Welcome to Oracle Application Server 10g (10.1.2) Forms and Reports Services. This document contains information that is specific for installing, configuring, and using Oracle Application Server 10g (10.1.2) Forms and Reports Services:

- Section 1, "Documentation Accessibility"
- Section 2, "About This Installation Type"
- Section 3, "Certification Information"
- Section 4, "Available Features with This Installation Type"
- Section 5, "Before You Start Installing Software"
- Section 6, "Other Sources of Information"
- Section 7, "General Issues"
- Section 8, "Oracle Forms Issues"
- Section 9, "Oracle Reports"

1 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. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at http://www.oracle.com/accessibility/.

Accessibility of Code Examples in Documentation

Screen readers 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, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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TTY Access to Oracle Support Services
Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, seven days a week. For TTY support, call 800.446.2398.

2 About This Installation Type
Oracle Application Server Forms and Reports Services allows you to install and configure Forms and Reports Services without the need to install and configure all of Oracle Application Server 10g.

This type of installation is suited best for users who want to upgrade Forms applications to the Grid environment in two phases. In phase one, they move to the Grid environment by upgrading their client server based Forms applications to Web-based ones. In phase two, users can then choose to use the services offered by an existing Oracle Application Server Infrastructure upgrade.

2.1 Restrictions with This Installation Type
Oracle Application Server Forms and Reports Services provides no Infrastructure service, such as Single Sign-On or Identity Management integration. However, Infrastructure services are available by upgrading your instance to use the services of an existing infrastructure, or install a new one.

Once you configure Forms and Reports Services to use the services of an OracleAS infrastructure, you cannot reverse this configuration.

3 Certification Information
The Microsoft Windows 32-bit software is certified on the following 64-bit operating systems (AMD64/Intel EM64T):

- Windows XP Professional x64 Edition
- Windows Server 2003, Standard x64 Edition
- Windows Server 2003, Enterprise x64 Edition
- Windows Server 2003, Datacenter x64 Edition

Note: All products and components except OracleAS Infrastructure are certified on AMD64 and Intel EM64T processors.

The latest certification information for Oracle Application Server 10g Release 2 (10.1.2) is available at:

http://metalink.oracle.com/
4 Available Features with This Installation Type

When you install Oracle Application Server Forms and Reports Services, you’ll have access to these features:

- Oracle Application Server Forms Services
- Oracle Application Server Reports Services
- Oracle HTTP Server
- Oracle Application Server Web Cache
- Oracle Containers for J2EE (OC4J)
- Oracle Enterprise Manager
- Oracle Process and Management Notification (OPMN)
- Distributed Configuration Management (DCM)

4.1 Oracle Application Server Forms Services

Oracle Application Server Forms Services deploys Forms applications with database access to Java clients in a Web environment. Oracle Application Server Forms Services automatically optimizes class downloads, network traffic, and interactions with Oracle database. Applications are automatically load-balanced across multiple servers and, therefore, can easily scale to service any number of requests.

4.2 Oracle Application Server Reports Services

Oracle Application Server Reports Services provides an easy-to-use, scalable, and manageable solution for high-quality database publishing and reporting by creating dynamic reports for the Web and across the enterprise. It enables you to implement a multitiered architecture for running your reports.

4.3 Oracle HTTP Server

Oracle HTTP Server is the Web server that Oracle Application Server uses, which is built on Apache Web server technology. Oracle HTTP Server offers scalability, stability, speed, and extensibility. It also supports Java servlets, Java Server Pages (JSPs), Perl, PL/SQL, and CGI applications.

4.4 Oracle Application Server Web Cache

Oracle Application Server Web Cache is a server accelerator caching service that improves the performance, scalability, and availability of frequently used e-business Web sites that run on the Oracle platform. By storing frequently accessed URLs in virtual memory, Oracle Application Server Web Cache eliminates the need to repeatedly process requests for those URLs on the Web server, and it caches both static and dynamically-generated HTTP content from one or more applications Web servers.
4.5 Oracle Containers for J2EE (OC4J)
Oracle Application Server Containers for Java is a complete set of J2EE containers written entirely in Java that execute on the Java Virtual Machine (JVM) of the standard Java Development Kit (JDK).

