

Troubleshooting Guide

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ORACLE

Introduction

In an Oracle9iAS installation, there are two tiers to keep in mind: the infrastructure tier and the application tier or middle tier. The application tier can be either the Oracle9iAS Portal installation or the Business Intelligence and Oracle9iAS Forms Services option. The infrastructure tier must be installed before the application tier. This paper will discuss how to test for a successful installation of Oracle9i Reports, some common problems and their potential solutions.

During the installation process, you can choose to automatically configure and start up the various applications. A common problem, which is noted in the Oracle9i Reports Release Notes, is an error during the Oracle9i Reports configuration. For further details, please see the Known Issues section below. Once the installation and initial configuration is complete, there are some simple steps to follow to test that your installation was successful.

Please note that this white paper will be updated regularly with new information. If you are running into an issue that we have not covered, please check <http://www.otn.oracle.com/products/reports> to see if you have the latest version of this paper.

Testing the Installation

There are two ways to test that Oracle9iAS Reports Services installed correctly. One way is to bring up the in-process Reports Server via the servlet. The other is to run the demonstration reports that are provided with the installation. Note that there is no need to manually start up the in-process Reports Server as it is started up automatically at the first request. Also, the process for the Reports Server will be a part of the Oracle9iAS HTTP Server process, so if you take a look at the Task Manager, you will not see a separate Report Server process.

Testing the Reports Server via the servlet.

1. Display the servlet help page using the following URL:

```
http://<server>:<port number>/reports/rwservlet/help
```

<server> = the machine name where your Oracle9iAS application tier resides.

<port number> = the port number of the HTTP listener for your application tier.

2. When help page displays valid servlet commands, use the following URL to show the in-process server's environment:

```
http://<server>:<port number>/reports/rwservlet/showenv
```

If you have Oracle Single Sign-on turned on, which by default is turned on by default after Oracle9iAS Reports Services is installed, you will be prompted for Oracle Single Sign-on userID and password. You can use the "orcladmin" user and password that was chosen on installation.

If both of these URLs display correctly, then you can move on to testing the demonstration reports as noted in the following section. If you run into any errors displaying these URLs, please see the Common Diagnostics section.

Testing the Reports Server via the Demonstration reports.

1. Oracle9i Reports provides test pages and reports you can run to test your installation. Display your Oracle9iAS default page by using the following URL in your browser:

```
http://<server>:<port number>/
```

<server> = the machine name where your Oracle9iAS application tier resides.

<port number> = the port number of the HTTP listener for your application tier.

For example: <http://jshimizu-pc1.us.oracle.com:7779/>

2. On the righthand side of the page, click the Demonstrations tab.

3. On the left side, click Business Intelligence and Oracle9i Forms in the list of installation options.
4. In the center of the page, click Oracle9iAS Reports Services to display the Oracle9i Reports Demo page.
5. On this page, you have a choice of running a JSP-based web report or a paper report. Click on either one.
6. Next, change the connect string to a valid database, then click Run.
7. The output from the test reports display in your browser.

Common Diagnostic steps

If you experience problems with the previously mentioned steps there is a list in the Known Issues section that could be related to your situation. The following are some generic steps to take:

1. If you have trouble accessing the rwservlet URLs, try to start the Reports Server from the command line in the same environment using the following command:

```
%> rwservlet name=<reports server name>
```

(If this command fails, you should see an error message that will help you address the problem.)

2. If starting the Reports Server from the command line doesn't work and does not show an error message, turn on the tracing in the configuration file, `$ORACLE_HOME/reports/conf/<reports server name>.conf`, by uncommenting the trace element:

```
<trace traceOpts="trace_all"/>
```

This element will create a trace file, `<reports server name>.trc` in `$ORACLE_HOME/reports/logs` that shows any errors that occurred during start up. For more details on the trace element, refer to the *Publishing Reports to the Web* manual with Oracle9iAS Reports Services.

3. Display the Oracle Enterprise Manager for the infrastructure tier and make sure all of the services are running.
4. Display the Oracle Enterprise Manager for the application tier and check that the Reports Server is up. Note: There is a known installation issue where the Reports Server appears to be down in the Oracle Enterprise Manager although it is really up. See the Known Issues section below for more details.

