correctly.

To change the user name and password:

1. Edit the *oracle_home*/reports/conf/*server_name*`.conf` file, as follows:

```
<identifier confidential="yes" encrypted="no">
  new_username/new_password
</identifier>
```

2. Edit the *oracle_home*/sysman/emd/targets.xml file, as follows:

```
<Property NAME="UserName" VALUE="new_username" ENCRYPTED="FALSE"/>
<Property NAME="Password" VALUE="new_password" ENCRYPTED="FALSE"/>
```

3. Restart EM and Reports Server. The user name and password in *server_name*.conf and targets.xml will be encrypted after the restart.

> **Note:** Beginning with Oracle Reports 10*g* (9.0.4), Enterprise Manager (EM) will not use OID authentication to access Reports Server information. It will use the SERVERACCESSKEY value to specify the authentication.

10.4.2 Running Reports on OracleAS Portal as an Item Link

When you install OracleAS Portal with a non-default language setting, some entries required to publish a report as an item link on a portal page are not installed automatically. You must install the language of your choice by using the rwlang.sql script.

Run the script rwlang.sql in the directory *oracle_home*/portal/admin/plsql/wwd/ if:

- You selected at least one language in addition to the default ("US") when you installed OracleAS Portal

- You want to publish a report as an item link in OracleAS Portal.

This is a one time post-installation task and will ensure that you can publish a report as an item link on OracleAS Portal.

To run the script:

1. Navigate to the directory *oracle_home*/portal/admin/plsql/wwd/.

2. Run SQL*Plus.

3. Logon to OracleAS Portal using the portal schema.

> **Note:** This is the portal schema you used to install OracleAS Portal PL/ SQL packages.

4. Run the script rwlang.sql with a list of language identifiers corresponding to the languages you installed with OracleAS Portal:

@rwlang.sql *language_list*

where *language_list* is a list of language identifiers, separated by commas.

For example, if you installed French and Japanese when you installed OracleAS Portal, you would run the following command:

@rwlang.sql f,ja.

Usage Notes:

- Do not leave spaces before or after the comma (,), otherwise SQL*Plus will interpret the language list as two parameters, instead of one parameter containing a comma delimiter.

- The file `rwlang.sql` contains a complete list of language identifiers. You can view the file with a text editor to find the identifiers you want.

10.5 Documentation Errata

This section describes known errors in the documentation.

10.5.1 REPORTS_CLASSPATH variable in Linux, Solaris, and HP-UX

Chapter 8, sections 8.1.2 through 8.2, of the *Oracle Application Server Reports Services Publishing Reports to the Web* manual specifies the `reports.sh` file as containing the `REPORTS_CLASSPATH` variable on Solaris. The `REPORTS_CLASSPATH` variable is located in the `reports.sh` file for all Linux, Solaris, and HP-UX platforms.

10.5.2 Oracle Reports Documentation Page on Oracle Technology Network

Due to improvements on OTN, the URL that directly accesses the Oracle Reports Documentation page is incorrect in the documentation. Instead of `http://otn.oracle.com/docs/products/reports/content.html`, the revised URL is http://otn.oracle.com/documentation/reports.html

10.5.3 Revised Section 13.3.3.2 of Oracle Application Server Reports Services Publishing Reports to the Web

Chapter 13, section 13.3.3.2, of the *Oracle Application Server Reports Services Publishing Reports to the Web* manual contains procedures that are outdated. Replace the section with the following section, "Deploying an Oracle Reports JSP to an OC4J_BI_FORMS Instance":

10.5.3.1 Deploying an Oracle Reports JSP to an OC4J_BI_FORMS Instance

This section describes how to deploy an Oracle Reports JSP file to either an existing or a new instance of OC4J_BI_FORMS.

10.5.3.1.1 To deploy to an existing OC4j_BI_FORMS instance:

1. Ensure that you have created the J2EE application. Refer to the manual *Oracle Application Server Reports Services Publishing Reports to the Web* for more information on creating a J2EE application for Oracle Reports.

2. In Oracle Enterprise Manager, display the detail page for your middle tier.

3. Under **System Components**, click **OC4J_BI_Forms**.

4. In the **OC4J_BI_FORMS** page, click **Administration**.

5. Under **Deployed Applications**, click **Deploy EAR file** to deploy the EAR file you created.

6. On the first page of the Deploy Application wizard, click **Browse** to select the J2EE application (EAR file) you want to deploy, or enter the location of the EAR file you created.

7. In **Application Name**, specify a unique application name for this application. For example, you can name your application **MyReportApp**.

8. From the **Parent Application** list, select the parent application and click **Continue**.

9. On the **URL Mapping** page, note the text in the **URL Mapping** field. This is the name your users will enter to access the new application.

10. In the **URL Mapping** field, add a forward slash (/) to the beginning of the application name, since it is part of a URL address. For example, if you have named your application **MyReportApp** then you should change the URL Mapping field to read

    /MyReportApp.

11. Click **Finish**.

12. On the next page, click **Deploy**.

13. On the OC4J_BI_Forms Detail page that displays, you should now see your application (**MyReportApp**) listed under **Deployed Applications**.

14. Click your application name (**MyReportApp**).

15. On the Application page, under **Properties**, click **General**.

16. Under **Library Paths**, click **Add Another Row**, then add the following path to the rwrun.jar library:

    oracle_home\reports\jlib\rwrun.jar.

17. Add another row with the following path to the zrclient.jar library:

    oracle_home\jlib\zrclient.jar.

18. Click **Apply**, then click **OK**.

19. Restart your application. Click **Stop**, then **Start**. Your application will restart The new library paths are now in effect.

10.5.3.1.2 To deploy to a new OC4j_BI_FORMS instance:

1. Ensure that you have created the J2EE application. Refer to the manual *Oracle Application Server Reports Services Publishing Reports to the Web* for more information on creating a J2EE application for Oracle Reports.

2. In Oracle Enterprise Manager, display the detail page for your middle tier.

3. Click **Create OC4J Instance**.

4. Type the name of your OC4J instance.

5. Click **Create**.

6. Once the OC4J instance is created, click **OK**.

7. On **Application Server** page, under **System Components**, you should now see the new OC4J instance.

8. Next, manually configure the OC4J instance to support connection to a Reports Server and to support security integration.

10.5.3.1.3 To configure the new OC4J instance:

1. Copy properties and their definitions from an existing OC4J instance to your new instance. The properties are in the oc4j.properties file of an existing OC4J instance.

    For example, if you have an existing OC4J_BI_FORMS instance and a new OC4J instance *myinstance*, then copy the properties from *oracle_home*/j2ee/OC4J_BI_FORMS/config/oc4j.properties into *oracle_home*/j2ee/*myinstance*/config/oc4j.properties.

Copy the following properties and their definitions:

– `oracle.home`

– `oracle.path`

2. In the file *oracle_home*`/opmn/conf/opmn.xml`, add the `PATH` (Windows) or `LD_LIBRARY_PATH` (Linux, Solaris, and HP-UX) property. To do this,

   a. In *oracle_home*`/opmn/conf/opmn.xml`, find the XML element that describes your new OC4J instance:

```
<process-type id="myapp" module-id="OC4J">
  <module-data>
    <category id="start-parameters">
      <data id="java-options"
            value="-server
-Djava.security.policy=oracle_home/j2ee/MyInst/config/java2.policy
-Djava.awt.headless=true"/>
       <data id="oc4j-options" value="-properties"/>
      </category>
      <category id="stop-parameters">
       <data id="java-options"
            value="
-Djava.security.policy=oracle_home/j2ee/MyInst/config/java2.policy
-Djava.awt.headless=true"/>
      </category>
  </module-data>
  <start timeout="900" retry="2"/>
  <stop timeout="120"/>
  <restart timeout="720" retry="2"/>
  <port id="ajp" range="3301-3400"/>
  <port id="rmi" range="3201-3300"/>
  <port id="jms" range="3701-3800"/>
  <process-set id="default_island" numprocs="1"/>
</process-type>
```

   b. Add either the `PATH` (for Windows) or `LD_LIBRARY_PATH` (for Linux, Solaris, and HP-UX) and module data properties by copying them from the `OC4J_BI_FORMS` instance in the same `opmn.xml` file. For example, on a Solaris computer:

```
<environment>
  <variable id="LD_LIBRARY_PATH"
            value="$ORACLE_HOME/lib:
                   $ORACLE_HOME/network/lib:
                   $ORACLE_HOME/jdk/jre/lib/sparc"/>
</environment>
<category id="start-parameters">
  <data id="java-options" value="-server
-Djava.security.policy=$ORACLE_HOME/j2ee/OC4J_BI_Forms/config/java2.policy
-Djava.awt.headless=true -Xmx512M
-Xbootclasspath/p:$ORACLE_HOME/vbroker4/lib/vbjboot.jar"/>
  <data id="oc4j-options" value="-properties -userThreads"/>
</category>
<category id="urlping-parameters">
  <data
    id="/MyReportsApp/rwservlet/pingserver?start=auto" value="200"/>
</category>
```

```
<dependencies>
  <database infrastructure-key="portal"/>
  <managed-process process-type="HTTP_Server"
                   process-set="HTTP_Server"
                   ias-component="HTTP_Server"
                   autostart="true"/>
</dependencies>
```

where *MyReportsApp* is your newly created Web application name for Oracle Reports.

c. Restart the OC4J instance.

10.5.4 Possible Outdated Screenshots in Oracle Reports Server Reports Services Publishing Reports to the Web

Chapter 19, "Managing and Monitoring OracleAS Reports Services", of the *Oracle Application Server Reports Services Publishing Reports to the Web* manual may show screenshots that do not reflect the latest updates to the Oracle Enterprise Manager user interface.

11

Oracle Designer

This chapter discusses the following Oracle Designer topics:

- Section 11.1, "General Issues and Workarounds"
- Section 11.2, "Platform-specific Issues and Workarounds"
- Section 11.3, "Configuration Issues and Workarounds"
- Section 11.4, "Administration Issues and Workarounds"
- Section 11.5, "Documentation Errata"

In addition to these release notes, you should also read Chapter 12, "Oracle Software Configuration Manager" for the SCM release notes.

11.1 General Issues and Workarounds

This section discusses general issues and workarounds for Oracle Designer.

11.1.1 Installation

This section discusses installation issues and workarounds.

11.1.1.1 Oracle Designer patchsets to 9.0.4

The Oracle Designer development team is committed to producing regular patchsets following the release of 9.0.4. The latest patchsets are available on Oracle*Metalink* (`http://metalink.oracle.com`). To find the latest patchset on Oralce*Metalink*, click the **Patches** button, then, in the new Oracle*Metalink* patch search facility, either enter the patch ID (if known) or search by "Product or Family" for "Oracle Designer - Repository Family". The latest Oracle Developer Suite patchset is listed in the Release list (drop down box). For additional information about availability and compatibility of the latest releases, see Support note:60705.1.

11.1.1.2 Oracle Designer/SCM Patchset 9.0.4.3: immediate installation may be required

Important: If your repository has been installed or upgraded via the repository administration utility (RAU) that came with Oracle Designer/SCM release 9.0.2.7, you must immediately patch all Oracle Designer 9.0.4.2 clients by applying the Oracle Designer/SCM patchset 9.0.4.3.

Oracle Designer/SCM 9.0.4.2 works against an earlier version of the repository that came with Oracle Designer/SCM 9.0.2.6 and will not work against a later repository from Oracle Designer/SCM release 9.0.2.7. Oracle Designer/SCM patchset 9.0.4.3 (a maintenance release) patches your 9.0.4.2 installation allowing it to connect to the 9.0.2.7 compatible repository.

If your repository is still at a version compatible with Oracle Designer/SCM 9.0.2.6, Oracle Designer/SCM 9.0.4.2 will work with that repository. However, Oracle strongly recommends that you install the Oracle Designer/SCM 9.0.4.3 patchset on your 9.0.4.2 clients and upgrade your repository as soon as possible.

If you wish to create a new repository, then, before doing so, Oracle strongly recommends that you install the Oracle Designer/SCM 9.0.4.3 patchset on your 9.0.4.2 installation. This will prevent you subsequently having to upgrade it via the RAU when you later apply the Oracle Designer/SCM 9.0.4.3 patchset.

11.1.1.3 Japanese in the multi-language environment

When installing Oracle Developer Suite 10*g* (9.0.4) on a client computer, you can select a one or more product languages. If you include Japanese as one of these languages (for example, if you select Japanese, Korean and English) then, in the Designer product, the user interface text will **always** be in Japanese. You cannot alter this later by changing the NLS language setting on the client computer. If you do not include Japanese as one of the product languages (for example, if you select Chinese, Korean and English) then the user interface text in Designer will always be in English.

If you do not require the user interface text to be in Japanese, then you must not include Japanese as one of the product languages. If you do require the user interface text to be in Japanese, you should, in addition to selecting Japanese as a product language, also check that a Japanese font has been installed.

11.1.1.4 Setting up the repository for NLS operation

If you have a National Language Support (NLS) version of the repository, you can change the display language for the following text:

- Repository Core Model
  - datatype values
  - element type names
  - property names
  - text type descriptions
  - report group names
  - report parameters
  - report title names
- Designer Model
- Valid Preference Meanings
- User Preference Names

The currently valid display languages are the default (English) or Japanese.

With Oracle Designer, if you also use Generator tools, you can change the display language for Generator preference descriptions and their valid value meanings. Changing the display language for "Valid Preference Names" will also change the display language for the Repository Object Browser (ROB).

The translated text files for the display languages that the repository supports are installed in the directory *oracle_home*\REPADM61\NLS if you have an NLS version of the repository.

> **Note:** If you do not have these translated text files in the \NLS directory, you cannot change the display language.

To set up the repository for NLS operation, perform the following tasks:

1. Load the language text files (see "Loading language text files" in the online help for the Repository Administration Utility).

2. Change the display language to the one you want (see "Changing the display language" in the online help for the Repository Administration Utility).

11.1.1.5 Enabling repository support for Oracle Designer Objects when the repository only supports core objects

When installing a repository from the Repository Administration Utility (RAU), you may select either "support for Repository (core) objects" or "support for Oracle Designer Objects". If your repository was installed by selecting the "support for Repository (core) objects" option then you must also install support for Oracle Designer Objects before the repository can be used by the Oracle Designer client tools. This is achieved by re-running the RAU and installing the required support. If your repository additionally requires upgrading, then choose one of the following two options:

- Upgrade the repository first using the latest version of the RAU, and then install support for Oracle Designer objects.

- install support for Oracle Designer Objects using a version of the RAU that is compatible with the existing repository, and then upgrade it using the latest version of the RAU.

Enabling support for Oracle Designer Objects will cause the repository to become non-versioned. Any version history information from the production repository will not be visible. To switch the versioning on again, in the Repository Administration Utility choose **Options > Enable Version Support**. The version history information will then be visible (see bug 1419412).

11.1.1.6 Migration from Oracle Designer Web Assistant (ODWA) to Repository Object Browser (ROB)

Starting with version 9.0.2.4, Oracle Designer includes a web based reporting tool called Repository Object Browser (ROB). ROB is functionally similar to the Oracle Designer Web Assistant (ODWA) tool, which is part of Oracle iDevelopment Accelerator suite. This section is a guide for users of ODWA migrating to ROB.

11.1.1.6.1 Installing ROB ROB will be installed automatically as a part of the repository install/upgrade process, by the Repository Administration utility (RAU). Unlike the ODWA, all the ROB objects will be installed within the REPOWNER schema. Access to all the subordinate users will be automatically created using the previously selected type of synonyms. Installing ROB on a repository having ODWA will not affect the ODWA data but the repository users will no longer be able to access ODWA.