4.6 Oracle Enterprise Manager
Oracle Enterprise Manager Application Server Control (from here on Application Server Control) provides you with the management tools you need to monitor and administer Oracle Application Server instances. Application Server Control is installed with every instance of Oracle Application Server.

Application Server Control provides Web-based management tools designed specifically for Oracle Application Server. Using Application Server Control, you can monitor and configure components of your application server. You can deploy applications, manage security, and create and manage Oracle Application Server clusters.

Application Server Control consists of the following:

- The Enterprise Manager Home pages you use to manage Oracle Application Server and its components: These Web pages provide you with a high-level view of your Oracle Application Server environment. From these pages you can drill down for more detailed information on administration, configuration, and performance monitoring. These pages allow you to administer the application server and its components and deployed applications.

- The underlying software technologies that keep track of your application server instances and components: These technologies automatically perform many management tasks. For example, they discover the components of each application server instance, gather and process performance data, and provide access to application configuration information.

Application Server Control is installed as part of the Oracle Application Server installation process.

4.7 Oracle Process and Management Notification (OPMN)
Oracle Process Manager and Notification Server (OPMN): OPMN provides process control and monitoring for application server instances and their components. It gathers component status information, and distributes the status information to components that are interested in it. The Application Server Control uses OPMN for such tasks as starting and stopping the components of your application server instance.

4.8 Distributed Configuration Management (DCM)
Distributed Configuration Management (DCM): DCM manages configurations among application server instances that are associated with a common Metadata Repository. It enables Oracle Application Server cluster-wide deployment so you can deploy an application to one instance and have it automatically propagated to the entire cluster. You can also make a single host or instance configuration change to one instance and have it propagated across all instances in the cluster. Application Server Control uses DCM to make configuration changes and to propagate configuration changes and deployed applications across the cluster.
5 Before You Start Installing Software
Before starting the software installation, please take the time to read the following documents:

1. Read this document first, which includes Release Notes for Oracle Application Server Forms Reports Services.

2. Read the Oracle Application Server 10g (10.1.2) Forms and Reports Services Installation Guide.
   This document explains what you need to know and to do when installing this installation type.

3. If you are upgrading from Oracle Forms 6i to Oracle Forms 10g, visit the Oracle Forms upgrade center at http://www.oracle.com/technology/products/forms/.

6 Other Sources of Information
The following sources provide additional information:

■ Online help, available in Oracle Forms Developer, Oracle Reports Developer, and Oracle Enterprise Manager
■ Oracle Application Server Forms Services 10g Deployment Guide
■ Oracle Forms Migration Guide
■ Oracle Application Server Reports Services Publishing Reports to the Web
■ Oracle Application Server 10g Concepts
■ Oracle Application Server 10g Administrator’s Guide
■ Oracle Application Server 10g Release Notes
■ Oracle Technology Network (http://www.oracle.com/technology/products/forms/).

7 General Issues
The non-English Welcome pages files have some of the links coded incorrectly, as they point to .html instead of .htm. The workaround is that, if you click on a link and you get the Not Found page, to change the extension in the address bar to .htm instead of .html.

8 Oracle Forms Issues
This section describes issues associated with Oracle Forms. It includes the following topics:

■ Section 8.1, "General Issues and Workarounds"
■ Section 8.2, "Configuration Issues and Workarounds"
■ Section 8.3, "Documentation Errata"
8.1 General Issues and Workarounds

This section describes general issues and workarounds. It includes the following topics:

- Section 8.1.1, "Backwards Compatibility with Earlier Releases"
- Section 8.1.2, "Windows Issues and Workarounds"

8.1.1 Backwards Compatibility with Earlier Releases

For information about upgrading from Oracle6i Forms, see the "Upgrading to Oracle AS Forms Services" chapter in Oracle Application Server Forms Services Deployment Guide. For information about changed or obsolete features, see the Migrating Forms Applications from Forms6i guide.