5. Check the logs for any errors.
 - The OPMN logs are located in:
\$ORACLE_HOME/opmn/logs
 - OC4J error logs are located in:
\$ORACLE_HOME/Apache/Apache/logs/
6. If you are having difficulty with using Oracle Single Sign-on for Oracle9iAS Reports, you can turn it off by doing the following:
 - a. Make a backup copy of your configuration file,
\$ORACLE_HOME/reports/conf/<your server>.conf.
The \$ORACLE_HOME is your applications tier ORACLE_HOME and <your server> will be the name of your default server, which was created upon installation.
 - b. Open the .conf file and delete the security element for the server. It looks something like:


```
<security id="rwSec"
class="oracle.reports.server.RWSecurity">
  <property name="securityuserid"
value="xxx" confidential="yes"
encrypted="yes"/>
</security>
```
 - c. For both the rwEng engine and rwURLEng entries, delete the security id="rwSec" property.
 - d. Bounce the process manager for the applications tier and retry.
7. If the problem is occurring in one type of a Web browser, try another, if there's a problem in Netscape, try Internet Explorer. You can also try different versions of these browsers.
8. Check the release notes located at <http://otn.oracle.com> for any related issues.
9. Ensure that all necessary operating system patches have been applied.

Useful log files

This section lists logfiles that may prove useful in determining where your problem lies. Note that \$ORACLE_HOME refers to either the infrastructure or application tier \$ORACLE_HOME, depending on where that particular service is installed.

- Oracle Process Manager (OPMN)
\$ORACLE_HOME/opmn/logs
- Apache (OC4J)
\$ORACLE_HOME/Apache/Apache/logs

- Reports Services
 `$ORACLE_HOME/reports/logs`

Note, Oracle9iAS Reports Services logs are not generated automatically. See Step 2 in this section for instructions about turning on tracing.

Known issues

Reports Configuration Assistant gives an error during installation.

During the installation, there was a problem configuring Oracle9iAS Reports Services. On the Windows platform, the problem log has a section that looks like the following:

```
Starting Action : SQLPlus
Command d:\ora9ias_bi\bin\sqlplus.exe -s
"PORTAL/XXXX@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP) (HOST=jshimizu-
pcl.us.oracle.com) (PORT=1521))) (CONNECT_DATA=(SERVICE_NAME=iasdb.jshimizu_pcl.us.oracle.com))) "
@d:\ora9ias_bi\portal\admin\plssql\wwd\rwaddpag.sql"
Process destroyed
Process err
Process out
Action queue
failedoracle.ifs.utils.common.ProcessDestroyedException
Error executing : rwaddpag.sql
Reports registration failed
```

UNIX platforms will have a similar error. This problem is a known issue. To resolve it, you can register Oracle9iAS Reports Services manually by running the `rwaddpag.sql` script as the Oracle9iAS Portal user in the infrastructure database.

1. Log on to Oracle Internet Directory (OID) using the `orcladmin` user.
2. Navigate the System Objects tree to the following location to find the Oracle9iAS Portal user:

```
Entry Management > OracleContext > Products > IAS >
IAS Infrastructure Infrastructure Databases >
dbName.domain
```

3. Click `OrclResourceName=PORTAL` to display the Oracle9iAS Portal user's specifics. The password should not be encoded.

4. `rwaddpag.sql` can then be run as this user via SQL*Plus. The script is located in your application tier `ORACLE_HOME` under:

```
$ORACLE_HOME/portal/admin/plsql/wwd
```

Trying to run the `rwaddpag.sql` script gives an error.

You are trying to run the `rwaddpag.sql` script and you get the following error:

```
SQL> @portal/admin/plsql/wwd/rwaddpag.sql
-- Registering Reports Provider --
ERROR: Registering Reports Provider
ERROR: Reports Page could not be created

PL/SQL procedure successfully completed.

Disconnected from Oracle9i Enterprise Edition Release
9.0.1.3.1 - Production
With the Partitioning option
JServer Release 9.0.1.3.0 - Production
```

It is possible that during the original installation, some pages within Oracle9iAS Portal were created before the configuration failed. If so the pages will need to be removed before running the `rwaddpag.sql` script. To do so, follow these steps:

1. Removing Reports Security pages.
 - a) Log on to Oracle9iAS Portal
 - b) Click Builder to go to Oracle9iAS Portal Builder.
 - c) Click Navigator.
 - d) In the Find field, type `%reports security%`. Then, click Go.
 - e) Delete the pages named Oracle Reports Security or Reports Security Banner.
2. Remove the Reports Security Provider.
 - a) Log on to Oracle9iAS Portal
 - b) Click Builder to go to Oracle9iAS Portal Builder.
 - c) Click on the Build link to go to the Build tab.
 - d) In the Providers portlet, type `ORACLE REPORTS SECURITY` in the Name field.
 - e) Click Delete.

On Windows, some of the services have not started up.