11.1.1.6.2 ODWA Data ODWA operates mainly on the data stored in the repository, although it also maintains some ODWA specific data. This data includes details about ODWA Hotspots, ODWA graphic categories and ODWA search library. All the data captured by ODWA is stored in a set of tables in ODWA owner schema. The following table lists these tables and details about the data stored in them:

Table Name	Description
ODWA_QUERY_LIBRARY	Contains data for all the saved queries
ODWA_HOTSPOTS	Contains information about all the Hotspots defined for ODWA graphics
ODWA_GRAPHICS	Contains the information about all ODWA graphic items
ODWA_GRPH_CATEGORIES	Contains information about the various graphic categories defined in ODWA

> **Note:** ODWA contains more tables than the ones listed above, but they do not contain user data.

11.1.1.6.3 Migration to ROB All the data contained in the ODWA tables can be migrated to ROB. ROB uses tables in the Repos owner schema with the same name and structure as that of ODWA owner tables to hold the ROB specific data. Hence migration of the hotspots and other saved query libraries from ODWA to ROB is an easier task. This can be accomplished with a simple SQL script that reads the ODWA tables listed above and inserts the data into ROB tables with the same name. For example the ODWA query library can be migrated by executing the following insert statement:

```
insert into REPOS.ODWA_QUERY_LIBRARY
   select  ID,
           CATEGORY,
           LABEL,
           DESCRIPTION,
           PUBLISHED,
           OWNER,
           LAST_DATE_CHANGED,
           BASIC,
           ADVANCED,
           VERSION,
           AUDIT_TAB
   from ODWA.ODWA_QUERY_LIBRARY;
```

where `REPOS` is the repository owner schema and `ODWA` is the ODWA owner schema.

Only the tables listed in the previous topic need to be migrated in this manner, the other ODWA tables like ODWA_SESSIONS need not be migrated as they do not contain any data that is useful to ROB.

11.1.1.6.4 ODWA Preferences While configuring ODWA, values for various preferences need to be inserted into the ODWA_PREFERENCES table manually, using **SQL*Plus**. ROB provides an easy-to-use web interface to manage all the preferences. Only the Repos owner can change the preferences and this can be done by navigating to the "Manage Preferences" page under "Management facility".

> **Note:** By default ROB does not support CDM objects like business rules, or CDM style reports. To expose these reports in ROB, set the preference "Enable Custom Development Method (CDM) objects" in the preferences page.

11.1.2 System Modeling and Design Tools

This section discusses issues and workarounds related to the Process Modeler, Entity Relationship Diagrammer, Function Hierarchy Diagrammer, Dataflow Diagrammer and Design Editor tools.

Copy, Move and Share

To copy a set of objects, keeping references between them, use Extended Copy.

Container Copy

If you copy a container using **Edit > Copy**, each object within the container is copied as a separate object. If two or more objects within the container refer to each other, the references are not updated to point to the new object in the new container, but still refer to the object in the original container, for example:

Application System ABC

Table DEPT

Table EMP

FK to DEPT

Copy ABC creating new application system XYZ

Application System XYZ

Table DEPT

Table EMP

FK to ABC.DEPT (not XYZ.DEPT)

If you want to maintain the links (such that in this example the foreign key points to XYZ.DEPT), select all the objects in the container and then choose **Utilities > Extended Copy**.

Known Issues and Workarounds

Matrix diagrammer raises "failed to update registry" error on Windows 2000 (bug 1472195)

Cause: If a Windows user that is not a member of the local "Power Users" group or the "Administrator" group attempts to invoke the Oracle Designer diagrammers, then an alert box will appear indicating "failed to update registry". The error is being raised because the user does not have permissions to allow Oracle Designer to write to the HKEY_CLASSES_ROOT registry key.

Action: Select **OK** to dismiss the error message. Then, add the Windows users who wish to use Oracle Designer to the local "Power Users" or "Administrator" group.

Syntax checker incorrectly reports error for application logic (bug 1366816)

Cause: When the syntax checker is run on application logic it may spuriously report errors. Two examples when this can occur are:

- when DECLARE appears before BEGIN. In this case you could remove the word DECLARE (leaving the variable declarations in place).

- when the application logic uses Forms built-ins such as FORMS_MDI_ WINDOW or WINDOW_STATE. The syntax checker does not recognize these and states that they must be declared, however the Forms Developer environment does recognize them so the form will run correctly

Action: None. In cases like these the best way to check that the application logic is working correctly is to generate the form and check that it works correctly.

Design Editor does not requery application logic (bug 1317918)

Cause: Requerying application logic does not work. Thus for example, when editing a workarea to include an old version of a table, any application logic associated with the table is not requeried. If you edit the application logic, you may see a message to the effect that the logic is out of date.

Action: Do any of the following:

- Choose **File > Change Connection** and reconnect to the repository.

- Choose **File > Change Workarea** and reselect the workarea.

- Choose a different Navigator tab in the Design Editor, then reselect the original tab.

- Restart the Design Editor.

Copy With New Language does not work for modules from the Repository Object Navigator (bug 1317853)

Cause: In the Repository Object Navigator, if you select a module, choose **Utilities > Designer > Copy with New Language**, select a language and then select **OK**, the message "CDR-00114: Container context has not been set" is displayed.

Action: Run the utility from the Design Editor (choose **Utilities > Copy with New Language**).

Unable to commit captured queue and queue table (bug 1290408)

Cause: Design capture of a persistent queue and corresponding queue table into a database user that has no queue table implementations may result in a CDA-02186 error during validation.

A database user must have a queue table implementation if a persistent queue implementation references the database user with its "Queue Table Database User" property. Since these objects are put forward for validation in an undefined order following design capture, the database user may not have a queue table implementation when the persistent queue implementation is validated.

Action: Design capture the queue table(s) first then invoke design capture again for the persistent queue(s).

OLE Problems (bugs 1114261, 951673, 837571, 781670, 755568, 636409, 625193, 595590, 529856, 373015)

Cause: There are many reported problems using OLE to embed objects in Designer diagrams, or to embed Designer diagrams in other applications.

> **Note:** Some extra exception handling has been added to the diagrammers to handle OLE errors during diagram open. This will enable some diagrams to be partially recovered, which would not have been possible in earlier releases.

Components affected:

- CASEDE - Design Editor

- CASEDFD - CASE Dataflow Diagrammer

- CASEFHD - CASE Function Hierarchy Diagrammer

- CASEERD - CASE Entity Relationship Diagrammer

- CASEPM - CASE Process Modeler

Action: Use OLE sparingly

Do not embed too many objects in Oracle Designer diagrams.

Use **Edit > Paste**, rather than **Edit > Paste Special** or **Insert > Object** if you wish to include a diagram in (for example) a Microsoft Word document.

Overlapping text in Process Modeler diagrams (bug 995298, 627818)

Cause: Descriptions and labels may overlap when laid out by the Process Modeler.

Component Affected: CASEPM - CASE Process Modeler

Action: Manually move the overlapping text, or use shorter text if possible.

Diagram graphics can become corrupt after invoking versioning utilities (bug 897686)

Cause: This can occur in the following scenario:

1. Invoke one of the Utilities under the **Version** menu.

2. Invoke a diagrammer if not already open.

3. Click on the Select Icon.

4. Drag a selection area over the diagram and you will notice that a horizontal and vertical line appears (as well as the dotted selection area rectangle) This is common across all of the tools.

Components Affected:

- CASEDE - Design Editor

- CASEDFD - CASE Dataflow Diagrammer

- CASEFHD - CASE Function Hierarchy Diagrammer

- CASEERD - CASE Entity Relationship Diagrammer

- CASEPM - CASE Process Modeler

Action: Restart the tool.

Print Scaling (bugs 896032, 674453, 481734)

Cause: When you scale a diagram on the Print dialog box, the diagram does not always print correctly.

Components Affected:

■ CASEDFD - CASE Dataflow Diagrammer

■ CASEFHD - CASE Function Hierarchy Diagrammer

■ CASEERD - CASE Entity Relationship Diagrammer

Action: No workaround is currently available.

Design Capture of Server Model results in error "CDI 22051 - TABLES OVERLAPPING ON DIAGRAM" (bug 749724)

Cause: If you capture a large schema and display the results on a diagram, autolayout may be unable to resolve some overlaps.

Component Affected: CASEDE - Design Editor

Action: Capture the design without enabling Show Results on new Server Model Diagram (on the Source tab of the Capture Server Model from Database dialog box), then include the server model definitions on the diagram a few at a time.

Batch Generation doesn't work for Menu Modules (bug 745824)

Cause: You cannot generate Forms Menu Modules with the batch interface.

Component Affected: CASEDE - Design Editor

Action: Use the generator from within Design Editor.

Using a plotter (bugs 660322, 344117)

Cause: There are a number of reported problems using a plotter (i.e. a vector device) as opposed to raster device (most printers).

Components Affected:

■ CASEDE - Design Editor

■ CASEERD - CASE Entity Relationship Diagrammer

Action: Make sure you have the most up to date driver for your plotter. If the plotter driver supports raster to vector conversion, the results will be better. Avoid using custom colors in your diagram.

Layout problems in Module Diagrammer for Components with two masters (bug 463149)

Cause: If a module component has two masters, layout can be poor.

Component Affected: CASEDE - Design Editor

Action: No workaround is currently available.

Best Fit Selection (bug 326606)

Cause: Edit > Select All, followed by **Best Fit Selection** may result in the diagram becoming very small in the center of the current window.

Component Affected: CASEFHD - CASE Function Hierarchy Diagrammer

Action: Instead of **Edit > Select All**, choose **Edit > Select** and then **Select All** from within the dialog box. In this case the Best Fit works.

Undo Autolayout not enabled (bug 315136)

Cause: The Undo layout option is not always enabled until autolayout has been performed a number of times.

Component Affected: **CASEDFD - CASE Dataflow Diagrammer**

Action: No workaround is currently available.

11.1.3 Database Design Transformer

Entities mapped to views

If a selected application system contains entities that you have mapped to views, these will be removed when the Database Design Transformer starts. You will be asked to confirm each removal with a dialog box which states that a table entity mapping will be removed.

Running the Database Design Transformer from the Entity Relationship Diagrammer locks diagrams (bug 1662205)

Cause: Entity relationship diagrams become inaccessible if the Database Design Transformer is opened from the Entity Relationship Diagrammer.

Action: Do one of the following:

- Close the Entity Relationship Diagrammer before opening the diagram.

- Do not run the Database Transformer from the ERD. Run it from the front panel.

11.1.4 Form Generator

To run generated forms locally after an Oracle Developer Suite installation:

1. Ensure that JInitiator has been installed on the client.

2. Start the Oracle Containers for J2EE (OC4J) instance by running the file `startinst.bat` (*oracle_home*`\j2ee\Oracle9iDS\startinst.bat`).

3. Generate the Form module.

4. Run the Form.

The specified browser will display the form.

To run generated forms locally after an Oracle Application Server installation:

1. Ensure that JInitiator has been installed on the client.

2. Set the Form Generator preference WEBURL to *appserver_host_name*`:port/forms90/servlet`.

3. Generate the Form module, noting the location of the generated `.fmx` file.

4. Create a sub-folder in the `forms90` folder of the Oracle Application Server Oracle home (on the client where Oracle Application Server is installed).

5. Locate the generated `.fmx` file and move it into the sub-folder that you created in the previous step.

6. Open the file `default.env` (*appserver_oracle_home*`\forms90\server\default.env`) in a text editor.

7. Uncomment the section "Forms90_Path" and add to it the path for the sub-folder where your `.fmx` file now resides.

8. Save and close the `default.env` file.

9. Start your web browser (preferably Internet Explorer) and enter a URL in the following form:

app_hostname:*port*
`/forms90/servlet/?form=`*form.fmx*`&userid=`*user*/*pwd@connect*

The generated form will run in the web browser

OCX/OLE item types in Oracle Designer (bug 1978769)

It is possible to model an item of type OCX Control or OLE Container, but these types are now generated as a text item. Warning message 39 is issued when such generation is attempted.

Generating Form-level triggers at lower levels is no longer valid (bug 2037694)

For Oracle Forms, restrictions have been added for some triggers. The following are now only permissible at form or block level:

```
WHEN-CLEAR-BLOCK
WHEN-CREATE-RECORD
WHEN-DATABASE-RECORD
WHEN-NEW-RECORD-INSTANCE
WHEN-REMOVE-RECORD
```

The following is now only permissible at form-level:

```
WHEN-NEW-FORM-INSTANCE
```

Previously it was acceptable to create these triggers additionally at block or item level. Although Oracle Designer still supports this at the design stage, you should not use this facility.

Number of characters in names used in generation (bug 2061520)

Although the number of characters allowed for object names in Oracle Designer is nominally 30, eight of these are required for the prefix that is added during generation. This means that the practical maximum number of characters for an object name is 22.

Oracle Forms menu substitution parameters (bug 2067988)

Menu substitution parameters are not supported by Oracle Forms from version 9*i* (9.0.4) onwards. Because of this, Oracle Designer is unable to support generation of user-defined menu substitution parameters. From Oracle9*i* Designer onwards, any user-defined menu parameter (for instance, *myparm*) will simply appear in the menu's command line (that is, :myparm), with no run-time support. Oracle recommends that you replace the use of these parameters with other code/methods for achieving the same results.

Form generation with preserve layout option is not possible when there are sub-components (bug 1317873)

Generation preserving layout does not work with sub-components.

Names of tables, unique names

The Generator requires that the names of tables and their keys be unique within the first 21 characters. The table names are used to create names for program units, which are limited to 30 chars.

The generator prepends the following example text when naming program units to support various areas of functionality:

`CGRI$CHK_table_name` or `CGRI$DEL_table_name`

Generate Preserve Layout does not support Blocks on Tabs layout functionality

It is not possible to preserve layout when modifications are made because the inclusion and dimensions of one block affect the sequence and dimensions of the others. If a form with Blocks on Tabs is generated in preserve layout mode, it may not run correctly. An alternative is to modify the form by hand, capture the design back to the repository and generate again.

Object Library Names

The standard object libraries shipped with the Oracle Forms generator have not changed names between releases 6*i*, 9*i* and 10*g*. A form generated with release 6*i* may not compile if compiled with the 9*i* or 10*g* object library (and vice versa). This may cause confusion if a user has `.FMB` files generated from both these releases in one area.

Preferences ITMMPW and ITMPPE

The preferences ITMMPW (minimum permitted width) and ITMPPE (permitted percentage expansion) are now applied to block titles, so if they are set at module or module component level they may add extra room to existing titles potentially changing the layout.

11.1.5 Web PL/SQL Generator

New "Concealed data" display type: the Web PL/SQL Generator library (WSGL) must be reinstalled

During generation, Web PL/SQL Generator makes use of the WSGL PL/SQL library package of procedures, functions and constants. This package has been reconstructed to incorporate the new "Concealed data" display type and must be reinstalled if you want to use this facility.

The package specification file is `wsgl.pks` and the package body is `wsgl.pkb`. Both files appear in the `CGENW61\CVWETC` directory of your Oracle Designer installation and they must be installed on the PL/SQL Toolkit schema. Instructions are contained in the help topic "Setting up the PL/SQL Toolkit schema".

DAD (database access descriptor) configuration for Web PL/SQL generated modules with Single Sign On (bug 2288798)

Even though the WSGSSO package provides SSO authentication to your WSG applications, the DAD used to access your generated applications should use "Basic Authentication" as its authentication mode.