For information about upgrading from Oracle9i Forms, you can use the Upgrade Assistant. see the Oracle Application Server Upgrade and Compatibility Guide. Additional information about backwards compatibility is MetaLink Note 113987.1 at http://metalink.oracle.com/.

Regardless from which version of Oracle Forms you are upgrading, you will need to recompile your applications and restart Oracle Forms.

8.1.2 Windows Issues and Workarounds

This section contains issues related to Oracle Forms and Windows:

- Section 8.1.2.1, "Availability of JACOB Libraries for WebUtil"
- Section 8.1.2.2, "Java Related Dialogs And Windows Are Not Read By JAWS"
- Section 8.1.2.3, "Location of JAWS Scripts"
- Section 8.1.2.4, "Internet Explorer Hangs When Exiting The Form and Closing Browser"

8.1.2.1 Availability of JACOB Libraries for WebUtil

You can download the latest version of the JACOB libraries from http://prdownloads.sourceforge.net/jacob-project/.

8.1.2.2 Java Related Dialogs And Windows Are Not Read By JAWS 3032246

You need to add access-bridge.jar and jaccess-1_3.jar to CLASSPATH.

8.1.2.3 Location of JAWS Scripts

JAWS scripts are now installed with Oracle Forms. The location for these scripts is ORACLE_HOME/forms/ScreenReader/, and are also available at Oracle Technology Network (OTN) at http://www.oracle.com/technology/products/.

8.1.2.4 Internet Explorer Hangs When Exiting The Form and Closing Browser 4522661

With the JDK 1.5 plug-in on Windows XP Client and IE browser, the browser hangs when exiting the Form and closing the browser. This is a known issue in the Sun Java Plug-in and will be fixed in a future release of the Sun Java Plug-in.

8.2 Configuration Issues and Workarounds

This section describes configuration issues and their workarounds. It includes the following topics:
8.2.1 Set EM_MODE to 1 for Metrics To Be Collected In Enterprise Manager Grid Control

Set the EM_MODE parameter in formsweb.cfg to 1 for metrics to be collected by Grid Control. The default value of this parameter is set to 0.

8.2.2 Non-Internet Explorer Browser Proxy Settings when Using One-Button-Run

If you encounter a FORBIDDEN error when using One-Button-Run with any of the supported Browsers other than Internet Explorer, verify if 127.0.0.1 (localhost) is in the proxy settings for your browser. If 127.0.0.1 is not in the exceptions list, then add it. This ensures that the browser will bypass the proxy server.

8.2.3 Change to Default Setting for FORMS_RESTRICT_ENTER_QUERY Environment Variable

The environment setting FORMS_RESTRICT_ENTER_QUERY has a default value of TRUE. This setting disallows users from using QUERY-WHERE functionality until it is set to FALSE.

8.2.4 PJC Wizard Now Part of Oracle Forms

With Oracle Forms 10.1.2 and higher, the Forms PJC Wizard is part of the standard Forms installation. The PJC Wizard works with JDeveloper 10g (10.1.2) that is part of Oracle Developer Suite 10g. For versions of JDeveloper that are obtained from OTN, the PJC wizard is available as a separate Jar file to download and place into your JDeveloper installation.

8.2.5 Exception When Clicking Other Items While Inputting Multibyte Characters

In CJK languages, the Forms client may stop responding when clicking another item while inputting text through inline IME. As a workaround, disable the inline IME. See section 4.10.2, “Inline IME Support” in Oracle Application Server Forms Services Deployment Guide. This issue will be fixed in a future patch set.
8.2.6 JDK 1.4.2_06 Plug-in Not Installed When Running a Form on the Web for the First Time

The Install JDK 1.4.2 dialog appears when running a Form on the Web for the first time. When you click Install, the JDK 1.4.2 Plug-in is installed instead of the JDK 1.4.2_06 Plug-in. If you're attempting to use the JDK 1.4.2 plug-in from Internet Explorer, and it isn't currently installed on your machine, it will download the wrong version. The workarounds are:

- Modify formsweb.cfg by finding:
  
  jpi_codebase=http://java.sun.com/products/plugin/autodl/jinstall-1_4_2-windows-i586.cab#Version=1,4,2,06

  and change it to:
  
  jpi_codebase=http://java.sun.com/products/plugin/autodl/jinstall-1_4_2_06-windows-i586.cab#Version=1,4,2,06.

