

# Oracle9iAS InterConnect

## Release Notes

Release 2 (9.0.2) for UNIX

April 2002

Part No. A96185-01

This document summarizes the differences between Oracle9iAS InterConnect and its documented functionality.

**See Also:** *Oracle9i Application Server Release Notes*

## 1 Certification and System Requirements

The following lists the Oracle9iAS InterConnect components and the supported platforms:

- Oracle9iAS InterConnect Adapter for JDEdwards—Solaris 2.6, 2.7, 2.8, and HP-UX 11i, 11.0 (64-bit)
- Oracle9iAS InterConnect Adapter for PeopleSoft—Solaris 2.6, 2.7, and HP-UX 11i, 11.0 (64-bit)
- Oracle9iAS InterConnect Adapter Publishing Engine—Solaris 2.6, 2.7
- Oracle9iAS InterConnect Adapter for SAP—Solaris 2.6, 2.7, 2.8, and HP-UX 11i, 11.0 (64-bit)
- Oracle9iAS InterConnect Adapter for Siebel—Solaris 2.6, 2.7, and HP-UX 11i, 11.0 (64-bit)

### 1.1 Siebel Adapter—Supported Systems

The Oracle9iAS InterConnect Adapter for Siebel supports 6.2.1 Enterprise Edition with patch 110 or higher.

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**Note:** This version of the adapter only works with Siebel eBusiness 2000 version 6.2.1 with patch 110 or higher applied. This patch is necessary to resolve a memory leak on the Siebel server when any kind of remote client is used. All instructions in the patch 110 *Maintenance Release Guide* from Siebel Systems must be followed carefully. The most important instruction as far as remedying the server side memory leak is the setting of a Siebel server component parameter called "recyclefactor" to a value greater than the default of zero. The *Maintenance Release Guide* recommends a value of 3. This will improve server performance and memory usage. This must be done for all object managers in use.

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## 2 New Features

This section describes new features for Oracle9iAS InterConnect.

### 2.1 DatabaseOperation Transformation

The DatabaseOperation transformation has been added to the current list of transformations.

#### 2.1.1 DatabaseOperation Transformation Parameters

The following is a list of parameters associated with the DatabaseOperation Transformation:

- db user—The database user name.
- db password—The password of the database user.
- db host—The hostname of the database.
- db port—The listener port of the database.
- db sid—The SID of the database.
- jdbc driver—The JDBC driver to use (*thin* or *oci*).
- retry count—The number of retries.
- retry delay—The delay before each retry in seconds.
- operation—The SQL or PL/SQL statement of the database operation.

## 2.1.2 DatabaseOperation Transformation Description

Apply some SQL or PL/SQL operations to the source fields(s) and copy the result to the destination field(s). The transformation operation can be processed on any database; not necessarily the hub or database adapter instance. Connect to the database given by the connectivity parameters (user, password, host, port, sid, driver) and bind the input variables to the corresponding bind variables of the SQL or PL/SQL given by the 'operation' parameter.

The statement is then executed and upon successful execution, the results are copied to the destination fields of the transformation. The connection to the database is then closed and the result of the transformation is returned.

For the PL/SQL type of transformations, the following syntax of the PL/SQL statement is assumed:

- IN parameters are specified with a ?I
- OUT parameters are specified with a ?O:<T>
- IN/OUT parameters are specified with a ?IO:<T>

where <T> is a single character type specifier denoting the type of the variable. Valid variable values are:

- S—String
- I—Integer
- F—Float
- D—Double
- T—Date
- B—Binary

For example, if the transformation is a PL/SQL function foo (par1 in number, par2 in out varchar) returning number, then the transformation operation needs to be specified as:

```
begin ?o:i := foo(?i, ?io:s); end;
```

## 3 Open Issues

This section describes open issues for Oracle9iAS InterConnect.

### 3.1 Content Based Routing—Known Bug

When creating a content based routing rule and then exiting iStudio, upon re-starting iStudio and editing the content based routing rule, the following error is reported by iStudio:

```
"Unable to load CBR for <event>"
```

The following error is also logged in the `iStudioLog.txt` file:

```
"::: org.omg.CORBA.UNKNOWN"
```

The workaround for this known bug is to create a subscribing application in iStudio before creating a content based routing event involving the application.

## 4 General Issues and Workarounds

This section describes general issues and their workarounds for Oracle9iAS InterConnect.