This is because generated applications using the WSGSSO security package cooperate with the SSO server for authentication, but still use their own set of user and responsibility tables.

> **Note:**   For information on how to set up DADs, refer to the Oracle Application Server administration documentation.

Port number required for setup of Portal Single Sign-On with Oracle Application Server

When setting up OracleAS Portal single sign-on (SSO) in an Oracle Application Server environment, you will need to specify a port number. This port number must be the one specified in the virtual hosts section of the HTTP server page of Oracle Enterprise Manager.

This port number will be required:

- when adding partner application on the OracleAS Portal instance, for the home URL and the success URL

- when editing `REGAPP.SQL`, for the value of p_listner_token (for example, `devweb.uk.oracle.com:3340`)

- when specifying the Web PL/SQL Generator option "Web Agent URL" (for example, `http://devweb.uk.oracle.com:3340/BASIC902_DAD/`)

Additionally, the Portal administrator, after creating the appropriate DAD, has to give the Web Agent URL with the correct port number to the Portal user.

Error Message PLS-00593

Cause: Error message PLS-00593 ("Default value of parameter P_REFRESH_URL in body must match that of specification") is displayed during the creation of WSG single sign-on packages.

Action: Manually change the default value of P_REFRESH_URL in `WSGSSO.PKB` to WSGSSO_CONSTANTS.G_CANCEL_URL, then rerun `WSGSSO.SQL`.

11.1.6 Report Generator, Design Capture and Application Logic Capture

Report Generator restriction on module short name and implementation name

Currently there is a restriction imposed by the Report Generator on the module short name and implementation name which means they cannot contain any spaces. This causes generation to fail with the following error :

```
CGEN-03448 ERROR: Module: Name is not a valid Oracle name; try
'module_name'
```

where *module_name* is the name of the module without spaces.

The workaround is to make sure that the module short name and implementation name do not contain spaces.

Unable to capture ORDER BY clause from RDF files

The design capture tool does not support capturing of ORDER BY sequences where the syntax is based on a number relating to the item order in the select statement, for example:

```
select empno, deptno, job from emp order by 2;
```

Here the ORDER BY sequence is based on `deptno`; however it will not be recovered.

If the select statement is in the following syntax the ORDER BY information will be recovered:

```
select empno, deptno, job from emp order by deptno;
```

Do not modify generated tags prior to application logic recovery

Report Generator includes a tag in a generated program unit to identify the repository element for which the event or named routine was defined. When capturing application logic, Report Generator uses this tag to associate application logic with the correct repository element.

If you modify or remove the tag and attempt to capture the application logic, Report Generator is unable to identify the repository element associated with the captured application logic. Report Generator therefore associates the captured application logic with a repository window definition.

If you intend to capture a generated program unit, do not modify or remove the tag embedded in generated program units.

Hint: If you intend to add user application logic using Report Builder, Oracle recommends that you create a skeletal event code segment or named routine for the appropriate repository element. When you generate the report, Report Generator will generate the code and include a valid tag. You can then use Report Builder to modify the code. During design capture, Report Generator will capture the application logic and use the tag to assign it to the correct Repository element. If you do not define the application logic in the Repository to begin with, a valid tag will not exist and Report Generator will capture the application logic and associate it with the window definition.

Indication of modified generated application logic

You can modify generated application logic in Report Builder. To retain this modified application logic during subsequent generations, you must capture it into the repository. By default, Report Generator does not capture generated application logic unless you indicate that you have modified it.

To indicate that you have modified generated application logic, add one or more alpha-numeric characters (not a space) between the comment symbol (--) and the start of the generated tag.

For example, the line containing the generated tag might appear as follows:

```
--   CG$PV0001.5642752
```

To indicate that you have changed this application logic and that it is to be captured, you might change the tag as follows:

```
-- modified CG$PV0001.5642752
```

Report generation may fail when attempted from the batch generation tool (bug 2106132)

Cause: You cannot generate reports from the batch generation tool if forms are also generated in the same batch.

Action: Generate Reports and Forms separately.

Header and footer sections in reports templates no longer available (bug 1386933)

Cause: Up to Designer 2.1.2 you could apply header, body and trailer templates to Reports. However, because of the changed functionality of Oracle Reports 6.0 onwards you can no longer use templates on report headers and trailers.

Action: No workaround is currently available.

11.1.7 Server Generator

Not all features are suitable for generating to all databases

Oracle Designer allows you to model many sophisticated database features. However, not all of these can be implemented in every database type. If you generate a feature that is not supported by your chosen database type, you will see an error message.

Default values for columns cannot be derived from user-defined functions (bug 2030889)

Oracle Database does not allow the default value for a column to be derived from a user-defined function. In the Design Editor, if you create a table with such a column, the table is created without any apparent error, but while generating the design to the database, the generator fails, stating that user-defined functions are not allowed as default values.

ODBC drivers for Server Generator

To connect to Microsoft SQL Server 7.0, use the Microsoft SQL Server ODBC driver that is supplied with the SQL Server 7.0 client software. (Server Generator has been tested with SQLSVR32.DLL version 3.70.06.23).

When specifying the logon details for an IBM DB2/MVS v5 ODBC connection, the username must be entered in uppercase to be able to see any objects for a server model capture. (see bug 1314224)

When connecting to DB2/MVS v5, use the IBM DB2 ODBC driver to connect. (see bug 1314307)

Server Generator provides connections to online databases using either ODBC or the Oracle Network layer.

During testing it has been found that using an old driver designed for an earlier version of an RDBMS can produce unpredictable behavior, such as a failure to recognize legitimate types or syntactic constructs introduced with the newer RDBMS.

Oracle recommends that you obtain ODBC drivers for non-Oracle databases from either the database provider or a specialist supplier.

Using Server Generator with a Sybase System 11 database

A patch from Sybase (ref. EBF 7704) must be applied to Sybase clients before attempting access to Sybase System 11 databases for generation or capture. If this patch is not applied, the Design Editor can terminate unexpectedly.

Generate Distributed Capabilities Doesn't Work (bug 771052)

Cause: Server Generator does not generate synonyms that reference objects across database links. Therefore the Generate Distributed Capability check box on the Database Generator Options dialog box has no effect.

Action: No workaround is currently available.

Replication Group Generation From Design Editor Doesn't Generate Correct Files (bug 675058)

Cause: Server Generator does not generate code for Master Replication Groups or Replicated Groups. Therefore the **Generate Replication Statements** check box in the **Generate Database Administration Objects** dialog box, and the **Assign Objects to Replication Code** check box in the **Database Generator Options** dialog box, have no effect.

Action: No workaround is currently available.

It is possible to open the same server model diagram twice (bug 641532)

    Cause: The same server diagram can be open any number of times in the server diagrammer in the Design Editor.

    Action: Open each diagram only once.

11.1.8 Repository Reports

Default date format

The following situations are all resolved by explicitly setting the default date format to "DD-MON-YYYY". To do so, choose **Options > General Settings** in the Design Editor or Repository Object Navigator and enter this value in the Date Format field.

- On a newly installed repository, the factory default date setting is "DD-MON-YYYY". However, unless you explicitly set this date format manually, Repository Reports uses a default date format of "DD Month YYYY" (large gap between month and year).

- If you enter a date in the format "DD-MON-YY" and either select another parameter with the mouse or immediately run the report, no validation warning is shown for the correct date format of "DD-MON-YYYY". The validation message is shown only if you press **Tab** on the date field or run the report subsequently. Even after the validation message, the report can be run with dates specified (for example) as "01-Jan-99" which is converted to "01 January 0099" (bug 1308455).

- No validation is performed if the parameter value for a Start Date is later than that for an End Date (bug 1308455).

- If you change the date format in the Design Editor or Repository Object Navigator to "DD-MON-YY" and then invoke Repository Reports, the reports become non-Y2K compliant. No validation for date format is performed, and no output is produced even if you enter dates in the format "DD-MON-YYYY".

11.1.9 Matrix Diagrammer

Matrix Diagrammer: invoking the VHV from a matrix diagram

When you try to start the VHV from a matrix diagram the first time, the following error is displayed:

```
CDR-03103: Attempted Diff/Merge but ran out of memory.
```

The workaround is to invoke the VHV from elsewhere in Designer.

Matrix Diagrammer: some element types cannot be created, updated, deleted or versioned

Using Matrix Diagrammer, you cannot create, update, delete or version containers, workareas or configurations. Also, you cannot create or delete configuration memberships between elements and configurations.

The workaround is to use the Repository Object Navigator to perform these operations.

Matrix Diagrammer GPFs when the intersection if a foreign key (bug 1456480)

When the intersection is a foreign key, for example if you select Table Definition vs Relational Definition, the Matrix Diagrammer GPFs. It works correctly when the intersection is not a foreign key.

11.1.10 Accessibility

General (bug 2023560)

In Microsoft Windows 2000, mnemonics (the underscores that indicate a shortcut) do not appear in a dialog or menu in Oracle Designer until the ALT key has been pressed. (See also bugs 1522303 and 1962540.)

Form Generator (bug 2055467)

Cause: There is limited keyboard access to generated navigation action items.

Action: Set the focus on action items by using the menu option **Block > Next**. Then use the **Enter** key to select an item.

Repository Reports (bug 1549890)

Cause: When using the Repository Reports navigator, and when the focus is moved between different nodes, JAWS sometimes reads out inappropriate prose.

Action: This problem will not occur if the navigator is not accessed using the mouse.

Design Editor (bug 1549933)

Cause: When using the navigator in the Design Editor, pressing **INSERT+UP ARROW** sometimes causes JAWS to behave inappropriately.

Action: This problem will not occur if the navigator is not accessed using the mouse.

11.1.11 Other problems and restrictions

Copyright

Please note that where you see Copyright 2002 this is also covered by Copyright 2003.

Export of repository data requires appropriate version of Import and Export utilities in different Oracle home

If you wish to export any repository data, you must install and use the appropriate version of the Oracle8*i* Import and Export utilities (IMP & EXP) against your repository. That is, you must use the 8.1.6 utilities for an 8.1.6 database and the 8.1.7 utilities for an 8.1.7 database. These utilities must not be installed into the same Oracle home as Oracle Repository.

Limitations when using Oracle Designer/Oracle Developer Automation

In some circumstances, you may not be able to get an instance of Oracle Forms Developer running from the Design Editor. For example, if you click on the action item list, after generation of a form, and choose the option to run **Form Builder**, nothing happens, that is, Oracle Forms Developer does not open. In this case, you should change the following entry in the registry file from:

```
HKEY_CLASSES_ROOT
\CLSID\{4271DF00-B54A-11CF-864B-0020AF1D40D7}
\LocalServer32
ifbld90.exe /AUTOMATION
```

to

```
HKEY_CLASSES_ROOT
\CLSID\{4271DF00-B54A-11CF-864B-0020AF1D40D7}\LocalServer32
oracle_home\ifbld90.exe /AUTOMATION
```

Generating forms in non-English environments

After generating a form in a non-English Oracle Designer environment, you will need to compile and run the form externally using Oracle Forms Developer.

Screen resolution types

Oracle Designer can be run under SVGA (recommended) or VGA.

System font size

Oracle recommends that you set the system font size to **Small Fonts** (**Control Panel > Display > Settings > Font Size**).

SQL or PL/SQL reserved words

It is possible to create instances of elements with names that are SQL or PL/SQL reserved words. Users should beware of this where these element names are likely to be used in SQL or PL/SQL statements. Also, if a systems modeling element is created with a name that is a SQL or PL/SQL reserved word, it may not be possible to transform it into a systems design element.

ORA-12514 Message not found

In some circumstances message ORA-12514 is displayed without its intended text. The message should read `ORA-12514 : TNS:listener could not resolve SERVICE_NAME given in connect descriptor`
Cause: The SERVICE_NAME in the CONNECT_DATA was not found in the listener's tables.

Action: Check to make sure that the SERVICE_NAME specified is correct.

This error will be returned if the database instance has not registered with the listener; the instance may need to be started.

11.2 Platform-specific Issues and Workarounds

There are currently no platform-specific issues

11.3 Configuration Issues and Workarounds

There are currently no configuration issues.

11.4 Administration Issues and Workarounds

There are currently no administration issues.

11.5 Documentation Errata

There are currently no known problems with the documentation.

12

Oracle Software Configuration Manager

This chapter discusses the following Oracle Software Configuration Manager (SCM) topics:

- Section 12.1, "General Issues and Workarounds"
- Section 12.2, "Known Problems and Restrictions"
- Section 12.3, "Known Restrictions to Keyboard Controls"
- Section 12.4, "Platform-specific Issues and Workarounds"
- Section 12.5, "Configuration Issues and Workarounds"
- Section 12.6, "Administration Issues and Workarounds"
- Section 12.7, "Documentation Errata"

12.1 General Issues and Workarounds

12.1.1 Patchsets

The Oracle Software Configuration Manager development team are committed to producing regular patchsets following the release of Oracle Developer Suite 10*g* (9.0.4). The latest SCM patch sets are made available on Oracle*MetaLink* (http://metalink.oracle.com). Go to patches, then enter the patch ID (if known) or alternatively search Product or Family "Oracle Designer - Repository Family". For additional information about availability and compatibility of the latest releases, see Support note:60705.1.

Oracle Designer/SCM Patchset 9.0.4.3: immediate installation may be required

Important: If your repository has been installed or upgraded via the repository administration utility (RAU) that came with Oracle Designer/SCM release 9.0.2.7, you must immediately patch all Oracle Designer 9.0.4.2 clients by applying the Oracle Designer/SCM patchset 9.0.4.3.

Oracle Designer/SCM 9.0.4.2 works against an earlier version of the repository that came with Oracle Designer/SCM 9.0.2.6 and will not work against a later repository from Oracle Designer/SCM release 9.0.2.7. Oracle Designer/SCM patchset 9.0.4.3 (a maintenance release) patches your 9.0.4.2 installation allowing it to connect to the 9.0.2.7 compatible repository.

If your repository is still at a version compatible with Oracle Designer/SCM 9.0.2.6, Oracle Designer/SCM 9.0.4.2 will work with that repository. However, we strongly recommend that you install the Oracle Designer/SCM 9.0.4.3 patchset on your 9.0.4.2 clients and upgrade your repository as soon as possible.

If you wish to create a new repository, then, before doing so, we strongly recommend that you install the Oracle Designer/SCM 9.0.4.3 patchset on your 9.0.4.2 installation. This will prevent you subsequently having to upgrade it via the RAU when you later apply the Oracle Designer/SCM 9.0.4.3 patchset.

12.1.2 Oracle Forms Developer and Oracle Reports Developer Users

There may be product dependencies requiring Oracle Forms Developer and Oracle Reports Developer patch sets. Follow Support Notes for any future updates.

12.1.3 Certification against Oracle RDBMS

Current certification details can be checked on Oracle*MetaLink* (http://metalink.oracle.com) by choosing the Certify & Availability option.

Also, see the "Compatibility of Oracle SCM 9.0.4 and Oracle Repository 6i Repositories" section below.

12.1.4 Upgrading from Oracle Designer Release 1.3.2

The earliest previous release from which Oracle SCM provides upgrade is Oracle Repository 6.0. Users of the older Oracle Designer Release 1.3.2 wishing to upgrade to Oracle SCM will therefore need to upgrade to Oracle Designer 6.0 first. The following alternatives exist for locating the upgrade to Oracle Designer 6.0:

- If Oracle Designer 6.0 is installed, the upgrade from Oracle Designer 1.3.2 can be invoked from the Oracle Designer 6.0 Repository Administration Utility.

