# Oracle9iAS Wireless

Release Notes

Release 2 (9.0.2)

April, 2002

Part No. A95426-01

This document summarizes the differences between Oracle9*i*AS Wireless and its documented functionality.

See Also: Oracle9i Application Server Release Notes

The following topics are addressed:

- "Required Fixes"
- "Demonstrations"
- "Verifying Your Installation"
- "Additional and Updated Information"

# 1 Required Fixes

This section details vital issues and their solutions that must be accomplished to enable the proper functioning of Oracle9*i*AS Wireless.

# 1.1 Configuring the Proxy Server

Accomplish this step on the middle tier. To specify a complete domain in the list of Proxy "Exception Addresses", prepend the domain name with a dot ("."). Here are the steps:

- 1. Log into Enterprise Manager at http://<hostname>:1810
- 2. Enter "ias\_admin" as your username.
- 3. Enter the password you supplied at install time.
- **4.** Select the Application Server tab.
- 5. Click the Application Server Name link.



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- **6.** Click the Wireless System Component link.
- **7.** Select the Site tab on the resulting page.
- **8.** Select Proxy Server on the resulting page (under "Configuration").
- **9.** Enter the values of Exception Address in the Exception Addresses Input box.

**Note:** Domain names specified in the exception addresses should be prepended with a ".". For example, to specify the domain "oracle.com" in the Exception Addresses use ".oracle.com" instead of "\*.oracle.com" or "oracle.com".

#### Here's an example:

To specify the domain "oracle.com" and the localhost in the Exception Addresses, enter "localhost | 127.0.0.1 | .oracle.com" in the Exception Address input box. For more information, see Section 4.4.1: "Configuring the Proxy Server" in *Oracle9i*AS Wireless *Getting Started and System Guide*.

# 1.2 Run OID Replication Server to Purge OID Change Log

Accomplish this step on the infrastructure. This version of Oracle9iAS Wireless relies on the Provisioning Integration Service provided by the Directory Integration Platform to be notified of user and/or group changes in OID. These changes are stored in the OID change log and are appropriately filtered by the Provisioning Integration Service before being delivered as change events to this application.

Even if you are not deploying the OID server in replication mode, ensure that the directory administrator starts up the replication server in order to periodically purge unnecessary change log entries.

This can be done by starting the replication server using the following command:

```
$ORACLE_HOME/bin/oidctl connect=<net_service_name>
server=oidrepld
instance=1
flags="-p <ldapserver_port_number>" start
```

**Note:** In Oracle9*i*AS 9.0.2, user information is stored in OID, where user names are *case-insensitive*. This is different from earlier versions of Oracle9*i*AS Wireless in which user names were *case-sensitive*.

For more information on starting and stopping the replication server, see Chapter 3: Preliminary Tasks and Information in the *OID Administrator Guide*.

Without this periodic cleanup, the OID change log can grow to occupy the entire file system causing the OID service to become unavailable. The need to start the replication server to purge the change log is only a temporary measure; it will be automatically addressed in a future release.

# 1.3 Synchronize Clocks

Accomplish this step on the middle tier and infrastructure. Clocks on all machines that are part of an Oracle9iAS instance must be synchronized. This can be done by running NTP (Network Time Protocol) daemons on all machines running the various components of an Oracle9iAS deployment. Run xntpd (or similar daemon processes) on most UNIX-like architectures and abouttime or similar software for Microsoft Windows platforms.

This is a requirement because several interdependent components require that clocks be synchronized for them to work coherently. All platforms are affected by this requirement.

# 1.4 Display Properties

Accomplish this step on the middle tier. Due to a JDK bug, HTML screens may have broken image tabs. To work around this issue, modify opmn.xml in: [Oracle Home]/opmn/conf

Modify the value of the DISPLAY property to point to a machine with an X server running. Also, be sure to allow other X-windows clients to connect to that machine. To achieve this, run the <code>xhost</code> command on the machine running the X-server.

Here is an opmn.xml example:

# 1.5 Auto-starting Applications

Accomplish this step on the middle tier. Due to a bug, none of the applications will be auto-started (that is, an application is started only when the first request for that application arrives). To change this behavior to auto-start applications (especially for push and async applications), edit the file config/default-web-site.xml to add a load-on-startup attribute to the web-app tag, setting the value of the attribute to True.

