

Installing Oracle Applications tier collectors

This section includes the following topics:

- [Pre-installation tasks](#)
- [Installing an Oracle Applications Tier instance](#)
- [Post-installation action items](#)

Pre-installation tasks

Most of the screens in this installation require you to input details regarding your information systems. Before installing an Oracle Applications Tier instance, compile a list of all required user inputs based on the screen names below.

Before installing an Oracle Applications Tier instance, verify that you have performed the following tasks:

- Use the Precise Framework Installer to install framework components.
- Verify that you have already installed an Oracle Collector.
- Verify that you can change the CUSTOM.pll and CUSTOM.plx forms library.
- Verify that there are no users logged on to the Oracle Applications server.
- Verify that there are no batch jobs or reports running on the Oracle Applications server.
- Verify that the Concurrent Manager is shut down.
- Log in to the Oracle DB with sysdba user and run:

```
GRANT EXECUTE ON DBMS_PIPE TO <COLLECTOR_SCHEMA_USER>
```

Installing an Oracle Applications Tier instance

This section describes the procedures that are needed to install an Oracle Applications Tier instance. You have the option of adding a new instance, as well as adding a new application. For information on editing or removing an existing instance, see [Editing or removing tier instances or clusters](#).

Adding an Oracle Applications Tier instance

On the AdminPoint Instances screen, you can add a new Tier instance.



Before adding a Tier instance, create a list of all required inputs based on the information below.

To add a Tier instance

1. From StartPoint, click the AdminPoint tab.
2. Click the Setup tab.
3. From the drop-down menu, select **Instances & Clusters**.
4. Click the **All instances** tree item
5. At the bottom of the Display Instances & Clusters screen, click **Add Instance**. An Add New Instance dialog box appears.
6. Select the required technology from the list.
7. Select the application from the list. If the desired application is not on the list, use the following steps:
 - a. Click **Add**.
 - b. In the Application Name field, type in the new application name.
 - c. On the Application System field, select the system application from the list.
 - d. Click **OK**.



To install an instance in an application, you must have `ADMINISTRATE . INSTALL` permission for the application in which you want to install the instance. If you only have permission for a specific technology, you will only be able to install in an application that is either empty, or is comprised of only the same technology.

8. Select a Tier from the list.
9. Click **OK** to view the next screen.



Always refresh AdminPoint after adding an instance.

Defining Oracle Applications property settings

You can install both an Interpoint for Oracle Applications and the Insight Savvy for Oracle Applications to monitor the Forms Tier of Oracle Applications. To use an Interpoint for Oracle Applications, the database instance must first be monitored by an Precise for Oracle Collector agent.

To monitor the Forms Tier of Oracle Applications by the Insight Savvy for Oracle Applications, the following conditions must be met:


- The Forms server must be a UNIX server.
- The database instance must first be monitored by an Precise for Oracle Collector agent.

- If the Oracle Applications Forms server works in Forms Listener Servlet Mode, then the Precise for J2EE Collector agent must first be installed on the Forms Listener JVM.
In the J2EE instance properties dialog box, select the J2EE application server type 'Oracle' and the J2EE application server version 'Oracle Applications 11.5.8 (Forms Listener Servlet Mode)'.


The first two textboxes are the database details (which should have already been installed as a Precise instance), with the third and fourth textboxes, the Oracle Applications forms details.

To define property settings for Oracle Applications

1. Select from the drop-down menu, the server where the Oracle Applications database is running.
2. Select from the drop-down menu, the Oracle Applications database instance name.

 The name of the Oracle instance or database used by Oracle Applications. If you also want to install an Interpoint for Oracle Applications, you need to install the Oracle Tier agents for the database SID previously installed. If this database is part of a Real Application Cluster (RAC), this is detected during the installation. In this case, you have to define the RAC later on.


3. Select from the drop-down menu, the Oracle Applications forms server. Click **Add**, to select a server that is not listed on the drop-down menu.

 This is the name or IP of the server where Oracle Applications forms are installed. This server is the Oracle Applications forms server, and it must be defined as a Precise Server.


4. Select from the drop-down menu, the Oracle Applications instance.

 The instance is usually auto-detected when the forms server is selected. In any event, you can select Other, from the drop-down menu.

5. The Oracle Applications instance ID textbox is auto-filled with the instance ID, when the instance is selected. You can manually change the value as well.

 Oracle Applications can have more than one forms server on one machine. The instance ID is a logical name that Insight uses to determine the specific forms server where you want to install this Oracle Applications Tier agent. If the Oracle Applications instance has been auto-detected this field is auto-filled.