- The upgrade CD in the *i*DS 1.0.2.4 pack contains Oracle Designer Release 1.3.2 to 6.0 upgrade.

- The Oracle Designer 1.3.2 to 6.0 upgrade can be obtained from Oracle*MetaLink*.

12.1.5 Multi-Language Environment

When you install Oracle SCM, you can select a combination of different product languages to install on the same computer. If you select Japanese as one of these languages (for example, a selection of Japanese, Korean and English), you should be aware that the user interface (translations) will be in Japanese, and this cannot be altered by changing the NLS language on the client computer. If you do not select Japanese (for example, if you select Chinese, Korean and English), the user interface will be in English. Therefore, if you do not require the user interface to be in Japanese, then you should not select Japanese as one of the product languages.

If you select Japanese as one of the product languages, you should verify that a Japanese font has been installed.

12.1.6 Compatibility of Oracle SCM and Oracle Repository 6*i* Repositories

Details of compatibility of Oracle Repository 6*i* and Oracle SCM repositories can be found in support note 60705.1, available on Oracle*MetaLink*.

To read the support note:

1. Log in to Oracle*MetaLink* (`http://metalink.oracle.com`)

2. Enter the note number in the **Search** field and select **Advanced**.

3. Select the **DocID** option and select **Search**.

4. Select the document title.

12.1.7 Changes from the Previous Release (*i*DS 9.0.2 maintenance release 9.0.2.5)

New feature: Instrumentation Report

Navigation:

RAU->HELP MENU->Instrumentation Report

Intended use by:

Designer/Repository Administrators, other DBAs and Oracle Support

Prerequisites:

Repository Administration Privileges, connection to the Designer schema instance (established via the RAU). An HTML Browser is required to view the output.

Feature Summary

This report is intended to assist with the diagnosis and resolution of common problems. The HTML output produced is mainly server and repository related although some of the client registry settings are also reported.

Typically you may be experiencing a problem as a result of one or more of the following:

- Designer schema installation, upgrade or migration setup

- Designer schema invalid, missing or disabled schema objects

- Tablespace storage issues

- Missing system privileges or grants

- Invoking import/export or SQL*Plus utilities

If you are experiencing problems in these areas the report may help you to quickly identify and resolve the problem. An Oracle Support representative may also ask you to run the report and supply the output for further analysis.

The RAU will attempt to display the report in an appropriate HTML browser, provided your client is set up to use one. Otherwise the output files can be found in the respective `oracle_home`\REPADM61\LOGS directory.

You may also want to run this report after an installation, upgrade, or as part of your standard maintenance tasks, just to provide a general "health check" status of the schema.

Further Information

Please refer to the online help for further information on this feature.

Other changes from the previous release of Oracle Repository 6*i* are bug fixes.

The registration feature (transfer of an existing Oracle schema into the repository) is still available, but has been de-supported.

12.1.8 Fixed Bugs

A list of the bugs that have been fixed in this release of Oracle SCM is available on Oracle*MetaLink*. To see the fixed bugs:

1. Log in to Oracle*MetaLink* (`http://metalink.oracle.com`).

2. Click the **Bugs** button on the left of the screen.

3. In the Bug Database Search dialog:

   a. From the Product list, select Oracle Repository (the bug database uses the old product name).

   b. From the Status list, select one of the "Closed" options (e.g. "Closed, verified by filer").

   c. In the Fixed in Version field, enter a product version number to search (e.g. "9.0.2%").

   d. Enter values in any other fields to restrict the search as required.

   e. Click the Search Bugs button.

12.1.9 API and Model Reference Guide

The API and Model Reference Guide is available on the Oracle Technology Network (`http://otn.oracle.com`). From the navigator frame on the left of the screen, choose **Documentation > Oracle SCM (Repository) > Repository API and Model Reference Guide**.

12.2 Known Problems and Restrictions

This section documents known problems and restrictions for:

- Section 12.2.1, "Migration"
- Section 12.2.2, "SCM Java Tools"
- Section 12.2.3, "Repository Administration Utility (RAU)"
- Section 12.2.4, "Repository Object Navigator"
- Section 12.2.5, "Compare Utility"
- Section 12.2.6, "Merge"
- Section 12.2.7, "Version History Viewer"
- Section 12.2.8, "Version Event Viewer"
- Section 12.2.9, "Importing and Exporting"

- Section 12.2.10, "Dependency Manager"
- Section 12.2.11, "Command Line Tool"
- Section 12.2.12, "Other Known Problems and Restrictions"

12.2.1 Migration

ERROR: **'ORA-02063: preceding 2 lines from R212', encountered during migration from Designer 6.0 to 6i/9i (bug 2758364)**

Cause: The following error has been reported during the migration process, during the stage CK_UPGRADE_MOD:

```
ORA-02063: preceding 2 lines from R212

..

RME-02124 Failed to execute SQL statement: begin ck_upgrade_
mod.init(:b1, b2);

end;
```

Note, It is also possible that other similar errors may also occur at different stages of the migration process.

Sometimes the problem can be resolved by clicking on the retry button on the RAU control panel, or restarting the migration at the point of failure after shutting down and restarting the instance, but if this is a persistent problem then it could be related to the fact that the source or target instances may not be setup correctly (see below).

Action: If such an error occurs it may be as a result of insufficient open cursors setting on the source Designer 6.0 instance.

You can verify this by looking in the `init.ora` parameter file to see the settings for open_cursors, if one does not exist then the default which is 50 will be used.

Try running the following SQL command from SYS to verify this (8.0.x):

```
SQL> select NAME, VALUE
2 from V$PARAMETER
3 where upper(NAME) like 'OPEN_CURSORS'
/

Name Value
----------
open_cursors 50
```

Note: it is recommended that you run this SQL as the value in the `init.ora` file may differ to that that has been applied to the instance. On 8i or above you need to use the following command:

```
SQL> show parameter open_cursors


NAME TYPE VALUE
---------------
open_cursors integer 50
```

Action: Please refer to the install guide for your Designer 6.0 instance (chapter 2). Depending on your hardware environment you must at least be using the minimum recommended settings for open_cursors. For example on a PC, open_cursors=400 is recommended as a minimum. To apply the change you must shutdown and restart the instance. If this does not resolve the problem please contact Oracle support.

It is worth checking all the `init.ora` parameters match or exceed the minimum recommended values in the documentation that came with your product. This is true for both Designer 6.0 (migration source instance) and the SCM (migration target instance).

User-extended element name conflicts with 9*i* element name (bug 1386747)

Cause: When migrating to a Release 9.0.2 or 9.0.4 repository, an attempt to migrate a user-extended element with a name that is reserved in 9*i* (for instance "Project") results in the following warning message:

```
Skipping insert of Element element_ID because ..... Duplicate
Plural Name
```

Action: A workaround is available but please contact your Oracle Support representative for assistance with this.

PL/SQL definitions not migrated correctly on multibyte database (bug 2247066)

Cause: When migrating Designer 6.0 data to a later Designer repository on a multibyte database, the text property '*PL/SQL Block*' is not migrated correctly for PL/SQL definitions of type PACKAGE. No error message will be displayed but, after migration, any text in the '*PL/SQL Block*' property will have been moved into its '*Private Declaration*' property.

This bug is a duplicate of bug 2641774, which is in the process of being fixed.

Action: No workaround is currently available.

12.2.2 SCM Java Tools

SCM Java tools fail to invoke for some configurations of TNSNAMES.ORA (bug 2181931)

Cause: Unable to invoke a SCM Java tool when connected to a repository on an Oracle9*i* server. This problem can be encountered when trying to invoke any of the SCM Java tools, which are:

- Command Line Tool
- Dependency Manager
- Version History Viewer (VHV)
- Version Event Viewer (VEV)
- Compare Utility
- Merge Utility

The failure to invoke a Java tool may occur in the following ways:

1. Problem: Java application does not invoke

    This occurs when invoking the Command Line Tool from a short cut or from the Repository Object Navigator.

2. Problem: [JDK2] No message error at ...RepositoryConnection.setConnection(RepositoryConnection.java:608)

    This occurs when trying to use the 'connect' command from the Command Line Tool.

3. Problem: java.lang.IllegalArgumentException : ErrorDialog: null message vector

    This occurs when running the Dependency Manager (`ckdm61`) from the DOS command prompt.

4. Problem: CDR-03120 : Internal Error - Problem making a Repository Connection

    This occurs when invoking the VHV, VEV or Compare Utility from the Repository Object Navigator.

5. Problem: Connect dialog keeps appearing

    This occurs when invoking the Dependency Manager from the Repository Object Navigator or the Oracle Designer Front Panel.

All of these problems stem from the same cause. There is a bug with the thin JDBC driver (bug 2346116) such that connections will fail if the length of the connect string is in the range 184 - 192 characters. See bugs 2181931 and 2346116 for more details.

Note: This happens only when connecting to an Oracle9*i* server. If connecting to an Oracle 8.1.7 server, all possible variations of `TNSNAMES.ORA` entries that work for SQL*Plus and the repository C++ tools will work and allow the Java tools to be invoked.

Action: Ensure that the connect string passed to the JDBC driver is not in the range 184 - 192 characters. There are many environmental factors that affect the length of this string, for example:

- database instance name
- database host name
- database host domain
- client computer network name
- client computer username
- name of Oracle home directory for Oracle SCM

Thus there is no simple workaround that will work for all situations. If you encounter this problem with a particular TNS alias, the workaround is to change the length of the alias entry in the `TNSNAMES.ORA` file. Increase or decrease the length of the entry, preferably by a minimum of 9 characters. The simplest way to do this when using Oracle Net configuration tools is to add the domain to, or remove the domain from, the hostname, for example:

- Use *host.domain* instead of *host* if you have not previously specified the domain.

- Use *host* instead of *host.domain* if you have previously specified the domain.

12.2.3 Repository Administration Utility (RAU)

End of communication channel error in stage CKREPINI during upgrade (bug 1889920)

Cause: On Oracle 8.1.7 computers during upgrade, the stage `CKREPINI` may fail with the following error:

```
end-of-file-communication channel
ORA-24323: value not allowed
Error accessing package DBMS_APPLICATION_INFO
ORA-03114: not connect to ORACLE
```

Action: Apply server patch 1408453, taking care to download the patch specific to your database version. Once the server has been patched, run 'Full Reconcile' from the Repository Administration Utility. This will rerun the stage `CKREPINI`, which will now succeed.

Subordinate users must be explicitly enabled to do migration

Cause: In previous releases of the Repository Administration Utility, subordinate users were able to perform migration as well as the repository owner. This has now been changed so that, by default, only the repository owner can run the Migration utility. However, some sites may still wish to allow subordinate users to perform migration.

Action: In the Repository Administration Utility, the repository owner can explicitly grant a subordinate user access to the Migration utility by enabling the "Migration Utility (RAU)" checkbox on the Repository User Properties dialog for that user.

Need to do a reconcile after a UE remap, but not told to do so (bug 1304800)

Cause: In the Repository Administration Utility, no reminder is displayed about performing a full reconcile after remapping an existing user-extended element type.

Action: Always perform a full reconcile after remapping a user-extended element type.

12.2.4 Repository Object Navigator

Files and Folders

If using only files and folders, you might want to turn off the heading "Files" in the Navigator window. To do so, choose **Navigator > Show Hide**, select **Objects** in the **Show Type Headings** field and select the **Never** option button.

Check In Contents

To check in the contents of a workarea or container, choose **Version > List Checkouts**, select the sub-context and click **OK**. In the **List Checkouts** dialog box, click **Select All**, then click **Check In**.

Purge

Note that if you purge versions from a workarea, prior versions, or other versions depending on the appropriate workarea compilation rule, will not appear until the workarea is refreshed.

Memory usage when running Java utilities from the Repository Object Navigator

The Compare and Merge utilities, and the Version History Viewer and Version Event Viewer are written in Java. The first time one of these tools is invoked, a Java Virtual Machine (JVM) is started within the Repository Object Navigator process. It will then appear that the Navigator is using a great deal more memory. The JVM is not shut down until the process ends, so this memory usage will not decrease until the Repository Object Navigator is shut down, even though the tool window may have been closed.

The memory parameters used by the JVM at startup can be controlled by registry settings. Memory allocations may need to be increased or adjusted depending on usage and the host environment. You can do this by changing the values of the following Windows registry variables, all of which are shown in bytes under the following registry keys:

- Key `HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME`*n*`\REPADM61`

    - `JVM_NATIVE_STACK_SIZE`

    - `JVM_JAVA_STACK_SIZE`

- Key
  `HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME`*n*`\REPADM61\`
  `DEFAULT_JVM_PARAMS_THIN_JDBC`

    - `JVM_MIN_HEAP_SIZE`

    - `JVM_MAX_HEAP_SIZE`

(where HOME*n* is home number of the home installed into for a multiple Oracle home environment, but is not present where the default Oracle home is being used).

There is also a problem in that the memory used by each invocation of one of these Java tools is not completely freed up. This may result in out-of-memory conditions arising after many invocations. If this happens, shut down and restart the Repository Object Navigator, or invoke the utilities from the Command Line Tool, which runs in its own JVM.

Edit File Registry: default for %.DOC and %.doc (MS Word) should be binary (bug 1321896)

Cause: In the Repository Object Navigator, the default rule in the file registry is Text File for files with `.DOC` or `.doc` extensions, but on Win32 computers these extensions are most likely to be used for MS Word files, which are binary.

Action: From the **Utilities** menu, choose **Edit File Registry** and use the **Edit Rule** option to change the rule to **Binary File** for files with these extensions.

Unable to connect to VHV, VEV, Dependency Manager and Compare utilities when client and repository are on same computer (bug 2028385)

Cause: If you are using the Repository Object Navigator and are connected to a repository on the default database of the local computer (i.e. connected as repos/manager with no connect identifier specified), you will not be able to invoke the VHV, VEV, Dependency Manager and Compare utilities. The following error will be displayed:

```
CDR-03120 : Internal Error - Problem making a repository
connection.
```

The Command Line Tool will invoke and immediately close down. If you invoke the Command Line Tool directly and try to connect to a repository on the default database of the local computer you will get a Java error.

Action: Connect to the repository on the default database of the local computer by specifying a Net8 alias e.g. **repos/manager@local**, where `local` has been set up as an alias or Net8 connect identifier for the local database by Net8 Configuration.

Import fails due to conflicts in user extensions between source and target repositories (bug 2088494)

Cause: In the Repository Object Navigator, the import of an application system may fail with an error indicating that conflicts have been detected between user extensions exported from the source repository and the target repository, and that these must be resolved before import can proceed.

Action: Using the Repository Administration Utility, extract the user extension definitions from the source repository and load them into the target repository. The import of the application system in the Repository Object Navigator should now work.

Repository Object Navigator may hang when invoking VHV for configuration (bug 2187553)

Cause: When invoking the VHV for a configuration in the Repository Object Navigator, the dialog 'Set Context Workarea' may be displayed and the Repository Object Navigator hangs.

Action: Before invoking the VHV for a configuration, invoke the VHV for any other object and then close it. Now, invoking the VHV for a configuration will work.

An alternative workaround is to use the Command Line Tool instead of the Repository Object Navigator to invoke the VHV for the configuration. The Command Line Tool will prompt the user to set the workarea context but, once this has been done, the VHV for the configuration will be successfully invoked.

Copy of ORACLE_DATABASE element fails (bug 960764)

Cause: If using a repository on an Oracle9*i* server, attempting to copy an ORACLE_DATABASE Designer element can result in the following error:

```
PLS-00123: program too large
```

Action: There is currently no workaround for a repository on an Oracle9*i* server.