For instance, to auto-start the async application which resides in the OC4J\_Wireless product group, edit the file

[Oracle Home]/j2ee/OC4J\_Wireless/config/default-web-site.xml and change the web-app tag for the async application such that it looks like the entry below:

```
<web-app application="async" name="async-web" root="/async"
load-on-startup="true"/>
```

#### 1.5.1 ASK

In this release, there can be only one Async server taking requests. Configuring and starting multiple ASK is not supported.

# 1.6 HTML Pages Protected by mod\_osso May Not Render on NetScape 4.7

Accomplish this step on the middle tier. Due to a bug, HTML pages (such as webtool, customization, etc.) may not work with NetScape 4.7. The workaround for this problem is to re-register the <code>mod\_osso</code> partner app to use the WebCache port number, rather than the Oracle HTTP Server port number. For the details and the exact steps as to how to perform this, please refer to the Oracle HTTP Server Release Notes.

All platforms are affected by this.

# 1.7 Post-install Configuration of Oracle9iAS Wireless

Accomplish this step on the middle tier. If you choose not to configure Wireless at installation time as part of a Portal and Wireless install type, it is still possible to configure Wireless. The software indicates that you can complete this post-installation through Oracle Enterprise Manager, but that functionality is not present. It must be accomplished manually as detailed below.

#### Run the script script:

 $\label{thm:constraint} \begin{tabular}{ll} $(OracleHome]/wireless/sample/wirelessConfig.sh]. bat, passing the value of ORACLE\_HOME as an argument. \end{tabular}$ 

### For example:

\$ wirelessConfig.sh /private/ias/v20

### 2 Demonstrations

- Download and set up an mobile phone simulator (there are several available from different vendors such as: Openwave, Nokia WAP Developer Forum, and others. Download the free emulator and follow included instructions for setup).
- **2.** Point the mobile phone simulator to: <hostname>:port/ptg/rm
- **3.** Run Hello World demonstration.
  - **a.** Select Examples.
  - **b.** Select Hello. The Hello World! example is displayed.
- 4. Run Messaging demonstration.
  - **a.** Ensure that the Messaging Server is started in order for this demonstration to work:
    - \* Log into Enterprise Manager at http://<hostname>:1810
    - \* Enter "ias\_admin" as your username.
    - \* Enter the password you supplied at install time.
    - \* Select the Application Server tab.
    - \* Click the Application Server Name link.
    - \* Click the Wireless System Component link.
    - \* Verify that the messagingserver1 messaging server is started. If the messagingserver1 is not started, click the messaging server link and start the messagingserver1.
  - **b.** Select PIM.
  - **c.** Select Short Messaging.
  - **d.** Select the type of message (Email, Voice, SMS, Fax).
  - **e.** Enter the Subject of the message.
  - **f.** Enter message text.
  - g. Enter recipients (if entering telephone numbers for Voice, SMS or Fax, ensure the telephone number is in the format: 1-aaa-nnnnnn. See "Messaging Phone Format" for details).

# 3 Verifying Your Installation

This section contains information that enables you to ensure that you've correctly set up Oracle9*i*AS Wireless for use.

# 3.1 Accessing and Managing Oracle9iAS Wireless

After installation and configuration, ensure that you are using the correct URLs, port numbers, and login information.

To ensure that you are using the correct port number, check the port number for Oracle9*i*AS Wireless stored in:

[Oracle home]/install/portlist.ini

For more information on port usage, see *Oracle9i Application Server Installation Guide* and *Oracle9i Application Server Administrator's Guide*.