- Run the Form (for the first time) from Netscape, which will go to the correct location for the download.

- Go to the correct location and manually install the JDK 1.4.2_06 Plug-in.

8.2.7 CLOB Data Cannot be Retrieved When Query Data More Than Max Width

When using Japanese NLS_LANG (JA16Sjis, JA16EUC etc.) if the queried CLOB data is longer than the maximum length (240 bytes by default) of the Text Item corresponding to this CLOB data, the query fails at runtime. The issue is that the CLOB data is correctly truncated with the maximum length of the Text Item (240 bytes by default) in English NLS_LANG, but not in Japanese NLS_LANG.

This issue may also raise "FRM-40505: ORACLE error: unable to perform query" on Windows.

As a workaround, extend the maximum length of the Text Item to fit the length of the CLOB data.

8.2.8 ORACLE_HOME Value Not Replaced In workingDirectory In formsweb.cfg

The OracleAS Upgrade Assistant does not replace any references to the source ORACLE_HOME with the destination ORACLE_HOME in the workingDirectory parameter in formsweb.cfg.

As a workaround, after running the OracleAS Upgrade Assistant, replace the references to the source ORACLE_HOME with the location of the destination ORACLE_HOME for the workingDirectory parameter in formsweb.cfg.

8.2.9 Monitoring CPU Usage and Response Time

On the System Component Tables in Enterprise Manager, the CPU and Memory statistics are collected every minute, by default. Note that this potentially can mean that any CPU spikes will not be displayed. In addition, if Forms server processes are dormant, awaiting client activity or requests, it is perfectly normal for the CPU usage to report 0.0%.

On the Forms Overview page, the CPU and Memory statistics are gathered each time the page is rendered when you click the Overview Tab or when you click the refresh icon next to the timestamp. However, due to an operating system restriction, if the Response Time from the Forms Servlet is less than 16ms, it will display as 0.00ms.
8.3 Documentation Errata
There is no reported issue for this revision of this document.

9 Oracle Reports
This section describes issues with Oracle Reports. It includes the following topics:

- Section 9.1, "General Issues and Workarounds"
- Section 9.2, "Vendor-Specific Issues and Workarounds"
- Section 9.3, "Globalization Support Issues and Workarounds"

See Also:
- Refer to the Oracle Reports 10g page on OTN, (http://www.oracle.com/technology/products/reports/index.html) for wide-ranging information about Oracle Reports, including a link to download the latest version of the Oracle Reports online Help.
- Your Oracle Application Server software ships with a standalone installation of Oracle Application Server Forms and Reports Services. Use this CD if you do not need all the functionality of the full Oracle Application Server installation. For more information, refer to the Oracle Application Server Forms and Reports Services Installation Guide available on your Documentation CD. Refer also to the Oracle Reports Technical FAQ on OTN for frequently asked questions about OracleAS Forms and Reports Services installation at http://www.oracle.com/technology/products/reports/htdocs/faq/faq_fr_services.htm.

9.1 General Issues and Workarounds
This section describes general issues and their workarounds for Oracle Reports. It includes the following topics:

- Section 9.1.1, "Enabling Backward Compatibility with 9.0.4"
- Section 9.1.2, "Using the New Auto Save Feature in Reports Builder"
- Section 9.1.3, "OracleAS Reports Services Demos Do Not Work If JServ Is Configured"
- Section 9.1.4, "Error While Editing Batch Registered Report in OracleAS Portal"
- Section 9.1.5, "Limitation on Linked Queries for DelimitedData Output"
- Section 9.1.6, "Summary Column Not Aligned for JSP-Based Web Reports with Group Above and Matrix Style"
- Section 9.1.7, "Images in HTML Output of Oracle Reports Not Displayed When Viewed from Oracle Enterprise Manager 10g"
- Section 9.1.8, "Misalignment in Large Multibyte Reports When Using the Enhanced Font Subsetting Feature with Acrobat Reader 7.0"
9.1.1 Enabling Backward Compatibility with 9.0.4
Oracle Reports 10g Release 2 (10.1.2) replaces the use of Borland VisiBroker with Sun Microsystems industry-standard Java Developer's Kit Object Request Broker (JDK ORB), providing support for Reports Server requests from clients across subnets, and using the broadcast mechanism for dynamic Reports Server discovery, both within a subnet and across subnets. For information about the changes related to JDK ORB, refer to the Oracle Application Server Reports Services Publishing Reports to the Web manual.

For releases prior to 9.0.4.3, you must apply the patch issued for 9.0.4.2 to achieve ORB backward compatibility between Oracle Reports (9.0.4) client and 10g Release 2 (10.1.2) server, or vice versa. Beginning with 9.0.4.3, the patch is included in the installation.

Platform-specific details for this patch are provided in bug 4092150.

9.1.2 Using the New Auto Save Feature in Reports Builder
Oracle Reports 10g Release 2 (10.1.2) introduces the Auto Save feature, which recovers unsaved changes in the case of an unexpected event of Reports Builder or system fail. When Auto Save is enabled, Reports Builder can automatically recover unsaved changes in open reports.
To enable the Auto Save functionality, you must perform the following steps:

1. In Reports Builder, select Edit, and then select Preferences to display the Preferences dialog box.

2. In the Preferences dialog box, on the General tab, select Auto Save.

Alternatively, you can enable the Auto Save functionality by modifying the Reports.auto_save property in the preferences file, cauprefs.ora for Windows or prefs.ora for UNIX platforms. Modify the file as follows:

```
Reports.auto_save = [YES|NO]
DEFAULT: NO
```

**Usage Notes**

- When Auto Save is enabled, any modifications done in the reports that are open are saved automatically in temporary recovery files at various events originating from menu, toolbar, tool palette, object navigator, property inspector, and other editor windows in Reports Builder.

- For a new report definition, Auto Save is enabled only after the report is saved the first time.

- After you save your report, Reports Builder deletes the current recovery file. Even if you just recovered unsaved changes, Reports Builder deletes the recovery file when you save the report.

- The temporary recovery file is created and saved in .rdf format in the same location as that of the original definition file. The format of recovery files is reportname_extension.rdf. For example, the recovery file of an original definition file, emp.jsp, would be emp_jsp.rdf. The emp_jsp.rdf file is saved in the same location as the emp.jsp file.

- If you reopen a previously unsaved report definition file for which a recovery file exists, then Reports Builder prompts you to save the changes. The recovery file contains the changes made until the last Auto Save event. After the changes are recovered, you must select the Save or Revert option. The Save option writes the unsaved previous changes to the original report definition file. The Revert option does not save the recovered changes. Reports Builder deletes the recovery file when you close the report.

- If an error occurs when autosaving the recovery file, then Reports Builder prompts you to disable Auto Save or continue with the error.

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**Note:** When Auto Save is enabled, Reports Builder assumes that the recovery file contains changes made since the last save of the report definition file. Before you choose to save the recovery file, you must ensure that the recovery file contains your latest changes. If the original report definition file is a later version than the recovery file, then you can choose to revert to the original report definition, so that you do not overwrite it with the changes read from the recovery file.

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**9.1.3 OracleAS Reports Services Demos Do Not Work If JServ Is Configured**

To run OracleAS Reports Services demos successfully, do not configure Apache JServ on the computer where OracleAS Reports Services is installed.
9.1.4 Error While Editing Batch Registered Report in OracleAS Portal
If you batch register a report in OracleAS Portal, then subsequently manually edit the report’s registration in OracleAS Portal, you may encounter an unexpected Save As dialog box during the manual editing process.

To work around this issue, specify the Display Name property while editing the report’s registration in OracleAS Portal.