12.2.5 Compare Utility

SCM Java tool fails to invoke for some configurations of TNSNAMES.ORA (bug 2181931)

Cause: If the Compare Utility fails to invoke, this may be as a result of a common problem shared by other SCM Java tools.

Action: The full problem description and workaround can be found in Section 12.2.2, "SCM Java Tools".

Compare utility may hang after compare of Oracle Forms files (bug 2209993)

Cause: If the Compare utility has been invoked from the Command Line Tool, it may hang after a compare of Oracle Forms files.

Action: Invoke the Compare utility from the Repository Object Navigator instead of from the Command Line Tool and this problem will not occur.

GPF on closing Compare window when invoked from the RON (bug 2019369)

Cause: When the Compare utility is invoked from the Repository Object Navigator, a program failure can occur if the Compare window is maximized, the window divide bar is moved and then the close button (x) at the top right is pressed.

Action: Invoke the Compare utility from the Version History Viewer or the Command Line Tool and this problem does not occur. Alternatively, if invoked from the Repository Object Navigator, do not maximize the Compare window.

Cannot compare or merge .FMB file that was previously merged (bug 1319068)

Cause: In the Repository Object Navigator or Version History Viewer, an attempt to compare or merge a generated .FMB file that has already been merged may fail. Messages from the Repository Object Navigator are:

```
CDR-03100: Diff/Merge internal error:
java.lang.IllegalStateException (compare)
```

```
CDR-03126: Internal Error - Object Delta retrieval (merge)
```

The message from the Version History Viewer for either compare or merge is:

```
java.lang.IllegalStateException
```

Action: No workaround is currently available.

Unable to compare versions of a subclassed form that are in the same workarea or configuration (bug 1502828)

Cause: The Compare utility cannot compare versions of a subclassed form that are in the same workarea or configuration. In addition, rather than reporting an error, the utility sometimes appears to have successfully compared the versions of the subclassed form.

A warning dialog box (currently undocumented in the online help) is displayed to inform you that that it is not possible to compare in these circumstances. You should ignore this warning when not comparing versions of a subclassed form in the same workarea or configuration.

Action: This warning can be turned off by adding a string value to the registry key:

`HKEY_CURRENT_USER\SOFTWARE\ORACLE\REPOS61\FORMSDM`

Create a string value "SUBCLASS_WARNING" with value "FALSE". Any other value (or the string not existing) results in the warning being displayed.

Any compare of a subclassed form must be carried out on versions that are in different workareas or configurations.

Comparing Oracle Forms

The Compare utility enables you to compare different versions of the same Oracle Form file, but not two different Forms files. When comparing files other than Oracle Forms, two different files can be compared.

12.2.6 Merge

SCM Java tool fails to invoke for some configurations of TNSNAMES.ORA (bug 2181931)

Cause: If Merge fails to invoke, this may be as a result of a common problem shared by other SCM Java tools.

Action: The full problem description and workaround can be found in Section 12.2.2, "SCM Java Tools".

Merge window may hang after merge of Oracle Forms files (bug 2209987)

Cause: If the Merge window has been invoked from the Command Line Tool, it may hang after a merge of Oracle Forms files.

Action: Invoke the Merge window from the Repository Object Navigator instead of from the Command Line Tool and this problem will not occur.

Merge Window, clarification on saving changes

After making changes, use **File > Save** to save your changes. Earlier versions had a **Save** button' which did this.

12.2.7 Version History Viewer

SCM Java tool fails to invoke for some configurations of TNSNAMES.ORA (bug 2181931)

Cause: If the Version History Viewer fails to invoke, this may be as a result of a common problem shared by other SCM Java tools.

Action: The full problem description and workaround can be found in Section 12.2.2, "SCM Java Tools".

12.2.8 Version Event Viewer

Date format in Version Event Viewer is incorrect in Japanese

Cause: Date appears as DD-MON-YY, where DD and YY are both corrupted. Occurs only when the Version Event Viewer is called from either the Command Line Tool, or the Design Editor, in a Japanese environment, before the RON has been invoked.

This also occurs for any client configured to use a NLS language other than the default "US".

Action:

1. Invoke the RON.

2. Navigate to the General Settings panel (**Options > General Settings**).

3. Type in the default date format that you want to use.

NOTE: You will need to perform this procedure for each client where you intend to use the VEV.

SCM Java tool fails to invoke for some configurations of TNSNAMES.ORA (bug 2181931)

Cause: If the Version Event Viewer fails to invoke, this may be as a result of a common problem shared by other SCM Java tools.

Action: The full problem description and workaround can be found in Section 12.2.2, "SCM Java Tools".

With start date year 99 or older, does not give any data in VEV (bug 1476771)

Cause: Running the Version Event Viewer with a start date in which the year is set to 99 or earlier causes no event data to be displayed in the viewer window.

Action: No workaround is currently available.

12.2.9 Importing and Exporting

Import/Export in database format - Import or refresh of workarea fails due to orphaned object (bug 2166873)

Cause: Importing into a workarea or refreshing a workarea can fail with the following error:

```
CDR-01062: Compilation leaves file filename orphaned. Need to
include container
```

This may have been caused by deletion of a previously imported folder that contained a share of an object, where the original object was not imported and does not exist in the workarea. In this situation, it is the share of the object that is causing this error.

Action: Restore the deleted folder from the Wastebasket. Invoke the Command Line Tool and reattach the shared object from the Lost+Found container. The shared object will now be seen as an original object and can be deleted causing no further problems.

Identifier 'SYS.LT_EXPORT_PKG' must be declared when exporting from an Oracle9i database (bug 2143951)

Cause: This occurs when exporting from an Oracle9*i* 9.0.1 database and the user has insufficient privileges. Users with DBA privilege or any of those shown in the given workaround will not encounter this problem. (This is fixed in Oracle9*i* 9.2.)

Action: Grant any of the following:

```
GRANT EXECUTE ON sys.lt_export_pkg TO exp_full_database;

GRANT EXECUTE ON sys.lt_export_pkg TO PUBLIC;

GRANT EXECUTE ON sys.lt_export_pkg TO user;
```

Unable to create a new workarea from the Import Wizard when importing a workarea containing a versioned object (bug 1429821)

Cause: When importing a workarea containing versioned objects into the same repository using the option 'Create new version where objects exist in the destination repository, otherwise create new objects', the import will fail if you try and create a new workarea by specifying a new workarea name in the wizard.

Action: Create a new workarea with the relevant name before you run the Import Wizard.

Import/Export in database format - exported objects may contain dangling references

The repository utilities Export and Import in database format are designed to take advantage of the universal uniqueness property of the Repository Object Internal Identifier. For example an object can be copied from one repository to another using Export and Import without having to change its internal identifier.

This feature is used by the Export and Import utilities to allow new versions of objects to be copied to other repositories even though the logical identifier or user's identifier (e.g. NAME) has changed. It also means that object versions can be exported which have references to other objects not included with the export, i.e. an object version may contain dangling references. This is not a problem so long as a) a subsequent export or import copies in the missing referenced objects, or b) the dangling references are resolved, either by deleting that part of the dangling object's structure which includes the reference, or by nullifying the reference property.

You should always precede an export operation with a check for external references within the set of candidate export objects. For example, a workarea or container may include the definition of a module object which references a language object not included in the workarea or container.

To resolve dangling references automatically at the target repository, select the "Remove dangling references" option on the **Advanced Options** dialog box in the Import Wizard. This option is highly recommended if the Import is creating 'brand new objects' as it will not be possible to copy new versions or related versions later on.

Import/Export in database format - Import utility may require specific repository privileges or access rights

For a versioned repository, depending on the kind of export performed, the Import utility will execute operations on your behalf which may require certain privileges, for instance:

- **Manage Workareas** - allows user to create a workarea
- **Compile** - allows user to compile or refresh a workarea
- **Version** - allows user to create new versions of objects within a workarea

If an error is returned by any of these operations, check that you have the appropriate repository privileges (assigned via the Repository Administration Utility) and workarea and container access rights (assigned via the Repository Object Navigator).

For a non-versioned repository, none of the above operations apply. The Import Wizard will normally detect this case.

12.2.10 Dependency Manager

Dependency Analyzer must be run against Pro*C files not the C files generated by the Pro*C compiler

The dependency analyzer should be run on a Pro*C (`.pc`) file to extract the dependencies from the SQL embedded in the file. The analyzer will look at both the C and SQL dependencies in the Pro*C file.

If the dependency analyzer is run on a C file generated by the Pro*C compiler, then it is likely that the analyzer will fail. This is because the dialect of C generated by the Pro*C compiler will trigger one or more underlying bugs in the dependency analyzer C parser (e.g. bug 2744718 - DA FAILS TO PARSE SELECT STATEMENT WHEN IT'S CONCATENATED WITH '\'). Analyzing the C file generated by the Pro*C compiler will also fail to extract the SQL dependencies, as there is no special handling for the generated OCI API. If the SQL dependencies are desired, then the Pro*C file itself must be analyzed.

C Parser fails to parse if certain preprocessor definitions are used (bug 1411270)

   Cause: If any token used within a PRO*C SQL statement has been #typedeffed with the C code or referenced header files, then the parsing of that SQL statement will fail.

   Action: Remove the #typedef.

C Parser fails to parse if Pro*C declarations are between function def and body (bug 1411271)

   Cause: If Pro*C declarations are between a function's definition and body, the C parser will fail.

   Action: Move the declarations.

SCM Java tool fails to invoke for some configurations of TNSNAMES.ORA (bug 2181931)

   Cause: If the Dependency Manager fails to invoke, this may be as a result of a common problem shared by other SCM Java tools.

   Action: The full problem description and workaround can be found in Section 12.2.2, "SCM Java Tools".

Cannot purge dependencies without running out of extents (bug 1317468)

Cause: Running a purge from the Dependency Manager fails because of lack of extents for rollback segment.

Action: Force dependency purge to use suitably sized rollback segment; only one rollback segment (of sufficient size) needs to be available. You can achieve this by making all rollback segments offline except for one large rollback segment. See the *Oracle SCM Repository Installation Guide* for instructions to do this.

12.2.11 Command Line Tool

Switching off case matching for object names

The MATCH_CASE session variable can be used to switch on and off the matching of case for names of objects. Switching the MATCH_CASE session variable off, using the command

```
set match_case off
```

command, may degrade performance in larger repositories.

SCM Java tool fails to invoke for some configurations of TNSNAMES.ORA (bug 2181931)

Cause: If the Command Line Tool fails to invoke, this may be as a result of a common problem shared by other SCM Java tools.

Action: The full problem description and workaround can be found in Section 12.2.2, "SCM Java Tools".

Command Line Tool exits on CTRL-C (bug 976364)

Cause: When attempting to exit from a long running command, CTRL-C not only terminates the command that is running but also the Command Line Tool. All outstanding uncommitted changes will be lost.

Action: Do not use CTRL-C unless you want to terminate the command line session completely and you are not concerned about any changes that have not been committed.

12.2.12 Other Known Problems and Restrictions

Operating System Authentication (bug 2683221)

The SCM Java based tools, which include:

- Version History Viewer

- Version Event Viewer

- Dependency Manager

- Command Line Utility

all use JDBC thin client as the mechanism to connect to Repository. As a result these tool do not support OS authenticated connections.

Use of public and private synonym access

Public synonym access is recommended only if you have a single Oracle SCM repository on the Oracle instance. If you have more than one such repository, we recommend that you use only private synonym access for each of them. Avoid the case where one repository is using public synonym access and the others are using private synonym access since this may lead to unpredictable behavior.

ORA-12514 Message not found

Cause: In some circumstances message ORA-12514 is displayed without its intended text.

The message should read

```
ORA-12514 : TNS:listener could not resolve SERVICE_NAME given
in connect descriptor
```

The error occurs because the SERVICE_NAME in the CONNECT_DATA was not found in the listener's tables.

Action: Check to make sure that the SERVICE_NAME specified is correct.

This error will be returned if the database instance has not registered with the listener; the instance may need to be started.

Configurations based on workareas include elements that do not exist in the workarea (bug 1312715)

Cause: If you create a configuration based on the current contents of a workarea, the configuration will consist of the entire contents of the workarea, possibly including objects to which you do not have access.

Action: Either manually remove the inaccessible objects from the configuration (e.g. Remove Members in the Configuration Wizard) or create the configuration based on the workarea specification rather than the workarea contents (e.g. use "from specification" in the Configuration Wizard rather than "from current contents").

Modifying workarea fails when workarea rules are more than 30k bytes (bug 2888993)

Cause: Creating or updating a workarea will fail if a workarea specification is used, whose text exceeds 30K.

You will see one of the following two failures:

- You will see the following error messages:

  ```
  ORA-01403: no data found
  ```

  ```
  RME-02124: Failed to execute SQL statement: begin jr_
  workarea.define_spec(:wa,:spec); :iserror := 0;   :sqlcode
  := 0;  exception when others then  :iserror := 1;
  :sqlcode := sqlcode;  end;
  ```

- The workarea update simply does not add the new rule, because if the file is bigger than 30000 bytes, only the first 30000 bytes are read, terminating the later portion.

Action: Create a configuration and use it to identify the member versions and then base a workarea on this configuration.

Workarea based only on a configuration does not refresh correctly (bug 1152274)

Cause: This applies when building a workarea based only on a configuration and with no check-in branch specified. If you use the workarea to check out and check in an object, the object now exists at the revised version. If you attempt to revert to the original object version by refreshing the workarea, the object disappears from the workarea completely rather than existing at its original version.

Action: No workaround is currently available.

Container and workarea uniqueness enforcement (bug 954545)

Cause: It is possible to create multiple identical objects in the same container without raising a uniqueness violation. An object can be created in a container in the context of one workarea and an identical object (e.g. with the same name in the same container) in the context of another workarea. If a workarea is created (or recompiled) which includes both objects (for example by including all objects within the container), the name uniqueness rules are violated without an error being raised.

Action: Manually perform name uniqueness check after workarea compilation.

`.RVI` files visible on file system

When creating a folder mapping, extra files called `.RVI` files are created. The repository uses `.RVI` files to store information about which file and folder objects have been updated. Do not delete these `.RVI` files.

Repository restore is unsuccessful in certain circumstances

If a repository containing tables with LOB columns is backed up, the tables with LOB columns must be restored to a tablespace with the same name as the original, otherwise the restore fails with the message:

```
ORA-00959: tablespace tablespace_name does not exist
```

If a repository is restored from a backup that contains tables with columns based on types (e.g. SDW_USERS and SDW_ACCESS_RIGHTS) and a type name with the same object identifier (OID) as one being imported already exists anywhere in the target database, neither the types nor the tables are restored. The following error messages are displayed:

```
IMP-00015: following statement failed because the object already exist: "CREATE
TYPE ... "
IMP-00061: Warning: Object type "..." already exists with a different identifier
IMP-00063: Warning: Skipping table "..." because object type "..." cannot be
created or has different identifier
```

However, if the same type name exists but with a different OID and the IGNORE parameter is set to Y, the types are imported followed by the tables.

Everyone has full access to the global wastebasket (bug 1208420)

This unexpected behavior is not known to cause any problems.

Migration issue with different multi-byte character sets

Cause: If the database that is hosting the new instance is created with a multi-byte character set and this is different to that of the database hosting the existing 6.0 instance, it is possible that during migration errors will occur because character data has become too big. For example, if the 6.0 repository used a character set of WE8ISO8859P1 but the target database uses UTF8, characters in the range 128-255 will go from requiring 1 byte to 2 bytes to hold them. This would include all the none ASCII characters. If an object in the repository had a name that included such a character, and the name was already the maximum length for the column definition in which it was stored, the migrated data becomes too large and raises an error during migration when it is attempted to be inserted into the new repository.