### 3.1.1 Accessing Oracle9iAS Wireless

To access Oracle9*i*AS Wireless, use the following URLs and other information:

Table 1 Accessing Oracle9iAS Wireless

Component	URL	Port number and login
Oracle9iAS Wireless Webtool Portal	http://hostname:7777 /webtool/login.uix	
Oracle9iAS Wireless Customization Portal	http://hostname:7777 /customization/Login .jsp	The default port number for Oracle9 <i>i</i> AS Wireless is 7777. The port number range is 7777 to 7877.
Oracle9iAS Wireless Device Portal	http://hostname:7777/ptg/rm	Enter your user name and then enter your password. If you are an administrator, enter <i>orcladmin</i> as your user name. The password
Oracle Mobile Studio	http://hostname:7777/studio	for <i>orcladmin</i> is what you supplied at installation time for <i>ias_admin</i> .
Oracle Mobile Studio Administration	http://hostname:7777/studio/admin	

### 3.1.2 Managing Oracle9 iAS Wireless

Management of Oracle9*i*AS Wireless Server is accomplished through Oracle Enterprise Manager. To access the system management for Oracle9*i*AS Wireless through the Oracle Enterprise Manager (OEM) console:

Table 2 Accessing Oracle9iAS Wireless

Component	URL	Port number and login
Oracle Enterprise Manager	http://hostname:1810	The default ports are 1810 and 1811. The port number range is 1812 to 1820.
		Enter your OEM user name (ias_admin is the default) and the password you supplied at installation.

For more information, see *Oracle9iAS Wireless Getting Started and System Guide*.

# 4 Additional and Updated Information

You can find additional and updated documentation and other information on Oracle9*i*AS Wireless through the Oracle Technology Network (OTN). OTN provides developers with the latest information on Oracle's products and technologies. To access OTN, visit:

http://otn.oracle.com/products

# 4.1 Messaging System Notes

Following are notes on the Messaging System for this release.

- You can declare the sending and receiving capability of transport driver programmatically, or through the site-level configuration of the messaging server drivers, accessed through Oracle Enterprise Manager. In this release, a value returned by a driver that has been configured programmatically overrides one set through the UI (if there is a conflict between the two).
- 2. The body of an email can only consist of text; you cannot receive email attachments.
- 3. Oracle9*i*AS Wireless can use a transport driver that is configured to either deliver or receive messages. The Wireless messaging system is considered a store-and-forward system and requires no immediate delivery capability for a driver. That is, transport drivers are considered active, even if you have not created any driver instances that are based upon them. As a result, you may encounter problems with your

installation of Wireless. For example, this release includes a Push driver and a messaging server with an instance of the Push driver. By default, the Push driver handles SMS, Voice, Email and Fax. If you do not want to use the Push driver and choose to configure your own SMS or Email driver (as well as the corresponding driver instances), you must remove the Push driver itself to ensure that your own drivers are used explicitly. Removing the messaging server's driver instance for the Push driver is not sufficient. In addition to removing the Push driver, you can optionally remove the instances of the Push driver. This is an optional step, because any remaining instances become obsolete once you remove or modify the definition of a driver.

If you do not remove the Push driver, then Wireless cannot send an SMS message. The SMS driver does not receive the delivery request because the system still considers the Push driver capable of delivering SMS. The delivery request remains in the system until a future instance of the Push driver becomes available.

4. The statistics of the transport system performance on wireless servers (such as the Async Server and Alert Server) does not function correctly in this version. The problem will be corrected in a future release.

# 4.2 Push Message IDs

Due to a bug, Message IDs returned from the Send methods of Push or Pushlite may not match the order of Recipients' addresses as they were input.

# 4.3 Assigning Roles

Users with additional roles (such as *Administrators, Designers*, etc.) should be created using the Oracle9*i*AS Wireless User Management tool, instead of using other general purpose User Management tools (for example, *DAS*). Users created using DAS or other OID tools are provisioned in Oracle9*i*AS Wireless only when the created user accesses the Wireless Portal (device portal or any of the PC-based tools) for the first time, and no roles are assigned to the provisioned user.

Roles are required by Users to access Oracle9iAS Wireless Webtool Portal, for example a User should have the *Designer* role in order to access Service Designer.

If a user without any role tries to log into an Oracle9*i*AS Wireless webtool, this Single Sign-On Error is displayed:

Your session has timed out. Please log on again.

You must log on again as a user with an assigned role.

### 4.4 Repository Upload and Download

The first time you attempt Repository Upload before Single Sign-On, you will be redirected to the Single Sign-On page. After you type in your username and password, the browser shows an empty page, with the URL pointing to http://<hostname>/webtool/provisioning/upload.jsp. Click the Back button three times, then you will see the Repository Object Upload page again. Click the Upload button, and the upload process will be finish successfully. This behavior does not reoccur in subsequent download/upload attempts.