### 4.1 Design Time Use of Adapters for PeopleSoft, SAP, Siebel, and JDEdwards

Please make sure the keys for your Java Runtime Environment are present in the registry. For example:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Java Runtime Environment]
[HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Java Runtime Environment\1.3]
"CurrentVersion"="1.3"
```

### 4.2 Publishing Engine

To use the Publishing Engine on UNIX, you must have a profile named `iStudio`. If you have run iStudio on your machine and browsed the PeopleSoft, SAP, Siebel, and JDEdwards adapters, this profile is created automatically. If you have not run iStudio on the machine and want to run the Publishing Engine, create an iStudio profile by running the Configuration Editor.

### 4.3 Configuration Editor

To create a new profile in Configuration Editor you would normally complete the following:

1. Choose Profile->Create New Profile from the menu bar.
2. Enter a name for the profile and click OK.

If the Configuration Editor is running on a UNIX system and you close the Configuration Editor after creating a new profile, profile information is not saved.

To save the newly created profile, edit the settings of any adapter for that profile and then save the profile information.

### 4.4 Oracle9iAS InterConnect Adapter for Siebel—Unformatted DTYPE\_PHONE Values

Siebel DTYPE\_PHONE is mapped to Oracle9iAS InterConnect as `java.lang.String`. The Siebel adapter expects unformatted phone number values for inserts and updates.

A formatted phone number looks like:

```
( 514 ) 332-6430 x909
```

An unformatted phone number looks like:

```
5143326430x909
```

If you submit a formatted phone number where the format matches the locale for which the Siebel application server has been set, for any business component phone field (of type DTYPE\_PHONE), the insert/update will succeed but all subsequent queries to retrieve that record will fail with a seemingly unrelated error message back from Siebel. If you insert multiple records, the first will succeed and the rest will fail.

In order to avoid this, all phone numbers should be submitted as unformatted.

The following is the exception in the ACB log if formatted phone number values are submitted:

```
Exception occurred:
Source: Siebel
Error Code: 65538 (0x10002)
Cause: Siebel://exception=SBLException (Unique ID <none>)
E-SBL0041: Call to business component Insert failed- Check record at
index 1- Siebel error msg- Failed to retrieve the new record that
was inserted. Contact Siebel Administrator Could not move the
record pointer to first record. The insert operation failed at index
1- Siebel error code- 65538- Siebel record index- 1
```

## 4.5 Oracle9iAS InterConnect Adapters for SAP, PeopleSoft, JDEdwards, and Siebel

Running the `stop` script for the application that loads the Oracle9iAS InterConnect adapters for SAP, PeopleSoft, JDEdwards, or Siebel does not stop the application.

Use `<Ctrl>C` to stop the application.

## 4.6 Oracle9iAS InterConnect Adapter for HTTP—Installing a Second HTTP Adapter in the Same Oracle Home

If you want to install a second HTTP adapter in the same Oracle home, complete the following steps:

1. Use the following `copyAdapter` utility to make a copy of the existing HTTP adapter:

```
% cd $ORACLE_HOME/oai/9.0.2/bin
% copyAdapter <oldAdapterName> <newAdapterName>
```

2. Change the parameters in the `adapter.ini` file for the new adapter. In particular, make sure the following parameters in the new `adapter.ini` file are different from the `adapter.ini` file for the existing HTTP adapter:
  - a. Change the send endpoint (`ota.send.endpoint`) parameter.
  - b. Change the receive endpoint (`ota.receive.endpoint`) parameter.

The default receive endpoint set by the installer is:

```
http://<machine name>:<port number>/oai/servlet/transportServlet
```

You can change the receive endpoint to the following:

```
http://<machine name>:<portnumber>/oai/servlet/transportServlet1
```

- c. Change the payload type parameter (`ota.type`) if necessary.
  - d. Change the rmi registry port parameter (`http.receiver.registry_port`) to a port not used on this machine.
3. Change the content of the `web.xml` file to match that of the `adapter.ini` file. The `web.xml` file is in the following directory:

```
$ORACLE_HOME/oai/9.0.2/adapters/<newAdapterName>/webapps/WEB-INF
```

- a. Change the rmi port to match the value entered in Step 2d.

\* Change the following entry in the `web.xml` file:

```
<param-value>9901</param-value>
```

to:

```
<param-value> port-number-you-used-step-2d </param-value>
```

- b. Change the `<servlet-name>` value to match the url set in Step 2b.

\* Change the following entry in the `web.xml` file:

```
<servlet-name>transportServlet</servlet-name>
```

For example (if you use the url given in Step 2b), change the value to:

```
<servlet-name>transportServlet1</servlet-name>
```

4. Prepare the java archive parameter (`oail.ear`):

```
% cd $ORACLE_HOME/oai/9.0.2/adapters/<you http app name>/webapps
% jar cvf oai.war WEB-INF
% jar cvf oail.ear oai.war META-INF
```

An `.ear` file has been created called `oail.ear` which is ready for deployment.

5. Deploy the `oail.ear` file in the Oracle9iAS environment:

```
% cd $ORACLE_HOME/dcm/bin
% dcmctl shell
dcmctl> deployApplication -f oail.ear -a oaiservlet1 -co oc4j_oai
dcmctl> exit
```

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**Note:** Here, `oaiservlet1` is a unique application name that you assign to your servlet. If this name is already used in the current environment, select a different name.

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6. Verify if the new receiving endpoint is functioning by entering the URL used in Step 2b in your browser. If the servlet is deployed correctly, a diagnostic page appears.

## 4.7 Oracle9iAS InterConnect Adapter for DB—Schema Password Exposed through the `agent1.sql` File

The password to the Oracle9iAS InterConnect schema in the spoke database of the database adapter is exposed through the `agent1.sql` located in the following directory:

```
$ORACLE_HOME/oai/9.0.2/adapters/<adapter_name>/
```

Make sure the file is password protected using the utilities provided by the operating system.

## 4.8 Oracle9iAS InterConnect Adapter for FTP—Installation Parameters

Do not set the `ota.send.endpoint` parameter to the same value set for the `ota.receive.endpoint` parameter unless you perform a loop-back test for the FTP adapter. The files that you send out are used by the receiving end.

## 4.9 Creating Multiple Adapters using the `copyAdapter` Script

The `copyAdapter` script is copied to the `$ORACLE_HOME/oai/9.0.2/bin` directory only during hub installation. If you need to use this script to create multiple adapters on a spoke machine, copy the script to the `$ORACLE_HOME/oai/9.0.2/bin` directory of the spoke machine and edit the script to reflect the new Oracle Home.



## 5 Documentation Errata

This section describes known errors in the documentation.

### 5.1 Oracle9iAS InterConnect Adapter for FTP—Missing Installation Parameters

**Table 1** lists two parameters missing from the FTP Adapter Parameters table (Table 2.6) in the Installation chapter of the *Oracle9iAS InterConnect Adapter for FTP Installation and User's Guide*. If your FTP server does not use the default port 21, set the port number by setting the `file.sender.port` parameter (for sending from Oracle9iAS InterConnect to external) or the `file.receiver.port` parameter (for receiving messages from external to Oracle9iAS InterConnect) in the `adapter.ini` file.

**Table 1** *Missing FTP Adapter Parameters*

Parameter	Description	Example
<code>file.receiver.polling_interval</code>	Defines the time interval to poll the message source in milliseconds. The default value is 60000.	<code>file.receiver.polling_interval = 10000</code>
<code>file.receiver.max_msgs_retrieved</code>	Defines the maximum number of messages to be retrieved in each session. The default value is 30.	<code>file.receiver.max_msgs_retrieved = 10</code>

### 5.2 Oracle9iAS InterConnect Adapter Documentation

Several Oracle9iAS InterConnect Adapter Installation and User's Guides contain a chapter which address frequently asked questions. In this chapter, the issue of installing multiple InterConnect components in the same Oracle Home is addressed incorrectly. Please refer to Appendix B of the *Oracle9iAS Installation Guide* for the correct information.

### 5.3 Oracle9iAS InterConnect User Documentation

The D3L DTD example in Appendix B of the *Oracle9iAS InterConnect User's Guide* is missing two element attributes for the message element. These attributes are `object` (mandatory) and `reply` (optional). In addition, the `name` attribute should be defined as mandatory. The definition of the message element should be as follows:

```
<!ELEMENT message ( %MessageElements; )* >
  <!ATTLIST message
```

name	%Name;	#REQUIRED
object	CDATA	#REQUIRED
type	IDREF	#REQUIRED
comment	%Comment;	#IMPLIED
id	ID	#IMPLIED
header	CDATA	#IMPLIED
value	CDATA	#IMPLIED
magic	CDATA	#IMPLIED
endpoint	CDATA	#IMPLIED
reply	(Y N)	"N"

>

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**Note:** The endpoint attribute is currently not used.

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## 5.4 Oracle9iAS InterConnect Installation Documentation

The Oracle9iAS InterConnect installation documentation, found in the *Oracle9iAS Installation Guide*, Appendix B, Section B.5.2 claims that `cookbook.zip` is available in the `$ORACLE_HOME/oai/9.0.2/sdk/` directory after the InterConnect Development Kit install. This `cookbook.zip` file is available only on UNIX.

## 5.5 iStudio Post Installation Steps for the Oracle9iAS InterConnect Adapter for JDEdwards

Complete the following iStudio post installation steps to fully enable the Oracle9iAS InterConnect Adapter for JDEdwards.

1. Update the `PATH` environment variable to include the `$ORACLE_HOME/oai/9.0.2/bin` directory. This is required to run the utilities in this directory.
2. Copy the `Kernel.jar` and `Connector.jar` libraries from the JDEdwards OneWorld installation to the `$ORACLE_HOME/oai/9.0.2/lib` directory in your Oracle Home.
3. Edit the `jdeinterop.ini` file located in the `$ORACLE_HOME/oai/9.0.2/config/JDE/` directory to specify the path to the log files for the following parameters:

```
[LOGS]
log=
debuglog=

[DEBUG]
log=
DebugFile=
JobFile=
```

For example:

```
log=C:/Oracle/Ora90/oai/9.0.2/jdelog.txt
```

Set the following parameter to point to \$ORACLE\_HOME/oai/9.0.2/lib directory:

```
[INTEROP]  
repository=
```

For example:

```
repository= C:/Oracle/Ora90/oai/9.0.2/lib
```

Set the other parameters in this file before you can use this adapter.

The files in the \$ORACLE\_HOME/oai/9.0.2/jde/ESU directory are provided to create custom packages on the JDE server. A custom package must be set up on the JDEdwards OneWorld server before using the adapter.

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**See Also:** *Oracle9iAS InterConnect Adapter for JDEdwards Installation and User's Guide*

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## 5.6 iStudio Post Installation Steps for the Oracle9iAS InterConnect Adapter for SAP

Complete the following iStudio post installation steps to fully enable the Oracle9iAS InterConnect Adapter for SAP.

1. Update the PATH environment variable to include the \$ORACLE\_HOME/oai/9.0.2/bin directory. This is required to run the utilities in this directory.
2. The SAP adapter requires the librfc32.dll SAP library for browsing the SAP system in iStudio and for run time. If the SAP graphical interface is installed on a machine, the librfc32.dll can be found in directories:

```
<SAP install directory>SAPpc\SapGui\RFCSDK\lib  
<SAP install directory>SAPpc\SapGui\RFCSDK\bin
```

The version information for the library is: librfc32.dll 4640.5.734.3319. Copy this library file to the \$ORACLE\_HOME/oai/9.0.2/bin directory.

If you do not have the library available at your site, please refer to R/3 note number 0413708. In this note you can find the information regarding procurement of the libraries.

3. To enable dynamic access to IDocs and enhanced use of RFCs, use the files provided in `$ORACLE_HOME/oai/9.0.2/sap` directory and upload the source code on to the SAP server. [Table 2](#) describes the folders in this directory.

**Table 2 SAP Folders**

Folder	Description
a. ale_files -	The files in this folder are used on the SAP server to enable dynamic access to IDocs at both design time and runtime. Please refer to the <code>IdocBrow.txt</code> file for instructions. Without uploading the source code in these files, you will not be able to dynamically access IDocs, in which case you need to manually download the IDoc definitions from the SAP server.
b. rfc_files -	The files in this folder are used on the SAP server or enhanced access to RFCs at both design time and runtime. Please refer to <code>rfcbrows.txt</code> for instructions. RFC browsing and runtime calls are slower if the source code in these files are not uploaded to the SAP server.

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**See Also:** *Oracle9iAS InterConnect Adapter for SAP Installation and User's Guide*

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## 5.7 iStudio Post Installation Steps for the Oracle9iAS InterConnect Adapter for PeopleSoft 7.5x

Complete the following iStudio post installation steps to fully enable the Oracle9iAS InterConnect Adapter for PeopleSoft.

1. Update the `PATH` environment variable to include the `$ORACLE_HOME/oai/9.0.2/bin` directory. This is required to run the utilities in this directory.
2. Customize the PeopleSoft panel and make it available through the application's Message Server API. The files in the `$ORACLE_HOME/oai/9.0.2/peoplesoft` directory are provided for that purpose.

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**See Also:**

- `readme.html` in the `$ORACLE_HOME/oai/9.0.2/peoplesoft/` directory
  - *Oracle9iAS InterConnect Adapter for PeopleSoft 7.5x Installation and User's Guide*
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## 5.8 iStudio Post Installation Steps for the Oracle9iAS InterConnect Adapter for Siebel 2000

Complete the following iStudio post installation steps to fully enable the Oracle9iAS InterConnect Adapter for Siebel 2000.

1. Update the `PATH` environment variable to include `$ORACLE_HOME/oai/9.0.2/bin` directory. This is required to run the utilities in this directory.
2. Copy the following libraries from the Siebel installation to the `$ORACLE_HOME/oai/9.0.2/lib` directory:
  - `SiebelTcOM.jar`
  - `SiebelTcCommon.jar`
  - `SiebelTC_enu.jar`
  - `SiebelDataBean.jar`

These `.jar` files comprise the Siebel Java Data Bean and are provided on the Siebel installation CD.

3. Siebel requires that you enable the Siebel Thin Client Enterprise Component to allow any thin client to communicate remotely with the Siebel Application Server.

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**See Also:** *Oracle9iAS InterConnect Adapter for Siebel 2000 Installation and User's Guide*

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