What has likely happened is that some of the services have tried to start up before the services that they depend on have finished their

start up process. For instance, the OC4J Demos service needs Oracle Internet Directory started up before it can be started. You can check the error logs in \$ORACLE_HOME/Apache/Apache/logs for the following errors. Also, WebIV note 198434.1 contains a description of the start/stop commands for the various infrastructure tier services.

The application tier's default Web page hangs.

If the application and infrastructure tiers are installed on the same Microsoft Windows machine, you may be running into an issue where the process manager for the application tier has tried to start up before the infrastructure tier process manager finished starting up. For now, you may want to change the process manager to start up manually instead of automatically. Then, when you reboot, you can start it up manually.

Check the Oracle Process Manager logs under the infrastructure tier. They are located under: \$ORACLE_HOME/opmn/logs/

In the OC4J_BI_Forms log file, you will see an error like:

```
Error initializing server: Error initializing userManager
'oracle.security.jazn.oc4j.JAZNUserManager':
java.lang.IllegalArgumentException (null)
```

Go to your services and bounce the process manager for the application tier.

The Web browser gives an internal server error when trying the Oracle9iAS Reports Services demo.

Check the error log for the application tier which is in:

```
$ORACLE_HOME/Apache/Apache/logs
```

Check to see if any errors note that the OC4J instance called OC4J_Demos could not be found. If you see such errors, this process probably tried to start up before Oracle Internet Directory had finished starting. You will need to bring up Oracle Enterprise Manager on the server where the infrastructure tier resides and check the OC4J Demos service. If it is down, start it up and refresh the Demonstrations page.

Clicking on the Oracle9iAS Reports Services link gives a NOT FOUND error.

You see the following when you click on the Oracle9iAS Report Services demo:

```
Not Found
The requested URL /repdemo/index.html was not found on this
server.
```

Check to make sure that you are accessing the application tier. If you were trying to access the demos from the infrastructure tier, you would see this error.

Test report takes you to the Oracle Single Sign-on page

The Reports Server is installed by default as a secure server. If you have not set up any users, you can use the orcladmin user to log in.

Instead of the Oracle Single Sign-on page, it returns a failure.

Display the Enterprise Manager console for the infrastructure tier and check the Oracle Single Sign-on service. If it is down, restart it.

You are able to run a test report but the Oracle Enterprise Manager shows that the Oracle9iAS Report Services is down. You are unable to start Oracle9iAS Reports Services via Oracle Enterprise Manager.

This is a known issue and is documented in the Oracle9iAS Reports Release Notes. The password set for the Reports target is not the Oracle9iAS admin password. To fix this problem, you need to do the following:

1. Open the file `$ORACLE_HOME/sysman/emd/targets.xml`.
2. Search for the reports target. The target type for the Reports Server is `oracle_repserv`. The target definition contains a property for password, for example:

```
<Property NAME="Password" VALUE="3f769c1e7cfd7411"
ENCRYPTED="TRUE"/>
```
3. Change the VALUE to be the Oracle9iAS admin password and set `ENCRYPTED = "FALSE"`. For example:

```
<Property NAME="Password" VALUE="adminpasswd"
ENCRYPTED="FALSE"/>
```
4. Search for the server name property of the Reports Server. For example, if the Reports Server is installed on the machine

prod1-sun in domain us.oracle.com, it would have the following server property:

```
<Property NAME="Server"
VALUE="rep_prod1-sun.us.oracle.com"/>
```

5. Delete the domain portion of the server name. For example, in the case above, you would remove us.oracle.com:

```
<Property NAME="Server" VALUE="rep_prod1-sun"/>
```

6. Stop and restart Oracle Enterprise Manager:

```
# $ORACLE_HOME/bin/emctl stop
# $ORACLE_HOME/bin/emctl start
```

Oracle Enterprise Manager will automatically encrypt the password and set the ENCRYPTED flag to TRUE.

When trying to run the demos, you get a sporadic Oracle Single Sign-on error.

The following error appears sporadically and, if you refresh the browser, it seems to go away:

```
Oracle SSO Warning - Unable to process request
Either the requested URL was not specified in terms of a
fully-qualified host name or OHS single sign-on is
incorrectly configured.
Please notify your administrator.
```

The problem is that Oracle9iAS Portal is using the wrong port number for Oracle9iAS Reports. Try the following steps:

1. Display the Oracle9iAS Portal instance in the browser using the following URL:
`http://<your machine>:7779/pls/portal`
2. Click the Login link in the upper righthand corner and log in using orcladmin.
3. Click the Builder link.
4. Click the Administer tab.
5. Go to the bottom of the page to the Oracle Single Sign-on Server Administration section, then click Administer Partner Applications.
6. Click the Edit button next to your applications tier instance.
7. Check the Home URL link. For example, it may be using 7780 as the port number instead of 7779. If you're planning on using 7779 you'll need to change this to 7779. Once you accept the changes, you shouldn't need to bounce anything.