The first time you attempt Repository Download, you will be redirected to the Single Sign-On login page (since you have not previously logged on). After login, a dialog box appears asking where to save the file. Specify the file location and click OK. The page remains at the SSO URL, and does not return to the System Manager page. This behavior does not reoccur in subsequent download/upload attempts.

# 4.5 Change Password Functionality

The password policy in OID can be configured by Oracle9*i*AS administrators to specify user password life, and how soon before password expiration users are prompted to change their passwords. Users must apply the rdbms 9.0.1.3 patchset to use this functionality. See "Password Policies" in Chapter 3, "Directory Enabled Single Sign-On" in "Oracle9*i*AS Single Sign-On Administrator's Guide" for more details on Change Password Functionality.

### 4.6 WebCache

Caching of forms in WebCache is not supported because session variables cannot be substituted (as they are hidden fields) in forms. Currently this is true only for TINY\_HTML, so technically one should still be able to cache forms for other devices. But, as other transformers are modified to use hidden fields for other devices (in order to support POST requests), this limitation will also apply to them.

When Oracle Web Cache sends requests to Oracle9*i*AS Wireless, Oracle Web Cache allows the Oracle9*i*AS Wireless server 30 seconds to generate a response. In some extreme conditions, such as when Oracle9*i*AS Wireless is under a heavy load, it may not be able to respond within the stipulated 30 seconds, in which case Oracle Web Cache sends a network apology page to the browser.

If 30 seconds is not sufficient, then you can change the default settings of the OSSEND\_TIMEOUT and OSRECV\_TIMEOUT attributes in the Oracle Web Cache configuration file internal.xml (this is in the Oracle Web Cache installation directory):

 OSSEND\_TIMEOUT—Network round-trip time (latency) between Oracle Web Cache and the application Web server. The 20 second default of the OSSEND\_TIMEOUT attribute is usually sufficient for most operating systems.

You can determine the latency to the application Web server by issuing the following command from the Oracle Web Cache computer:

```
ping -s application_Web_server
```

This command provides output similar to the following:

```
PING sales.us.acme.com: 56 data bytes
64 bytes from sales.us.acme.com (130.35.45.34): icmp_seq=0. time=20. ms
64 bytes from sales.us.acme.com (130.35.45.34): icmp_seq=0. time=21. ms
```

If the time value is over 20 seconds, then increase the OSSEND\_TIMEOUT attribute value.

 OSRECV\_TIMEOUT—Latency and application Web server processing time. The default is 30 seconds.

You can determine the processing time by sending a sample request to the application Web server, then monitor the time to process the request. If the processing time is over 30 seconds, then increase the OSRECV\_TIMEOUT attribute value.

To change these default settings:

- 2. Modify the <CALYPSONETINFO/> line as follows:

  - Add both the OSSEND\_TIMEOUT and OSSRECV\_TIMEOUT attributes as follows: <CALYPSONETINFO OSSEND\_
    TIMEOUT="time" OSRECV\_TIMEOUT="time"/>

### 4.7 Modules

### 4.7.1 Linking to a Short Messaging Module

Section 17.1.6.2 in *Oracle9iAS Wireless Developer's Guide* gives the incorrect URL for linking to a Short Messaging Module. You can link to a short messaging module using the following virtual URL:

omp://oracle/services/pim/sm

### 4.7.2 Configuring m-Commerce Modules

m-Commerce module configuration has been simplified. In *Oracle9iAS Wireless Developer's Guide*, the following directory was mentioned as containing .sh files to be modified:

/wireless/j2ee/modules/modules-web/commerce/setup/script

The directory actually containing these files is:

ORACLE\_HOME/wireless/sample

**Note:** Occurrences of \$IASWV20\_DIR should be replaced with ORACLE HOME.

To configure security.sh, complete these steps:

- 1. Modify the security.sh script and change the variables.
- **2.** Run the script to generate the key, security.sh (UNIX) or security.bat (WINDOWS).