Action: Follow Oracle's recommendations for changing the character set of the 6.0 repository database before attempting to migrate.

Naming convention for user-defined version labels

If checking in to a default checkin branch using user-defined labelling, the version label becomes *user label*.

For information about automatic version labelling, refer to the online documentation.

Screen resolution types

Oracle SCM can be run under SVGA (recommended) or VGA.

System font size

Oracle recommends that you set the system font size to Small Fonts (**Control Panel > Display > Settings > Font Size**).

Copyright

Please note that where you see Copyright 2002 this is also covered by Copyright 2003.

12.3 Known Restrictions to Keyboard Controls

This section documents known restrictions to keyboard controls, and is organized in the following sections:

- Section 12.3.1, "General Keyboard Control Restrictions"
- Section 12.3.2, "Non-Standard Keyboard Controls"
- Section 12.3.3, "Known Problems and Workarounds"
- Section 12.3.4, "Command Line Tool Accessibility"

12.3.1 General Keyboard Control Restrictions

This section documents general keyboard control restrictions.

Dependency Manager

When the Dependency Manager is started from the Repository Object Navigator, keyboard focus may be unreliable. Therefore, the Dependency Manager must always be started from the Command Line Tool to make full use of the keyboard controls.

Version Event Viewer

When the Version Event Viewer is started from the Repository Object Navigator, keyboard focus may be unreliable. Therefore, the Version Event Viewer must always be started from the Command Line Tool to make full use of the keyboard controls.

Version History Viewer

When the Version History Viewer is started from the Repository Object Navigator, keyboard focus may be unreliable. Therefore, the Version History Viewer must always be started from the Command Line Tool to make full use of the keyboard controls.

12.3.2 Non-Standard Keyboard Controls

This section documents areas of the user interface for which standard keyboard controls are not implemented and contains the following sections:

- Section 12.3.2.1, "Dependency Manager"
- Section 12.3.2.2, "Repository Administration Utility"

12.3.2.1 Dependency Manager

This section documents the parts of the Dependency Manager for which non-standard keyboard controls exist, but for which alternative keyboard controls are available.

Build Dependencies Dialog Box

The Build Dependencies dialog box contains a table and a number of controls. To navigate between the cells in the table, use the **Tab** key. To navigate from the table to the other controls in the dialog box, first navigate to the last cell in the table, then use **Ctrl+Tab**. To navigate between controls outside of the table, use the **Tab** key.

Change Workarea Dialog Box

To choose **OK** from the Change Workarea dialog box, focus must be on the **OK** button before activating the **Enter** key. If focus is on the list of workareas field when the **Enter** key is pressed, the dialog box is canceled without changing the workarea.

Search for Out of Workarea Objects Dialog Box

To navigate between the cells of the Configurations table, use the **Tab** key. To move focus out of the Configurations table, press **Ctrl+Tab**.

Selection Drop-Down Lists

A number of selection drop-down lists exist within the Dependency Manager. When using selection drop-down lists, use the following keyboard controls:

- Press **F4** to open the drop-down list, and navigate to the required entry using the **Up** and **Down** arrow keys.
- If the selection drop-down list is a column in a table, press **F2** first (to select the cell for edit), then **F4** to open the drop-down list, and use the **Up** and **Down** arrows to navigate to the required entry.

Toolbar

To change focus from the Toolbar to the Navigator, press **Shift+Tab**, then use the **Up** and **Down** arrows to move within the Navigator tree.

12.3.2.2 Repository Administration Utility

This section documents the parts of the Repository Administration Utility for which non-standard keyboard controls exist.

Main RAU Panel

The Repository Administration Utility (RAU) panel comprises a number of buttons that provide access to administration features. To use the keyboard controls to access a feature from its associated RAU button, first navigate to the appropriate button (using the **Tab** key) and then press the spacebar.

User Maintenance Screen

On the User Maintenance screen, the options are Add Users, Delete Users, Expand Nodes, Collapse Nodes and View Properties. To use the keyboard to perform these tasks, use the Windows **Menu** key to display the context menu, then use the **Up** and **Down** arrow keys to choose the required option from the menu.

12.3.2.3 Repository Object Navigator

This section documents the parts of the Repository Object Navigator for which non-standard keyboard controls exist.

Navigator Window

Each time the Repository Object Navigator is started a Navigator window and a Property Palette are displayed by default. To use keyboard controls to navigate through the Navigator window immediately after the Repository Object Navigator has been started, press **F4** to switch context to the Property Palette, then press **F3** to return to the Navigator window.

Color Dialog Box

Color can be used to distinguish text items in the Repository Object Navigator, the Property Palette and the TextPad. To use the keyboard to change the color of text, invoke the **Color** dialog box (as described in the online help system) and use the **Up**, **Down**, **Left** and **Right** arrow keys to pick the required color.

Property Palette

For some repository elements it is possible to specify reference properties, that is, references to repository elements that already exist. A reference property can be chosen from the **Select Objects** dialog box. To display the **Select Objects** dialog box from a Property Palette, position the cursor in the appropriate reference property field and press the **Enter** key.

Configuration Wizard

To invoke any button in the Configuration Wizard dialogs, first navigate to the button using the **Tab** key and then use the spacebar to choose that button.

Dialog Boxes with Grid Controls

A number of dialog boxes in the Repository Object Navigator contain grid controls, for example, the Customize Navigator Groups dialog box. When using dialog boxes with grid controls, use the following keyboard controls:

- To navigate around a grid, use the **Up**, **Down**, **Left** and **Right** arrow keys.

- To navigate out of a grid to the next control, use **Ctrl+Tab**. Note that pressing **Tab** in the last cell of a grid navigates to the next window in the dialog box, if one exists.

Dialog Boxes with Query Windows

A number of dialog boxes in the Repository Object Navigator (for example, the Customize Navigator Views dialog box) contain query windows that contain buttons for actions, such as grouping conditions.

When using dialog boxes with query windows, use the following keyboard controls:

- To move a row up the list for sorting purposes, use **Ctrl+Up Arrow**.

- To move a row down the list for sorting purposes, use **Ctrl+Down Arrow**.

- To group selected cells together, use **Alt+G**.

- To undo a grouping for selected cells, use **Alt+U**.

- To duplicate cells, use **Alt+D**.

- To clear a condition, use **Alt+C**.

- To toggle between AND and OR settings, use the spacebar.

- To toggle check boxes, use the spacebar.

12.3.2.4 General Restrictions for Java Tools

This section documents general keyboard controls required to use the Version History Viewer, Version Event Viewer and Dependency Manager.

- To navigate to a field with a mnemonic, use **Alt +** the mnemonic.

- If the focus is on a tree, the **Enter** key opens or closes a branch instead of activating the default button (e.g., closing the dialog box).

- If the focus is on a table, the **Enter** key navigates to the next row instead of activating the default button.

- If the focus is in a multi-line text field, the **Tab** key navigates through the text. Use **Ctrl+Tab** to navigate to the next field.

- If mnemonics are used to navigate to an editable drop-down list field, the field will not be in focus until the **Tab** key is pressed.

12.3.3 Known Problems and Workarounds

This section documents known problems and workarounds for keyboard controls:

- Section 12.3.3.1, "Merge Window"

- Section 12.3.3.2, "Repository Object Navigator"

- Section 12.3.3.3, "Other Known Problems and Restrictions"

12.3.3.1 Merge Window

JAWS does not read Merge window

    Cause: This is an issue for users of the JAWS screen reader.

    When the Merge window has been invoked from the Command Line Tool, JAWS reads either blank, unavailable or nothing at all when the user navigates through the merge document. However, this problem will not occur if the Merge window is invoked from the Version History Viewer.

    Action: The following workarounds are available:

- Use **Alt+Tab** to go to another window, then **Alt+Tab** to return to the **Merge** window.

- Iconify the Merge window, and then de-iconify it.

- Open and close any of the menus in the menu bar without selecting a menu item.

One of these workarounds will also need to be applied when the user navigates from the merge document to the toolbar and then back to the merge document.

12.3.3.2 Repository Object Navigator

JAWS repeats last visible entry with each entry in 'View Copied Properties' dialog (bug 1930763)

Cause: This is an issue for users of the JAWS screen reader.

This problem occurs when properties copied via 'Copy Properties' are being viewed via 'View Copied Properties', and the down arrow key is being used to trigger JAWS to read out the visible information for each property. When more than five properties have been copied, the reading for each property is preceded by a reading of the last property visible in the 'View Copied Properties' dialog.

Action: If five or fewer properties can be copied, this problem will not occur. However, if it is necessary to copy more than five properties, the audible duplication in the reading for each entry should be ignored.

12.3.3.3 Other Known Problems and Restrictions

Issue for JAWS users invoking VEV, VHV or Compare utilities.

When invoking the Version Event Viewer, Version History Viewer or Compare utility from the Repository Object Navigator JAWS will read the name of the dialog window as it is created, but it will then read the text of the Repository Object Navigator main window once the dialog has been established. This may suggest incorrectly that the invoked dialog has failed (and disappeared).

To verify that the dialog has been correctly created: Press the **TAB** key. This will highlight (focus on) the first control/menu item in the dialog, which JAWS will read.

Disabled tabs

It may be possible for a user to navigate via the keyboard to disabled tabs that would not be accessible to a user navigating with a mouse.

12.3.4 Command Line Tool Accessibility

In order for JAWS to read output from the Command Line Tool correctly, users should download a set of scripts from the Oracle Technology Network (http://otn.oracle.com).

12.4 Platform-specific Issues and Workarounds

12.4.1 Windows Platform Issues and Workarounds

Windows issues are documented as part of Section 12.1, "General Issues and Workarounds" and Section 12.2, "Known Problems and Restrictions".

12.4.2 Linux, Solaris, and HP-UX Platform Issues and Workarounds

12.4.2.1 General Linux, Solaris, and HP-UX Platform Issues and Workarounds

There are currently no general Linux, Solaris, and HP-UX platform issues.

12.4.2.2 Solaris Issues and Workarounds

Broadcast Server - Solaris computers

The broadcast server does not work on Solaris computers (bug 1325598).

12.4.2.3 Linux Issues and Workarounds

There are currently no Linux platform issues.

12.4.2.4 HP-UX Issues and Workarounds

There are currently no HP-UX platform issues.

12.5 Configuration Issues and Workarounds

There are currently no configuration issues.

12.6 Administration Issues and Workarounds

There are currently no administration issues.

12.7 Documentation Errata

There are currently no documentation errata.

Part III

Other Release Notes

Part III of the release notes contains information for server components that are installed with Oracle Developer Suite. Each feature has its own chapter.

Part III contains the following chapters:

- Chapter 13, "Oracle Application Server Containers for J2EE (OC4J)"

13

Oracle Application Server Containers for J2EE (OC4J)

This chapter describes issues and workarounds for Oracle Application Server Containers for J2EE (OC4J). This chapter discusses the following topics:

- Section 13.1, "Configuration Issues and Workarounds"
- Section 13.2, "Release Notes for JSP, Tag Libraries, and Related Demos"
- Section 13.3, "Release Notes for Servlets"
- Section 13.4, "Release Notes for EJB"
- Section 13.5, "Release Notes for OC4J Services"
- Section 13.6, "Release Notes for DataDirect Connect for JDBC"
- Section 13.7, "Documentation Errata"

You can access Oracle manuals mentioned in this document at the Oracle Technology Network (`http://otn.oracle.com/`).

13.1 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds for OC4J. It features the following topics:

- Section 13.1.1, "OPMN Does Not Properly Assign CORBA SSL Client Ports for Default"
- Section 13.1.2, "Sharing and Using Libraries"
- Section 13.1.3, "Invalid or Unneeded Library Elements Degrade Performance"
- Section 13.1.4, "Custom User Managers Deployed Within EJB JAR Files"
- Section 13.1.5, "Considerations for Startup and Shutdown"
- Section 13.1.6, "Supported JDK Versions"
- Section 13.1.7, "Migrating Source Code from JDK 1.4 to JDK 1.3"
- Section 13.1.8, "Migrating Source Code from JDK 1.3 to JDK 1.4"
- Section 13.1.9, "OC4J Demo Downloads"

For useful information on configuring OC4J, see the *Configuration Guide for OC4J* which is available from Oracle Technology Network (`http://otn.oracle.com`).

13.1.1 OPMN Does Not Properly Assign CORBA SSL Client Ports for Default

In the Oracle Application Server environment, you must explicitly specify the port ranges for iiops1 and iiops2 in the `opmn.xml` file.

13.1.2 Sharing and Using Libraries

In Oracle Application Server 10*g* (9.0.4), Oracle recommends creating specific `<library>` elements in the global `application.xml` file to load any libraries required by your application. Oracle recommends this as a way to ensure efficient loading and desired loading order. (Libraries are loaded in the order in which the `<library>` elements are encountered.)

Note that in previous releases, you could put libraries into the `j2ee/home/lib` directory, which by default had a `<library>` element in `application.xml`. This directory is now reserved for OC4J system libraries, and the `<library>` element that points to it is no longer present in `application.xml` by default. If you want to use a general library location, use `j2ee/home/applib`. By default, there is now a `<library>` element pointing to that location in `application.xml`.

For general information about sharing libraries, refer to the *Oracle Application Server Containers for J2EE User's Guide*.

13.1.3 Invalid or Unneeded Library Elements Degrade Performance

```
Out of Memory During Execution
```

If the OC4J process memory is growing consistently during program execution, then you may have references to invalid symbolic links in your global `application.xml` file. This problem is usually characterized by a growth in the C heap and not a growth in Java object memory, as one would see with a more traditional Java object memory leak. OC4J loads all resources using the links in the `application.xml` file. If these links are invalid, then the C heap continues to grow, causing OC4J to run out of memory. Ensure that all symbolic links are valid, and restart OC4J.

In addition, keep to a minimum the number of JAR files OC4J is configured to load. Eliminate all unused JAR files from the configuration and from the directories OC4J is configured to search. OC4J searches all JAR files for classes and resources, thereby causing the file cache to use extra memory and processor time.

You can control the loading more precisely if your `<library>` elements in the `application.xml` file point to the individual JAR and ZIP files that are needed, instead of to the directories where they reside.

13.1.4 Custom User Managers Deployed Within EJB JAR Files

Custom user manager classes deployed within Enterprise Java Beans (EJB) JAR files cannot be loaded by OC4J unless an explicit `<library>` element exists in the `orion-application.xml` file for the application. The `<library>` element must point to the JAR file containing the custom user manager classes. To allow the custom user manager to be resolved and instantiated, create the necessary `<library>` element, such as in the following example:

```
<orion-application ....>
    ...
    <library path="d:\oc4j904\j2ee\home\applications\XmlnewsEar\XmlnewsEjb.jar"/>
    ...
</orion-application>
```

13.1.5 Considerations for Startup and Shutdown

- You must use the JNDI context that is passed in as an argument to your startup and shutdown methods. You cannot create your own.

- You should separate your shutdown class from any archive files (WAR and EAR) that will be undeployed before shutdown.

- OC4J creates an instance of your startup class and an instance of your shutdown class. These are separate instances. If you implement the startup and shutdown interfaces in the same class, OC4J creates two instances of that class. In this case, you cannot share non static fields between your startup class and your shutdown class.

13.1.6 Supported JDK Versions

You must have only one Java Developer's Kit (JDK) installed on your computer. Make sure that it is a version that OC4J supports:

- JDK 1.3.1

- JDK 1.4.1

OC4J Standalone does not include a JDK. If you are using OC4J Standalone, then you must provide your own JDK installation.