Refer to the *Oracle Application Server Reports Services Publishing Reports to the Web* manual for information on how to register a report with OracleAS Portal.

9.1.5 Limitation on Linked Queries for DelimitedData Output
DelimitedData output does not allow multiple queries to be linked to the main query, because sibling groups are not supported.
For example:

Case 1: You have a link between Q1 and Q2, a link between Q2 and Q3, and a standalone Q4 query.

\[ Q1 \leftrightarrow Q2 \leftrightarrow Q3 \quad Q4 \]

In this case, DelimitedData output is generated correctly.

Case 2: You have a link between Q1 and Q2, a link between Q2 and Q3, and a link between Q4 and Q1.

\[ Q1 \leftrightarrow Q2 \leftrightarrow Q3 \quad Q1 \leftrightarrow Q4 \]

In this case, DelimitedData output is not generated correctly. Alternatively, you can use XML output.

### 9.1.6 Summary Column Not Aligned for JSP-Based Web Reports with Group Above and Matrix Style

If any summary column values are not correctly left-aligned in the output of JSP-based Web reports with a Group Above or Matrix style, then you can implement the following workaround to get proper alignment:

- Open the JSP report in Reports Builder.
- Select the **Web Source** view.
- In the Web Source view, locate the section where the summary column is defined, and delete the following line to remove the extra space:

```html
<th class="summary_column_name"> </th>
```

### 9.1.7 Images in HTML Output of Oracle Reports Not Displayed When Viewed from Oracle Enterprise Manager 10g

If OracleAS Web Cache is configured as SSL-enabled and Oracle HTTP Server is not, then the images in the HTML output of Oracle Reports is not displayed when viewed from Oracle Enterprise Manager 10g. This is because the image URLs mentioned in the HTML output points to OracleAS Web Cache ports, which are SSL-enabled, whereas the request for past job outputs of Oracle Reports from Oracle Enterprise Manager 10g is non-SSL.

To work around this issue, edit the Servlet property of the URL in the targets.xml file for Reports Server type such that it points to the OracleAS Web Cache port instead of the Oracle HTTP Server port. The targets.xml file is available at `ORACLE_HOME/sysman/emd` directory.

For example, if your OracleAS Web Cache is SSL-enabled and the listening port number is 443, then the Servlet property of the URL for the Reports Server target in the targets.xml file should be as shown in the following example:

```xml
<Target TYPE="oracle_repserv" ...

......

<Property NAME="Servlet" VALUE="https://xyz.mycompany.com:443/reports/rwservlet"/>

......

</Target>
```
9.1.8 Misalignment in Large Multibyte Reports When Using the Enhanced Font Subsetting Feature with Acrobat Reader 7.0

If you use Acrobat Reader 7.0 to view multibyte and unicode PDF reports that use enhanced font subsetting feature (default) and the report size is very large, then some of the characters displayed will not be aligned properly.

To work around this issue, you can do either of the following:

■ Set the environment variable REPORTS_ENHANCED_SUBSET to NO to revert to the Type 3 font subsetting implementation used in releases prior to Oracle Reports 10g Release 2 (10.1.2).

■ Use Acrobat Reader 6.0 or earlier.

9.1.9 Incorrect Color for Multiline Text in Paper Design View When Inline HTML Tags Are Used

If any of the following conditions are present, then the text in the Paper Design view of Reports Builder may display in an incorrect color:

■ A text object includes multiline text, which wraps beyond the first line.

■ The text object’s Contains HTML Tags property is set to Yes.

■ More than one color is applied to different parts of the multiline text.

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**Note:** This issue is shown in the Paper Design view only. The report output in all other output formats show correct colors.

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9.1.10 PL/SQL Compilation Failure When Using SQL Constructs

PL/SQL compilation may fail if you use SQL constructs in your reports and if the following conditions are present:

■ The SQL constructs were introduced in Oracle Database versions after 9.0.1, for example, `ROW_NUMBER()`.

■ The SQL constructs are used in client side PL/SQL procedures.