To generate and install the security key, follow these steps:

1. Go to ORACLE\_HOME/wireless/sample

**2.** Edit the template **security.sh** (or **security.bat**) script to configure the following:

#### Table 3 Security Key configuration

DB_USER, DB_ PWD and DB_ URL	Passwords for the Wireless database schema are randomized out of the box, and are not available to end users. Hence, the password must be changed by a user through the Oracle Enterprise Manager console; this new password must be used for security key configuration. The password for the Wireless schema can be changed from the Oracle Enterprise Manager console:	
	1. Click on the link corresponding to the middle tier.	
	2. Click the 'Configure Schema' option.	
	3. Select the radio button corresponding to 'Oracle9iAS Wireless'.	
	4. Click 'Change Password'.	
	All platforms are affected by this.	
SEC_SEED	The seed number used to create the System Encryption Key. The range of the number is that of a java long number (that is, -9223372036854775808L to 9223372036854775807L.) For example: SEC_SEED 1234567890	
SEC_PWD	The password with which the generated System Encryption Key is encrypted and stored in the database. The password can be any length greater than eight characters. For example: SEC_PWD systemEncryptionKeyPassword	
SEC_FILE_ PWD	The password with which to encrypt the local <b>KeyMgmtProps.en</b> c file (which contains secure information) protecting it from unauthorized access. The password can be any length greater than eight characters. For example: SEC_FILE_PWD fileEncryptionPassword.	

3. Save your changes and execute the script. This generates a secure file, **KeyMgmtProps.enc** in the current directory and also generates, encrypts and inserts the System Encryption Key into the database as well as printing out the directory path for the security file. You must save the path to the file because it is used as a service input parameter value.

**Note:** Because the script contains sensitive information, you should destroy it after running it or move it to a secure place.

# 4.7.3 Messaging Phone Format

When using the pre-built Oracle9*i*AS Wireless Messaging/Push applications and when developing your own applications with messenger.oracle.com, the required format for SMS, voice (telephone) and fax numbers is:

1-aaa-nnnnnn

Where aga is the area code, and nnnnnn is the telephone number.

### 4.8 Mobile Studio

A list of known bugs and their workarounds for Oracle Mobile Studio follows.

Table 4 Mobile Studio Bugs

Bug Description	Workaround
Studio service name cannot contain single or double quote character.	None (choose a name without any single or double quotes).
Studio page titles always appear in site-default locale.	None.
"Move Down" button doesn't work on Studio admin pages.	Use "Move Up" button instead.
<simplestrong> fails to render as bold text on Nokia WML browsers.</simplestrong>	None (patched stylesheet will be made available at http://otn.oracle.com).
For some Web Clipping browsers (e.g. Palm VII, OmniSky, etc.) cookies occasionally cause problems.	In the Webtool, uncheck "Supports Cookie" for the Palm VII logical device.
Incorrect device attribute settings for Blazer browser.	In the Webtool, set the screen width for the Blazer browser to 120 pixels, and add "image/gif gif" to the available image formats.
Checkboxes and radio buttons in non-tabular <simpleform>s are rendered incorrectly for HTML devices.</simpleform>	None (patched stylesheet will be made available at http://otn.oracle.com).

Table 4 Mobile Studio Bugs

Bug Description	Workaround	
Unable to view sample source code on the Studio home page.	Using the Studio Administration tool (http://myserver:myport/studio/a dmin), create a new configuration parameter called samples.source.root.path. Set its value to//j2ee/OC4J_ Portal/applications/studio/studio-web/samples. In general, the value of this configuration parameter should be the relative or absolute filesystem path to the directory where the sample source files are located. Click the Reset button to reset the Studio server so the changes take effect.	
Unable to deploy Studio applications to a remote Oracle9 <i>i</i> AS Wireless instance.	Using the Studio Administration tool (http://myserver:myport/studio/a dmin), create a new configuration parameter called deploy.ptg.url, and set its value to http://remoteserver:remoteport/studio, where remoteserver and remoteport are the server name and port of the remote Oracle9iAS Wireless instance to which Studio applications should be deployed. Click the Reset button to reset the Studio server so the changes take effect.	
Unable to access newly created custom site.	Using the Studio Administration tool (http://myserver:myport/studio/a dmin), create a new configuration parameter called oracle.panama.studio.resource.defaultSite, and set its value to the name of the new site. Click the Reset button to reset the Studio server so the changes take effect.	