Some suppliers bundle a JDK with their products. If necessary, remove any old version(s), replace them with a supported version, and update the appropriate environment variables. Make sure that your `PATH`, `CLASSPATH`, and `LD_LIBRARY_PATH` (or `LIB` on Windows) variables are all set to the officially supported version of JDK.

> **Note:**   On Solaris computers, Sun Microsystems supplies an old JDK under `/usr/bin`.

13.1.7 Migrating Source Code from JDK 1.4 to JDK 1.3

Java does not support compiling Java code under JDK 1.4 and running it under JDK 1.3 (bug 2811379). If you try anyway, Java may throw one of the following error messages at runtime:

- `Unsupported major.minor version 48.0.`

- `The major.minor version '48.0' is too recent for this tool to understand.`

However, if you must generate class files using JDK 1.4 and run them using JDK 1.3, then you can use the following command to force a JDK 1.4 compiler to generate a class file that is compatible with JDK 1.3:

```
% javac -target 1.3 hello.java
```

13.1.8 Migrating Source Code from JDK 1.3 to JDK 1.4

When you upgrade from JDK 1.3 to JDK 1.4, put all classes into packages.

The JDK 1.4 specification explicitly prohibits a class within a package from invoking a class not within a package. For this reason, some Java source code that compiles in JDK 1.3 will not compile in JDK 1.4. This error is identified by the following compiler message:

```
'.' expected import myClass
```

This message means that the Java compiler expects to find a package and class name and cannot parse a line that contains only a class name.

For details, see the Sun Microsystems compatibility document supplied with the JDK.

13.1.9 OC4J Demo Downloads

Oracle Application Server 10*g* (9.0.4) includes one demo per component. Additional demos are available for download from OTN at the following URL:

http://otn.oracle.com/tech/java/oc4j/demos/

Navigate down from this index page to the component areas that contain the additional demos that you need.

13.2 Release Notes for JSP, Tag Libraries, and Related Demos

This section describes issues for Java Server Pages (JSP), tag libraries, and related demos. It features the following topics:

- Section 13.2.1, "Cannot Invoke Classes That Are Not in Packages"
- Section 13.2.2, "Set the SAX Driver When Starting OC4J"
- Section 13.2.3, "JSP ojspc Issues"
- Section 13.2.4, "JESI Tag Release Notes"
- Section 13.1.5, "Considerations for Startup and Shutdown"
- Section 13.1.6, "Supported JDK Versions"
- Section 13.2.7, "Search Local Classes First"
- Section 13.2.8, "java.lang.ClassFormatError: (Truncated Class File)"

13.2.1 Cannot Invoke Classes That Are Not in Packages

Among the considerations in migrating to a Sun Microsystems JDK 1.4 environment, one is particularly important to servlet and JSP developers.

Sun Microsystems states, "The compiler now rejects import statements that import a type from the unnamed namespace." This change addresses security concerns and ambiguities with previous JDK versions. This means that you cannot invoke a class (a method of a class) that is not within a package. Any attempt to do so results in a fatal error at compilation time.

This issue especially affects JSP developers who invoke JavaBeans from their JSP pages, because such beans are often outside any package (although the JSP 2.0 specification now requires beans to be within packages, to satisfy the new compiler requirements). When JavaBeans outside of packages are invoked, JSP applications that were built and executed in an OC4J 9.0.3 / JDK 1.3.1 environment no longer work in an OC4J 9.0.4 / JDK 1.4 environment.

Until you update your application so that all JavaBeans and other invoked classes are within packages, you can revert to a JDK 1.3.1 environment to avoid this issue.

Notes:

- The `javac -source` compiler option allows JDK 1.3.1 code to be processed seamlessly by the JDK 1.4 compiler, but classes must still be in packages in order to be invoked.

- Only the JDK 1.3.1 and JDK 1.4 compilers are supported and certified by OC4J. It is possible to specify an alternative compiler by adding a `<java-compiler>` element to the `server.xml` file. This might provide a workaround for the "classes not in packages" issue, but other compilers are not certified or supported by Oracle for use with OC4J. Furthermore, do not update the `server.xml` file directly in an Oracle Application Server environment. Use the Oracle Enterprise Manager.

This issue is also discussed in Section 13.1.8, "Migrating Source Code from JDK 1.3 to JDK 1.4". For more information about the "classes not in packages" issue and other JDK 1.4 compatibility issues, refer to the following Web site:

`http://java.sun.com/j2se/1.4/compatibility.html`

Click the link "Incompatibilities Between Java 2 Platform, Standard Edition, v1.4.0 and v1.3".

13.2.2 Set the SAX Driver When Starting OC4J

For the filter functionality of Java Server Pages Standard Tag Library (JSTL) XML tags to work in OC4J, you must set the SAX driver when starting OC4J.

When starting OC4J standalone, use the following option in the command line:

`-Dorg.xml.sax.driver=oracle.xml.parser.v2.SAXParser`

When starting the Oracle Application Server, you can specify this setting through the system properties. See the Oracle Application Server documentation for details on where and how to make this specification.

If you do not set the property, then the JSTL demo `Filter.jsp` gives the following exception:

`javax.servlet.jsp.JspException: System property org.xml.sax.driver not specified`

13.2.3 JSP ojspc Issues

This section features the following topics:

- Section 13.2.3.1, "Debug Option Has No Effect on ojspc Output"
- Section 13.2.3.2, "The /WEB-INF/lib or /WEB-INF/classes Directories Should Not Contain .java Files"

13.2.3.1 Debug Option Has No Effect on ojspc Output

The `ojspc -debug` option has no effect on `ojspc` output in Oracle Application Server 10*g* (9.0.4). If you specify -debug, the option is accepted but ignored.

13.2.3.2 The /WEB-INF/lib or /WEB-INF/classes Directories Should Not Contain .java Files

When using `ojspc`, do not put any `.java` files in or under the `/WEB-INF/lib` directory or the `/WEB-INF/classes` directory.

If the `/WEB-INF/lib` or `/WEB-INF/classes` directories contain any `.java` files, then ojspc occasionally creates one or more duplicate .class files at the top level of the archive during batch pretranslation.

13.2.4 JESI Tag Release Notes

This section describes changes and enhancements in the behavior of Java Edge Side Includes (JESI) tags in Oracle Application Server 10*g* (9.0.4). It features the following topics:

- Section 13.2.4.1, "JESI Tags No Longer Require Conditional Treatment"
- Section 13.2.4.2, "JESI personalize Tag Now Adds Single Quotes"
- Section 13.2.4.3, "A fragment Tag Can Be Inside an Included Page"
- Section 13.2.4.4, "Multiple control or template Tags Can Be Used"
- Section 13.2.4.5, "No Response Output Outside the Tags of a template Tag"
- Section 13.2.4.6, "Do Not Use Explicit ESI Markup With JESI Tags"

13.2.4.1 JESI Tags No Longer Require Conditional Treatment

In prior versions of the JESI tag library, JESI tags always generated the same output regardless of whether the request was coming directly from a client, such as a browser, or from Oracle Web Cache. Therefore, in prior versions of the tag library, JESI tags required special conditional treatment if there was a possibility that the Oracle Web Cache might be down or unavailable at any time, because then the included pages and fragments would not have been inserted into the response.

In the OC4J 9.0.4 implementation, JESI tags correctly generate a full response, even without the presence of Oracle Web Cache, by falling back to the standard JSP "include" functionality for inclusion of fragments. For more information, see the *Oracle Application Server Containers for J2EE JSP Tag Libraries and Utilities Reference*.

13.2.4.2 JESI personalize Tag Now Adds Single Quotes

In the OC4J 9.0.4 implementation, the JESI `personalize` tag now puts single quotes around the string value of the default attribute (or, for backward compatibility, the value attribute). This behavior is more compliant with the ESI syntax. In versions prior to Oracle Application Server 10*g* (9.0.4), the user had to add single quotes as part of the attribute string value. You must edit pages containing `personalize` tags that used to work prior to the 9.0.4 implementation to remove extra single quotes.

13.2.4.3 A fragment Tag Can Be Inside an Included Page

You can now place a fragment tag inside a page included through a `jsp:include` standard action, if it is properly enclosed in a `template` tag (which can be in the including page).

13.2.4.4 Multiple control or template Tags Can Be Used

When OC4J encounters multiple `control` tags, instead of throwing an exception, it ignores additional `control` or `template` tags. OC4J executes only the first tag that it encounters. This feature allows placing `control` tags into JSP-included pages. If a page is included in another page with `control` or `template` tags of its own, then the second tag is ignored. At the same time, the included page can be executed independently.

The four permutations and their behavior are as follows:

- A `control` tag followed by a `control` tag is acceptable. The second `control` tag is ignored.

- A `control` tag followed by a `template` tag is acceptable. The attributes of the `template` tag are ignored.

- A `template` tag followed by a `control` tag is acceptable. The `control` tag is ignored.

- A `template` tag followed by a `template` tag produces an error.

13.2.4.5 No Response Output Outside the Tags of a template Tag

In the OC4J 9.0.4 and the OC4J 9.0.3 implementations, there must be no response output outside the `start` and `end` tags of a `template` tag. Additionally, you can now place `template` tags in an included page, if there is no content output into the response outside the `start` and `end` tags.

13.2.4.6 Do Not Use Explicit ESI Markup With JESI Tags

The JESI tag library is not guaranteed to work correctly when explicit ESI markup is used together with JESI tags to generate an HTTP response.

13.2.5 Tag Library Descriptors Must Be Under WEB-INF

You should carefully observe the JSP specification with respect to tag library descriptors, despite leniency in previous OC4J implementations.

The existing specification allows tag library descriptors only under *application_root*/WEB-INF/ for a given application.

In practice, in the OC4J 9.0.4 implementation (and previous implementations), tag library descriptors have been accepted anywhere under *application_root*, despite the requirements of the specification.

In implementations under development, the specification is strictly enforced. Tag library descriptors are allowed only under WEB-INF.

13.2.6 Adding Tag Library JAR Files to /WEB-INF/lib While OC4J Is Running

If you are adding tag library JAR files to the /WEB-INF/lib directory while OC4J is running, then set tags_reuse_default to "none" or "compiletime" to avoid a ClassCastException.

13.2.7 Search Local Classes First

If you are using tag library JAR files at the application level that are intended to supersede JAR files in the well-known tag library location (global level), then you must set the application loader to search local classes first. You can do this through the following setting in your application's orion-web.xml file:

```
<web-app-class-loader search-local-classes-first="true" />
```

13.2.8 java.lang.ClassFormatError: (Truncated Class File)

A JSP error message such as the example shown below indicates a truncated class file.

Some conditions in which this can occur include the following:

- You are using JSP in a portal environment.

- The computer is heavily loaded.

Use one of the following techniques to repair the error:

- Use touch on the JSP file to cause the JSP to be recompiled.

- Remove the corrupted class file, as indicated by the "/modules/location/bizdir/jsp/bizdir.jsp" listing in the error message example.

Truncated Class File Error Message Example

```
500 Internal Server Error
    OracleJSP:
    JSP Error:
------------------------------------------------------------------------------
    Request URI:/modules/location/bizdir/jsp/bizdir.jsp
    Exception:
    java.lang.ClassFormatError: _location/_bizdir/_jsp/_bizdir (Truncated class
file)
    at java.lang.ClassLoader.defineClass0(Native Method)
    at java.lang.ClassLoader.defineClass(ClassLoader.java:493)
    at java.security.SecureClassLoader.defineClass(SecureClassLoader.java:111)
    at oracle.jsp.app.JspClassLoader.loadClass(JspClassLoader.java:682)
    at java.lang.ClassLoader.loadClass(ClassLoader.java:255)
...
```

13.3 Release Notes for Servlets

This section describes release notes for servlets. It features the following topics:

- Section 13.3.1, "Cannot Invoke Classes Not in Packages"
- Section 13.3.2, "Servlet Invocation by Class Name Is Available During Development"
- Section 13.3.3, "Do Not Use Certain <orion-web-app> Attributes"

13.3.1 Cannot Invoke Classes Not in Packages

With JDK 1.4, you are not allowed to invoke a class if it is not in a package if you are calling it from a class that is not in a package. The JSP release notes, Section 13.2.1, "Cannot Invoke Classes That Are Not in Packages" describes this issue in detail.

13.3.2 Servlet Invocation by Class Name Is Available During Development

In OC4J, servlet invocation by class name is available as a convenience feature during development.

This feature is controlled through the `http.webdir.enable` system property or the `servlet-webdir` attribute of the `<orion-web-app>` element in either the `global-web-application.xml` file or the `orion-web.xml` file.

This feature is documented in the *Oracle Application Server Containers for J2EE Servlet Developer's Guide*.

In the OC4J 9.0.4 implementation, invocation by class name is enabled by default, through the default settings `http.webdir.enable=true` and `servlet-webdir="/servlet/"`.

In a production environment, you must disable this feature by setting either `http.webdir.enable=false` or `servlet-webdir=""` (empty quotes).

13.3.3 Do Not Use Certain <orion-web-app> Attributes

In the OC4J 9.0.4 implementation, the `<orion-web-app>` attributes `internationalize-resources` and `default-mime-type` appear in the `orion-web.dtd` file. However, these attributes are not documented and are not recommended for use.

13.4 Release Notes for EJB

This section describes release notes for EJBs. It features the following topics:

- Section 13.4.1, "Client Requests Must Include a Port Number"
- Section 13.4.2, "MDB Transaction Timeout"
- Section 13.4.3, "Create and Release JMS Connections for JMS in the MDB onMessage() Method"
- Section 13.4.4, "Considerations When Modifying Your orion-ejb-jar.xml File"
- Section 13.4.5, "Static Block in an EJB"
- Section 13.4.6, "OC4J Instances Terminating Due To ping Timeout"
- Section 13.4.7, "Miscellaneous EJB Release Notes"

13.4.1 Client Requests Must Include a Port Number

When you provide your URL on the client to access an EJB in the following form, you must always provide the port number. For example,

```
opmn:ormi://host:port:oc4j_inst/application
```

If you do not, then the `oc4j_inst` always defaults to the **home** instance. (bug 3234351).

13.4.2 MDB Transaction Timeout

The message-driven bean (MDB) transaction timeout, as defined in the `transaction-timeout` attribute in the `orion-ejb-jar.xml` file, is an optional parameter. This attribute controls the transaction timeout interval (in seconds) for any container-managed transactional MDB that uses Oracle JMS. The default is one day (86,400 seconds). The MDB `transaction-timeout` attribute applies only to CMT MDBs that use Oracle JMS as the JMS provider. This attribute setting has no effect on BMT MDBs or any MDBs that use OC4J JMS. (bug 3079322)

- JMS behavior with Oracle Application Server — If the transaction has not completed in this time frame, then the transaction is rolled back and the message is redelivered to the `Destination` object. After Oracle JMS attempts to redeliver the message (the default is five attempts), the message is moved to the exception queue. For more information, refer to the *Oracle9i Application Developer's Guide—Advanced Queuing for Release 2 (9.2)*.

- JMS behavior with OC4J — The transaction-timeout setting does not work for CMT MDBs that use OC4J JMS. The timeout is always one day and cannot be modified. When the timeout occurs, OC4J JMS redelivers the message indefinitely, until the delivery is successful. You cannot set a retry limit.

In addition, the global `transaction-timeout` attribute defined in the `server.xml` file does not have any effect on MDBs.

13.4.3 Create and Release JMS Connections for JMS in the MDB onMessage() Method

You must create and release the JMS connections for Oracle JMS in the MDB `onMessage()` method, and not in the `ejbCreate()` method. (bug 2967949).