To work around this issue, you can do any of the following:

■ Use Oracle Database Release 10.1.0.4 or later.

■ Move those SQL constructs to the server-side stored procedures.

■ Use the SQL constructs within SQL queries directly instead of procedures.

9.1.11 PL/SQL Package Specification and/or Body Lost When Saving Report As XML

For a report developed in a release prior to Oracle Reports 10g Release 2 (10.1.2) patch 2, you may encounter the following issue when saving the report in XML format: if the report defines a PL/SQL package, the package specification, and sometimes the body, is not saved in the XML report. To resolve this issue, perform either of the following steps:

■ If the RDF exists, regenerate the XML output file using Oracle Reports 10g Release 2 (10.1.2) patch 2 or later.
If the RDF does not exist, edit the XML manually to add type="packageSpec" and/or type="packageBody" to the function element, as shown in the following example:

```xml
<programUnits>
  <function name="a" type="packageSpec">
    <textSource><![CDATA[
      PACKAGE a IS
      function lire return date ;
      END a;
    ]]>)
  </function>
  <function name="a" type="packageBody">
    <textSource><![CDATA[
      PACKAGE BODY a IS
      function lire return date is
      c2 date;
      begin
       c2 :=sysdate;
      return c2;
      end;
      END;
    ]]>)
  </function>
  <function name="cf_1formula" returnType="date">
    <textSource><![CDATA[
      function CF_1Formula return Date is
      aa date;
      begin
       --aa :=a.lire;
      end;
    ]]>)
  </function>
</programUnits>
```

9.2 Vendor-Specific Issues and Workarounds

This section describes vendor-specific issues and their workarounds for Oracle Reports. It includes the following topics:

- Section 9.2.1, "Underlines Do Not Display in HTMLCSS Output in Browser"
- Section 9.2.2, "JSP-Based Web Report with Large Number of Columns Generates JSP Compilation Error"
- Section 9.2.3, "Java AWT Windows Hangs with Specific Graphics Cards"

9.2.1 Underlines Do Not Display in HTMLCSS Output in Browser

In HTMLCSS output, underlines may not display in the browser if you use a custom style for a field object and apply both background color and underline as part of the style, as shown in the following example:

```
.ReportLevel {text-decoration:underline;color:blue; background-color:yellow}
```
This is a browser limitation. The browser cannot display underlines, with absolute positioning, for the fields that have both underline and background color applied to them.

9.2.2 JSP-Based Web Report with Large Number of Columns Generates JSP Compilation Error
When you run a JSP-based Web report with more than 149 columns, you may encounter the oracle.jsp.provider.JspCompileException error, as shown in the following example:

500 Internal Server Error
OracleJSP: oracle.jsp.provider.JspCompileException: Errors
...
6764 code too large for try statement catch( Throwable e)
(18 code too large public void _jspService(HttpServletRequest request,
HttpServletResponse response) throws java.io.IOException, ServletException)

This occurs due to a limitation in the Java language that does not enable compilation of Java files with large methods.

9.2.3 Java AWT Windows Hangs with Specific Graphics Cards
When you start Reports Server with rwserver.exe, the UI may not display and Reports Server may hang on computers with specific graphics cards (for example, ATI Rage XL PCI card). This occurs due to a problem with the UI mechanism used in Java.

As a workaround, start Reports Server with the JVMOPTIONS command line keyword set as shown in the following example:

rwserver SERVER=test JVMOPTIONS="-Dsun.java2d.noddraw=true"

Note: It is recommended that you start Reports Server from OPMN.