# 4.9 Pointing to a Different Schema

If, for some reason, the Wireless schema (that is, the database connect string and/or password have been modified to point to a different schema, the targets.xml file on the middle tier must be modified to reflect this change. Edit targets.xml in Oracle9iAS Wireless Release 9.0.2

 ${\tt OracleHome/sysman/emd, to \ make \ the \ following \ changes \ (in \ bold) \ to \ the \ target \ entry \ corresponding \ to \ oracle\_wireless.}$ 

```
<Property NAME="ConfigDBPort" VALUE="port number of new</pre>
database"/>
<Property NAME="ConfigDBpassword" VALUE="schema password of</pre>
new database" ENCRYPTED="FALSE"/>
<Property NAME="MachineName" VALUE="machine name of new</pre>
database"/>
<Property NAME="ConfigDBSID" VALUE="SID of new database"/>
<Property NAME="ConfigDBMachineName" VALUE="machine name of</pre>
new database"/>
<Property NAME="UserName" VALUE="schema name of new database"</pre>
ENCRYPTED= "FALSE" />
<Property NAME="Port" VALUE="port number of new database"/>
<Property NAME="SID" VALUE="SID of new database"/>
<Property NAME="ConfigDBUserName" VALUE="schema name of new</pre>
database" ENCRYPTED="FALSE"/>
<Property NAME="ORACLE_HOME" VALUE="/private/ias/OraHome1"/>
<Property NAME="password" VALUE="schema password of new</pre>
database " ENCRYPTED= "FALSE" />
```

All platforms are affected by this.

# 4.10 Create the JSP Application

In *Oracle9iAS Wireless Developer's Guide*, there is an error in the syntax in section 14.2.5.12, "Create the JSP Application". Here is the correct JSP file example:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<!DOCTYPE SimpleResult PUBLIC "-//ORACLE//DTD SimpleResult 1.1//EN"
"http://xmlns.oracle.com/ias/dtds/SimpleResult_1_1_0.dtd">
<%@ page language="java" session="false" %>
<%@ page import="java.util.*" %>
<%@ page import="oracle.panama.tools.webbean.*" %>
<%
    String CoSymbol = request.getParameter ("CoSymbol");</pre>
```

```
//CoSymbol is null, ask for a Symbol from the User
    if ((CoSymbol == null) | (CoSymbol.length() == 0)) {
응>
      <SimpleResult>
        <SimpleContainer>
          <SimpleForm target="StockQuote.jsp">
            <SimpleTitle>Stock Quotes</SimpleTitle>
            <SimpleFormItem name="CoSymbol" type="none" displaymode="text">
              <SimpleTitle>Enter Company Symbol</SimpleTitle>
            </SimpleFormItem>
          </SimpleForm>
        </SimpleContainer>
      </SimpleResult>
<%
    else {
      //Set the Input to the User given Symbol
      HashMap inputs = new HashMap();
      inputs.put("CoSymbol", CoSymbol);
      //Define the Service and ServiceContext
      //Set the Service to "StockInfo" and SubService to "Yahoo_GetQuote"
      WebBeanContextDelegator context = null;
      context = new WebBeanContextDelegator();
      context.setService("StockInfo");
      context.setSubService("Yahoo GetQuote");
      //Connect to the Server and Invoke the Service
      WebBeanDelegator webBean = null;
      webBean = new WebBeanDelegator();
      HashMap outputs = webBean.invokeWebService(context,inputs);
      String CurrentPrice = (String)outputs.get ("CurrentPrice");
%>
      <SimpleResult>
        <SimpleContainer>
          <SimpleText>
            <SimpleTextItem>
               Current Price of <%=CoSymbol%> is: <SimpleBreak></SimpleBreak>
               <%=CurrentPrice%>
            </SimpleTextItem>
            <SimpleAction type="primary" target="StockQuote.jsp" label="New"></S</pre>
impleAction>
          </SimpleText>
        </SimpleContainer>
      </SimpleResult>
<%
%>
```

# 4.11 Web Integration Server and Developer

Web Integration Server and Developer are not included in this release.