13.4.4 Considerations When Modifying Your orion-ejb-jar.xml File

If you modify your `orion-ejb-jar.xml` file using the Oracle Enterprise Manager, then you must restart OC4J. Otherwise, if you are operating in the standalone environment and you modify your `orion-ejb-jar.xml` file using an editor, then you must repackage the application and redeploy it to OC4J without restarting. (bug 3001543)

13.4.5 Static Block in an EJB

During EJB deployment in OC4J, you load the bean class to find out its methods so that you can generate EJB wrappers. Because the code in the static block is executed as the class is being loaded, the JNDI environment context is not yet set up. Even during runtime, the bean is in the "does not exist" stage. In this stage of the life cycle, the JNDI environment context is undefined, and the bean provider cannot rely on it to be available.

To work around this problem, set up and cache the context either during the construction of the bean, in the `ejbCreate()` method, or in the `setSessionContext()` method.

13.4.6 OC4J Instances Terminating Due To ping Timeout

Under some conditions, the OPMN process monitoring software in Oracle Application Server may lose contact with an OC4J process. This can occur because of unexpected delays in the hearbeat protocol used by OPMN and OC4J to verify the proper functioning of the OC4J instance.

If this problem occurs sporadically, you can try increasing the ping timeout parameters as described in the following instructions.

However, if this occurs regularly, due to a consistent resource shortage, then you must increase the available hardware resources to solve the problem.

The following conditions can cause this problem:

- An overloaded host processor.

- One or more computation-intensive applications running in the OC4J instance.

- Deployment of applications with large numbers (hundreds) of EJBs. Full garbage collections of large heaps can cause the OC4J process to become less responsive during the garbage collection phase. Although this should not occur during normal usage, deployment of large applications with many EJBs in a memory-constrained environment can trigger this behavior.

You can configure the behavior of the "ping protocol" between OPMN and OC4J in the `opmn.xml` configuration file.

When OC4J exceeds the timeout intervals specified for the ping protocol, the process monitoring software decides that the OC4J process has stopped responding and, therefore, terminates the OC4J process.

If you suspect this behavior in an Oracle Application Server installation, then use the following steps to troubleshoot and work around:

1. When OC4J instances are "mysteriously" terminating, first increase diagnostic logging to determine if ping failures are triggering the termination:

   a. Increase the OPMN logging level to 5 so that you can see the pings.

      In `opmn/conf/opmn.xml`, edit the following line:

      ```
      log-file path="$ORACLE_HOME/opmn/logs/ipm.log" level="5" ...
      ```

   b. Reload the daemon.

      ```
      opmn/bin/opmnctl reload
      ```

2. Look in `opmn/logs/ipm.log` for the following line:

   ```
   Process Ping Failed:OC4J~<instance name>~default_island~1 (opmnid)
   ```

3. The line above indicates that the memory and CPU resources of the current host are probably not sufficient to perform the operation within the currently specified ping timeout interval (used by OPMN to determine OC4J "responsiveness").

Change the settings as follows:

a. Increase the timeout and interval.

Example:

```
<ping timeout="60" interval="60"/>"
<data id="reverseping-failed-ping-limit" value="5" />
```

b. Reload the daemon.

```
opmn/bin/opmnctl reload
```

c. Restart the appropriate OC4J instance.

4. Repeat the top-level operation that caused the timeout failure.

13.4.7 Miscellaneous EJB Release Notes

- You cannot mark a Container-Managed Persistence (CMP) entity bean as read-only if it has a Container-Managed Relationships (CMR) relationship to another entity bean that is not read-only.

- If you invoke any EJB from an application client outside the EJB container, then Java Authentication and Authorization Service (JAAS) is not supported for the EJB. However, if you call the EJB from a servlet within the OC4J instance, then JAAS is supported.

- The container may call the `EJBActivate()` method multiple times when the bean is associated with several wrappers. (bug 3107168)

- If you access an EJB in an application from an EJB in a different application, then you cannot use the RMIInitialContextFactory object. In this scenario, you must use a parent-child relationship between these applications, and you must use the default initial context factory object. (bug 2812150)

- The JTA two-phase commit (2pc) function does not work with Oracle Database version 9.2. Instead, use Oracle Database version 9.2.0.4 or higher to enable the 2pc functionality. (bug 2668460)

- Currently, inline SQL queries are not supported within the finder query string defined in the orion-ejb-jar.xml file. When modifying these queries, avoid inline SQL queries, such as:

```
SELECT * FROM
     (SELECT * FROM TEST1) A,
        (SELECT * FROM TEST2) B WHERE A.ID =B.ID
```

13.5 Release Notes for OC4J Services

This section contains release notes for OC4J Services. It features the following topic:

- Section 13.5.1, "Release Notes for Java Object Cache (JOC)"

13.5.1 Release Notes for Java Object Cache (JOC)

This section describes release notes for the Java Object Cache (JOC). It describes the following topic:

- Section 13.5.1.1, "Use javacache.xml for JOC Configuration"

13.5.1.1 Use javacache.xml for JOC Configuration

The OC4J 9.0.4 implementation uses the file `javacache.xml` for JOC configuration. In previous versions of JOC, configuration was done through the file `javacache.properties`.

> **Note:** f you install both a 9.0.4 release and a pre-9.0.4 release on the same host, you must ensure that the `javacache.xml` `discovery-port` attribute and the `javacache.properties` `discoveryAddress` attribute are not configured to the same port. If they are, you must manually change the value of one or the other to a different port number, in the range of 7000 - 7099.

13.6 Release Notes for DataDirect Connect for JDBC

This section contains release notes for DataDirect Connect for JDBC.

For additional information, refer to the following manuals:

- *Oracle Application Server Containers for J2EE Services Guide*
- *DataDirect Connect for JDBC User's Guide and Reference*

13.6.1 Considerations When Using DataDirect Connect for JDBC

A customized version of DataDirect Connect for JDBC is shipped with Oracle Application Server to provide connectivity to non-Oracle databases. Do not use the DataDirect Connect for JDBC driver outside of Oracle Application Server.

This section describes important differences between the customized DataDirect Connect for JDBC driver and the standard version.

- The customized DataDirect driver JAR file names use the `YM` prefix. The following DataDirect JAR files are distributed with Oracle Application Server:

  ```
  YMbase.jar
  YMinformix.jar
  YMsqlserver.jar
  YMutil.jar
  YMdb2.jar
  YMsybase.jar
  ```

- The URL subprotocol prefix is `oracle`. When you connect, use the correct subprotocol. For example:

  ```
  jdbc:oracle:db2://server1:1433
  ```

- The vendor message prefix is `[oias]`.

- The customized DataDirect driver is configured to run within Oracle Application Server. Attempting to use the customized DataDirect JDBC driver outside Oracle Application Server yields the following exception:

  ```
  java.sql.SQLException: [oias][... JDBC Driver]
  ```

13.6.2 Installing DataDirect Connect for JDBC

This section provides information for installing DataDirect Connect for JDBC.

Refer to the *Oracle Application Server Containers for J2EE Services Guide* for additional detail on setting up DataDirect with Oracle Application Server or OC4J.

Install

The DataDirect driver is a ZIP file available at: `http://otn.oracle.com/` under the Oracle Application Server download area.

Unzip the DataDirect package as follows:

- On Linux, Solaris, and HP-UX, run the following command:

  unzip *Data-Direct-Installation-Zip-File*

- On Windows, use WinZip or a similar tool to unzip the DataDirect package.

> **Note:** n the following instructions, note these definitions:
>
> - n a standalone OC4J environment, unzip the file `oc4j_extended.zip` into the *oc4j_install* directory.
>
> - In an Oracle Application Server installation, *oc4j_install* is your Oracle home directory.
>
> - In both a standalone OC4J and an Oracle Application Server environment, unzip the DataDirect JDBC drivers into the *ddjd_install* directory.
>
> - In a standalone installation, *instance_name* is `home`. In an Oracle Application Server installation, *instance_name* is the OC4J instance into which you wish to install the DataDirect JDBC drivers.

Set up DataDirect according to the following instructions:

1. Unzip the contents of the DataDirect JDBC drivers to the directory *ddjd_install*.

2. If it does not already exist, create the directory *oc4j_install*/j2ee/*instance_name*/applib.

3. Copy the DataDirect JDBC drivers in *ddjd_install*/lib to the following directory: *oc4j_install*/j2ee/*instance_name*/applib.

4. Verify that the file `application.xml` contains a library entry that references the `j2ee/home/applib` location, as follows

   `<library path="../../instance_name/applib" />`

5. Add data sources to the file `data-source.xml` as described in the following examples, taken from the *Oracle Application Server Containers for J2EE Services Guide*.

Example DataDirect Data Source Entries

This section shows an example data source entry for each of the following non-Oracle databases:

- SQLServer
- DB2
- Sybase

> **Note:** The OC4J 9.0.4 implementation does not work with non-Oracle data sources in the nonemulated case. That is, you cannot use a non-Oracle data source in a two-phase commit transaction.

You can also use vendor-specific data sources in the class attribute directly. That is, it is not necessary to use an OC4J-specific data source in the `class` attribute.

SQLServer

Here is a data source configuration example for a SQLServer database.

```
<data-source
class="com.evermind.sql.DriverManagerDataSource"
name="MerantDS"
location="jdbc/MerantCoreSSDS"
xa-location="jdbc/xa/MerantSSXADS"
ejb-location="jdbc/MerantSSDS"
connection-driver="com.oracle.ias.jdbc.sqlserver.SQLServerDriver"
username="test"
password="secret"
url="jdbc:sqlserver//hostname:port;User=test;Password=secret"
inactivity-timeout="30"
/>
```

DB2

Here is a data source configuration example for a DB2 database:

```
<data-source
class="com.evermind.sql.DriverManagerDataSource"
name="MerantDS"
location="jdbc/MerantDB2DS"
xa-location="jdbc/xa/MerantDB2XADS"
ejb-location="jdbc/MerantDB2DS"
connection-driver="com.oracle.ias.jdbc.db2.DB2Driver"
username="test"
password="secret"
url="jdbc:db2://hostname:port;LocationName=jdbc;CollectionId=default;"
inactivity-timeout="30"
/>
```

Sybase

Here is a data source configuration sample for a Sybase database:

```
<data-source
class="com.evermind.sql.DriverManagerDataSource"
name="MerantDS"
location="jdbc/MerantCoreSybaseDS"
xa-location="jdbc/xa/MerantSybaseXADS"
ejb-location="jdbc/MerantSybaseDS"
connection-driver="com.oracle.ias.jdbc.sybase.SybaseDriver"
username="test"
password="secret"
url="jdbc:sybase://hostname:port;User=test;Password=secret"
inactivity-timeout="30"
/>
```

13.7 Documentation Errata

This section describes known errors in the OC4J documentation in Oracle Application Server 10g (9.0.4). It features the following topics:

- Section 13.7.1, "Servlet Developer's Guide Errata"
- Section 13.7.2, "Support for JavaServer Pages Developer's Guide Errata"
- Section 13.7.3, "OC4J User's Guide Errata"

13.7.1 Servlet Developer's Guide Errata

This section describes errata in the *Oracle Application Server Containers for J2EE Servlet Developer's Guide*.

13.7.1.1 The OC4J 9.0.4 JSP Container Supports the persistence-path Flag

The following note, which appears on page 6-6 of the 9.0.4 version of the *Oracle Application Server Containers for J2EE Servlet Developer's Guide*, is incorrect:

"Note: The OC4J JSP container does not currently support the persistence-path flag. It is for servlets only."

This flag actually is supported by the JSP container in the Oracle Application Server 10g (9.0.4) release.

13.7.2 Support for JavaServer Pages Developer's Guide Errata

This section describes errata in the *JavaServer Pages Developer's Guide*. It features the following topic:

- Section 13.7.2.1, "mod_oc4j Does Not Restart OC4J Processes"

13.7.2.1 mod_oc4j Does Not Restart OC4J Processes

The following item, which appears in the "Oracle HTTP Server and mod_oc4j" section in Chapter 2 of the *Oracle Application Server Containers for J2EE Support for JavaServer Pages Developer's Guide*, is incorrect:

"A mod_oc4j module can restart an OC4J instance automatically, if necessary."

In fact, OPMN, not `mod_oc4j`, restarts OC4J processes automatically when it detects that they are unavailable (for several reasons).

13.7.3 OC4J User's Guide Errata

This section describes known errors in the *Oracle Application Server Containers for J2EE User's Guide*. It features the following topic:

- Section 13.7.3.1, "End to End Test Results for Metrics Load Balancing"

13.7.3.1 End to End Test Results for Metrics Load Balancing

Add the following information to the *Oracle Application Server Containers for J2EE User's Guide*, Appendix A, "Additional Information". In the section "Elements Contained Within <application-server> of the server.xml file", add the following text describing the `<metric-collector>` element.

`<metric-collector>`

The `<metric-collector>` element specifies that OC4J sends a metric between 0 and 100, inclusive, to `mod_oc4j` so that `mod_oc4j` can make routing decisions to load-balance incoming requests to a list of available OC4J instances. The metric sent has a relative value only, where 0 means that the OC4J instance is very busy and 100 means that the OC4J instance is available (not busy). When configured for metric load balancing, `mod_oc4j` routes first to the OC4J instance with the greater value.

The metric sent from OC4J to `mod_oc4j` is used only when metric-based load balancing is specified for `mod_oc4j` and when OC4J runs in an Oracle Application Server environment.

If you specify metric-based load balancing in `mod_oc4j` and do not specify the `<metric-collector>` element in `server.xml`, then `mod_oc4j` expects OC4J to send metrics, but OC4J does not send metrics. In this case, `mod_oc4j` reports the following warning message:

```
No run time metrics for oc4j(opmnid=%s) in notification
Oc4jSelectMethod is configured to use run time metrics, please
make sure OC4J side is configured accordingly. Default to 50.
```

In this case, `mod_oc4j` uses the value 50 for each of the OC4J processes and continues.

Likewise, if you specify the `<metric-collector>` element in `server.xml`, but do not specify metric-based load balancing in `mod_oc4j`, then OC4J sends metrics but `mod_oc4j` is not configured to receive metrics. In this case, `mod_oc4j` ignores the metrics and uses whatever the configured method is for load balancing. You specify the load balancing method with `Oc4jSelectMethod`. If no `Oc4jSelectMethod` is specified, then `mod_oc4j` uses the default, which is `roundrobin`.

The `<metric-collector>` element takes the following attribute: `classname`.

The `classname` attribute defines an interface for gathering and calculating a server-wide metric. Use `oracle.oc4j.server.DMSMetricCollector` for the `classname` attribute when using a DMS-noun-based metric collector. A `DMSMetricCollector` instance takes several parameters. Details for the values for these parameters are available in the *Oracle Application Server 10g Performance Guide*.

For example:

```
<metric-collector classname="oracle.oc4j.server.DMSMetricCollector">
   <init-param>
     <param-name>
        dms-noun
     </param-name>
     <param-value>
        /oc4j/default/WEBs/processRequest.time
    </param-value>
   </init-param>
   <init-param>
     <param-name>
        history-proportion
     </param-name>
     <param-value>
        0.2
     </param-value>
   </init-param>
   <init-param>
     <param-name>
        debug
     </param-name>
     <param-value>
        false
     </param-value>
   </init-param>
</metric-collector>
```

For details on using the `<metric-collector>` element and using metric-based load balancing with `mod_oc4j`, see the *Oracle Application Server 10g Performance Guide*.

Index