6. Select from the drop-down menu, where the Oracle Applications works in. You can choose from the following:
 - Forms Listener Mode
 - Forms Listener Servlet Mode
 The Forms Listener Servlet Mode is enabled only if you have installed a J2EE instance on the forms server (as part of the Precise instance installation).
7. Click **Next**.

 Forms Listener Mode is also known as Forms Socket Mode and is the default configured mode for Oracle Applications 11i. Check with your Oracle Applications administrator to determine which configured mode is running for the Oracle Applications Forms server in your application.

Entering Forms Listener inputs

If you selected Forms Listener Mode, you can integrate Insight with the Oracle Applications instance. This enables you to correlate activities within your Oracle Applications domain with other activities in your application and measure Oracle Applications-related network time, and to do so, you need to configure the TCP/IP ports to be used by the Oracle Applications Forms Server Listener. This option is only relevant if your Oracle Applications Forms Server is running on a UNIX server that has the Insight Savvy for Network installed. The relevant port number is defined by the FORMS_PORT application variable in the adfrmctl.sh script (located in the Oracle Applications installation folder). This script is used to start up or shut down the Forms Listener. The default values for the ports are auto-detected.

To integrate Insight with the Oracle Apps instance

1. Mark the "Integrate with Insight" box.
2. Specify the port numbers used by the Oracle Applications listener forms.
3. Click the **arrow (>>)** button to add port numbers to the list.
4. Click **Next**.

If you selected Forms Listener Servlet Mode, you can integrate Insight with the Oracle Apps instance. This enables you to correlate activities within your Oracle Applications domain with other activities in your application and measure Oracle Applications-related response time, and to do so, you need to configure the Oracle Applications forms server JVM to be used by the Oracle Applications Forms Server agent. This option is only relevant if the Oracle Applications forms server works in Forms Listener Servlet Mode and has the J2EE Collector installed.

To integrate Insight with the Oracle Apps instance

1. Mark the "Integrate with Insight" box.
2. Select from the drop-down menu, the JVM in which the Oracle Applications listener servlet is running.
3. Click **Next**.

Defining the RAC cluster

If there is a RAC, the RAC Cluster dialog box will appear, with the left table listing all monitored Oracle instances. The right table lists only instances that are part of the RAC (not including the instance defined in the Oracle Applications Tier - Instance Properties dialog box).



The right table must include all of the Oracle instances that are part of the RAC. Verify that this table is updated whenever you add or remove instances from your RAC configuration.

To define the RAC cluster

1. In the Oracle Applications Tier - RAC Cluster dialog box, select the instances to be part of the Oracle Applications RAC cluster. Use the arrow buttons to move instances between the tables.
2. Click **Next**.

About the AdminPoint Tier installation preview screen

The preview screen signifies that the AdminPoint Tier installer has gathered enough information to begin the installation phase.

The preview screen displays the following details before installation begins:

- Server name or IP address
- The name of the monitored server
- What actions will be performed in their respective order
- Installation folder (location)
- Required disk space
- Currently available disk space

At this screen, you can still change any of the settings displayed. Click **Back** to change any of the displayed settings. Click **Next** to continue installation. Click **Cancel** to stop the installation process.

About the AdminPoint Tier installation progress screen

This screen appears when the AdminPoint Tier installer is actually performing installation. Installation may take several minutes.

The progress screen visually displays the progress of actual installation on selected servers.

About the AdminPoint Tier installation complete screen

This screen appears when the AdminPoint Tier Installer has completed installation of all Tier instances.

If there are no action items, click **Finish** (it will be the only option available) to complete the instance installation. If there are action items, click **Next** (it will be the only option available).

About the AdminPoint Tier Action Items screen

After a Tier instance is installed, you must perform post-installation tasks as may be required. Only after completing any post-installation tasks required can you start using the Tier instances you have just installed.

Perform any tasks displayed on this screen. Click **Execute** for Precise to perform the action items. Click **Mark as done** if you have performed the action items yourself.

Post-installation action items

When the Oracle Applications Tier Collectors have been installed, post-installation tasks are required. Depending on your application settings, you may need to stop all Insight Savvies that are currently running on the respective server and restart them. In addition, you need to grant permissions to schema user as described below and activate an Interpoint for Oracle Applications, as well as configure the Interpoint for Oracle Applications for the purpose of data collection.