Running to PDF on Solaris pops up a dialog box asking if you want to save or open the file. Clicking OK or Cancel gives a file damaged error.

This is a mod_osso bug that is fixed. See bug 2382139 on Metalink for the relevant patch download.

When trying to start up Oracle9iAS Reports Services, you get an REP-3000 error on UNIX.

By default, the DISPLAY environment variable is not set. You will need to set DISPLAY to a valid xterm. There are two locations where this could be set:

1. The reports.sh script, in which case every time the server is invoked via the script it is set up.
2. The OC4J.properties file located in your application tier ORACLE_HOME under \$ORACLE_HOME/OC4J_bi_Forms/configure. If the DISPLAY is set in this file, it will only affect the in-process server.

Please note that any dialog boxes that the Reports Server displays are shown in the xterm set in the DISPLAY environment variable.

The Reports Server gives a REP-50125 error or the Reports Builder hangs at the splash screen when running in a Dutch locale with NLS_LANG set to DUTCH_THE NETHERLANDS.WE8MSWIN1252.

This bug was fixed in Reports 9.0.2.0.4 with the resource file for the Netherlands. Either install the latest patch or set the NLS_LANG to AMERICAN_AMERICA.

Solaris Issues

On Solaris, starting the Reports Server gives a “Cannot bind to Reports Server” error. If you remove the security element from the <reports server>.conf file so that you are no longer using Oracle Single Sign-on , the error goes away.

This problem relates to a known issue with the security element and a character overflow where the password buffer is one character too short to accommodate the encryption. You can try to shorten this either by putting in the Oracle9iAS Portal user's password and setting confidential to no or creating a tnsnames.ora entry for the connection info in the string and using that instead. Then, bounce the process manager for the application tier.

Trying to use Web caching on Solaris is failing.

By default on Solaris, Web caching is not turned on. You will need to turn it on manually in your infrastructure tier.

1. Make sure your ORACLE_HOME is pointing to the infrastructure tier.
2. In the \$ORACLE_HOME/webcache/bin directory, run the webcachectl script to start up the Web cache:
 - a. `%>webcachectl start`

Note 190887.1 on WebIV covers the general Oracle9iAS installation on Solaris that may prove useful.

Linux-specific issues

Even after trying the workaround listed above for the Oracle Enterprise Manager, the Reports Server is still shown as down on Linux.

On Linux, there's an additional step needed. Add the following to the end of your reports.sh script:

```
HOME=<your_linux_home_environment_variable_value>; export  
HOME
```

There are some installation issues that occur on Linux. Note 191567.1 contains a step by step guide for installing Oracle9iAS on Linux. The following list of issues are just some highlights of this note.

The installation fails without the Korn shell.

You need to have the Korn shell in order to install. The `pksh-5.2.14-16.i3.rpm` version is recommended by the above note. Another option is to create a symbolic link from `/bin/ksh` to `/bin/sh`. As root:

```
%> ln -s /bin/sh /bin/ksh
```

Linking fails during the installation.

There is an error in invoking `relink` of some makefiles. For example:

```
/home/ias/infrastructure/precomp/lib/ins_precomp.mk
```

To fix it, follow these steps:

1. As the Oracle user, go to the `$ORACLE_HOME/bin`
2. Open the `genclntsh` script in an editor.
3. Change line `LD_SELF_CONTAINED="-z defs"` to `LD_SELF_CONTAINED=""` (line 147 of 200)
4. Save the `genclntsh` script.
5. Run the `genclntsh` script, i.e. `%>./genclntsh`
6. You should get the following message:
“Created `/home/ias/infrastructure/lib/libclntst9.a`”
7. Click `Retry` in the error popup window. The installer will continue and should display the following:

```
Link successful.
```

Trying to run `genclntsh` manually errors out because it is unable to find libraries.

In the release notes, there is mention of unsetting `ORACLE_BASE`, `ORACLE_HOME`, and `LD_LIBRARY_PATH`. These actually need to be set for both the infrastructure and application tiers depending on which you are installing at the time. Also, the `PATH` environment variable needs to be set as well to `$PATH:$ORACLE_HOME/bin` depending on which tier you are installing.

Summary

This white paper is updated regularly on the Oracle Technology Network (<http://otn.oracle.com/products/reports/>). For more information on Oracle9iAS Reports Services, see the Oracle9iAS Reports Release Notes and the *Publishing Reports to the Web with Oracle9iAS Reports Services*.

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