9.3 Globalization Support Issues and Workarounds
This section describes Globalization Support issues and their workarounds for Oracle Reports. It includes the following topics:

• Section 9.3.1, "Images Do Not Display Correctly in Turkish Environments"
• Section 9.3.2, "MS Mincho Font in PostScript Font Mapping Does Not Work When NLS_LANG is JA16EUC"
• Section 9.3.3, "Multibyte Reports Containing Oracle Object Types Hang Reports Builder"
• Section 9.3.4, "Reports Server's Job Status Messages in Application Server Control Contain Invalid Characters"
• Section 9.3.5, "ENVID Ignored While Detecting Duplicate Job"

9.3.1 Images Do Not Display Correctly in Turkish Environments
If you are running reports that include images and use advanced imaging in Turkish environments (when NLS_LANG is set to TURKISH_
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TURKEY.TR8MSWIN125 or TURKISH_TURKEY.WE8ISO8859P9), then set the environment variable REPORTS_OUTPUTIMAGEFORMAT=[PNG|GIF]. Alternatively, you can control the value in the reports request using the command line keyword OUTPUTIMAGEFORMAT=[PNG|GIF].

9.3.2 MS Mincho Font in PostScript Font Mapping Does Not Work When NLS_LANG is JA16EUC

When you deploy reports created with Reports Builder on Windows to a Solaris or LINUX Reports Server that has NLS_LANG set to JA16EUC, the PDF font mappings will not work. This happens if any one of the following fonts is used in the PostScript font mapping entry:

"<MS Mincho in JP>".....
"<MS PMincho in JP>".....

To work around this issue, you must perform one of the following tasks:

- Set NLS_LANG to JA16SJIS.
- Use MS Gothic instead of MS Mincho in PostScript font mappings when creating the reports.

9.3.3 Multibyte Reports Containing Oracle Object Types Hang Reports Builder

Reports Builder may stop responding when you run a multibyte report containing an embedded Oracle Object type.

This is a known issue.

9.3.4 Reports Server's Job Status Messages in Application Server Control Contain Invalid Characters

Oracle Reports status messages on the Job Status page in Application Server Control may contain invalid characters if the middle tier character set, NLS_CHARACTERSET (the third field of NLS_LANG) does not correspond to the encoding of the Reports Servlet response for the Servlet locale.

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**Note:** The middle tier’s default encoding can be different from the Servlet’s encoding. For example, when you set LANG to ja or ja_JP.eucJP, the default middle tier system encoding is EUC. However, in this locale, Reports Servlet messages are encoded in Shift_JIS. This is because default encoding for ja_JP is Shift_JIS in the servlet.

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Oracle Enterprise Manager 10g converts the messages from the middle tier’s NLS_CHARACTERSET to UTF8 resulting in invalid characters in the status messages on the Job Status page. For example, the Reports Servlet messages are encoded in Shift_JIS when the middle tier runs with LANG set to ja and NLS_LANG set to JAPANESE_JAPAN.JA16EUC. However, Oracle Enterprise Manager 10g assumes that the original message is in JA16EUC, and converts it to UTF8, which results in the display of invalid characters in the status messages.

9.3.5 ENVID Ignored While Detecting Duplicate Job

When detecting a new incoming request for a duplicate job where the job request includes the TOLERANCE keyword, Reports Server ignores the value of the
ENVID keyword. As a result, the job is marked duplicate of a previous job that was submitted with the same values for all keywords except ENVID.

The following example illustrates this issue:

<table>
<thead>
<tr>
<th>Report Request</th>
<th>Report</th>
<th>ENVID</th>
<th>TOLERANCE</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Japanese.rdf</td>
<td>JA</td>
<td>10</td>
<td>As expected</td>
</tr>
<tr>
<td>2</td>
<td>Arabic.rdf</td>
<td>UTF</td>
<td>10</td>
<td>As expected</td>
</tr>
<tr>
<td>3</td>
<td>Arabic.rdf</td>
<td>AR</td>
<td>10</td>
<td>Same as request 2 (incorrect)</td>
</tr>
</tbody>
</table>

In this example, request 4 is correctly marked as a duplicate of request 1 as both the requests use the same values for all keywords, including the ENVID keyword. However, request 3 is incorrectly marked as duplicate of request 2 because both requests use the same values for all keywords, except the ENVID keyword. As a result, the changed ENVID will not be accepted in request 3.

To work around this issue, either do not specify TOLERANCE on the command line or specify a dummy user parameter in the job request to differentiate the job requests in duplicate job detection.