Granting permissions to schema user

Connect to the Oracle instance on which the corresponding collector is installed as DBA user and run query:

```
grant execute on DBMS_PIPE to <collector_schema_user>
```

Activating the Interpoint for Oracle Applications

To activate an Interpoint for Oracle Applications

1. Log in to the server and run the following script to install the Interpoint:
 - **Windows**
\\products\oracle\SID\schema\install_oracle_apps.bat

- **UNIX**
./products/oracle/SID/schema/install)_oracle_apps.sh
where <Precise_root> is the name of the Precise root folder.
2. To verify that the installation was successful, run the following script:
 - **Windows**
verify_install_oracle_apps.bat
 - **UNIX**
verify_install_oracle_apps.sh
 3. Configure the Oracle Applications application.
For more information on how to configure the Oracle Applications application, see the next topic.
 4. Restart the Precise for Oracle Collector agent for this instance.

Configuring an Interpoint for Oracle Applications for data collection

The Interpoint for Oracle Applications identifies activities of Oracle Applications by monitoring the events that are called by forms. Configuring an Interpoint for Oracle Applications to collect the relevant data involves these tasks:

- Manually updating the customization library
- Manually updating Oracle Applications' system profile (Oracle applications 11.5 or higher)

Manually updating the customization library

To have the Interpoint for Oracle Applications collect forms data, you must manually add some information to the customization library of the Oracle Applications forms. This information includes user, form, and application names.

The customization library consists of the following files:

- CUSTOM.pld
- CUSTOM.pll
- CUSTOM.plx

You can only modify the CUSTOM.pld file. This file does not exist by default but can be extracted from the CUSTOM.pll file. For the changes to take a global effect in the customization library after they are implemented in the CUSTOM.pld file, you need to regenerate the CUSTOM.pll and CUSTOM.plx files from the CUSTOM.pld file.



The file names may appear lowercase or uppercase (for example CUSTOM.pll). In the following task, all filenames are uppercase. If you copy-paste this information, verify that the case matches the actual file names on your system.

To update the customization library on UNIX

1. Find the CUSTOM.pll and CUSTOM.plx files, usually located in your Oracle Applications folder.
2. Back up the CUSTOM.pll and CUSTOM.plx files and, if it exists, also the CUSTOM.pld file.
3. Verify that no Oracle Applications user is currently logged on to the database or any other database using the CUSTOM.pll and CUSTOM.plx files.
4. Change to the folder that contains the CUSTOM.pll file. This folder is pointed to by the application variable \$FORMS60_PATH.
5. To extract the CUSTOM.pld file, run the following command using the Oracle account of Oracle Applications (such as APPS):
f60gen Module=CUSTOM.pll Module_Type=LIBRARY userid=user/password script=yes



For Oracle Applications version R12, replace f60gen command with frmcamp_batch.

6. Run the following command to edit the file:
vi CUSTOM.pld
7. Find the EVENT procedure, locate the first BEGIN after the commented sample code, and insert the following code, starting with BEGIN. Do not insert the script into commented sample code. You can easily mistake sample code for real code.
begin
if (event_name='WHEN-NEW-FORM-INSTANCE') then declare cursor_name integer;
rows_processed integer; del char(1) := substr(get_application_property(CURRENT_FORM),1,1); begin
if (del != '/') then del := '\';
end if;
cursor_name := dbms_sql.open_cursor;
dbms_sql.parse(cursor_name,
'begin VERITAS_APPS_LOG('F' , :username ,
:application , :form , NULL) ; end ;' , 1); dbms_sql.bind_variable(cursor_name,':username' , FND_PROFILE.
VALUE('USERNAME')); dbms_sql.bind_variable(cursor_name,':application' , substr(get_application_property
(CURRENT_FORM), instr(get_application_property(CURRENT_FORM),del ,
-1)+1, length(substr(get_application_property(CURRENT_FORM), instr(get_application_property(CURRENT_FORM),
del,-1)+1)-4)); dbms_sql.bind_variable(cursor_name,':form' , Name_In('system.current_form'));
rows_processed := dbms_sql.execute(cursor_name);
dbms_sql.close_cursor(cursor_name);
exception
when others then begin dbms_sql.close_cursor(cursor_name); exception
when others then null;
end; end if;
exception

```
when others then null;
end;
```

8. To regenerate the CUSTOM.pll file from the CUSTOM.pld file, run the following command using the Oracle account of Oracle Applications (such as APPS):
 - a. For Oracle Application version under R12 (exclusive):
f60gen Module=CUSTOM.pld Module_Type=LIBRARY userid=user/password parse=yes
 - b. For Oracle Applications version R12:
frmcamp_batch Module=CUSTOM Module_Type=LIBRARY userid=user/password parse=yes
9. To regenerate the CUSTOM.plx file from the CUSTOM.pll file, run the following command using the Oracle account of Oracle Applications (such as APPS):
f60gen Module=CUSTOM.pll Module_Type=LIBRARY userid=user/password compile_all=yes



For Oracle Applications version R12 replace f60gen command with frmcamp_batch.

10. To verify the CUSTOM library change, run the following script:
<precise_root>/products/oracle/<sid>/schema/pss_verify_oa_customer_pll.sh

To update the customization library on Windows

1. Find the CUSTOM.pll and CUSTOM.plx files, usually located in your Oracle Applications folder.
2. Back up the CUSTOM.pll and CUSTOM.plx files.
3. Verify that no Oracle Applications user is currently logged on to the database or any other database using the CUSTOM.pll and CUSTOM.plx files.
4. Run the %ORACLE_HOME%\bin\if60gen.exe tool (sometimes called ifbld60.exe).



For Oracle Applications version R12 replace f60gen command with frmcamp.exe.

5. In the welcome wizard, select **Open an existing form**, followed by **OK**.
6. Choose CUSTOM.pll and click **Open**.
7. Under PL/SQL Libraries > Custom > Program Units right-click on Package body and select the **PL/SQL Editor**.
8. Find the EVENT procedure, locate the first BEGIN after the commented sample code, and insert the following code, starting with BEGIN. Verify that the script was not inserted into commented sample code. You can easily mistake sample code for real code.

```
begin
  if (event_name='WHEN-NEW-FORM-INSTANCE') then declare
    cursor_name integer; rows_processed integer; del char(1) :=
    substr(get_application_property(CURRENT_FORM),1,1);
    begin
      if (del != '/') then del := '\';
      end if;
      cursor_name := dbms_sql.open_cursor;
      dbms_sql.parse(cursor_name,
        'begin VERITAS_APPS_LOG( ''F'' , :username ,
        :application , :form , NULL) ; end ;' , 1); dbms_sql.bind_variable(cursor_name,':username' ,
        FND_PROFILE.VALUE('USERNAME')); dbms_sql.bind_variable(cursor_name,':application' ,
        substr(get_application_property(CURRENT_FORM), instr(get_application_property(CURRENT_FORM),del
        ,
        -1)+1, length(substr( get_application_property(CURRENT_FORM), instr(get_application_property
        (CURRENT_FORM), del,-1)+1))-4)); dbms_sql.bind_variable(cursor_name,':form' , Name_In('system.
        current_form'));
      rows_processed := dbms_sql.execute(cursor_name);
      dbms_sql.close_cursor(cursor_name);
    exception
      when others then begin dbms_sql.close_cursor(cursor_name); exception
      when others then null;
      end; end; end if;
    exception
      when others then null;
      end;
  end;
```

9. Click File > Save.
10. Run %ORACLE_HOME%\bin\ifcmp60.exe.
11. Fill in the following fields:

a. File	CUSTOM.PLL (that we changed before)
b. Userid	APPS
c. Password	APPS password
d. Database	database name
e. Module Type	LIBRARY
f. Module Access	FILE
12. Click **OK**.

Manually updating Oracle Applications system profile (Oracle applications 11.5 or higher)

To have an Interpoint for Oracle Applications identify interactive forms in Oracle Applications 11.5 or higher, you must manually update the system profile of Oracle Applications with site-specific initialization code. As a result, Oracle Applications forwards the required information - the user, form, and application name for interactive work and the concurrent program and application name for batch work - to an Interpoint for Oracle Applications.

Before updating Oracle Applications' system profile, you must verify that an Interpoint for Oracle Applications was installed successfully. Otherwise, updating the profile may halt Oracle Applications.

To avoid interfering with anyone's work before changing the system profile, you can alternatively change the profile for only one user to first test the outcome.

To verify that an Interpoint for Oracle Applications was installed successfully, run the following script:

- Windows
 \products\oracle\SID\schema\verify_install_oracle_apps.bat
- UNIX
 ./products/oracle/SID/schema/verify_install_oracle_apps.sh

To update Oracle Application's system profile

1. Log in to Oracle Applications with a user that has system administrator privileges.
2. Open the System Administrator application.
3. Open the Navigator - System Administrator dialog box.
4. On the Functions tab, select Profile > System; then click **Open**.
5. In the Find System Profile Values form, select the Site check box and Type the following value in the Profile text box: Init%SQL%Custom
6. Click **Find**.
7. In the System Profile Values form, type the following in the Site text box: begin veritas_custom_profile; end;
8. Close the System Profile Values form; then open any form.

If the form opens cleanly, you can start working with the Interpoint for Oracle Applications.

If an issue occurs, verify again that the Interpoint for Oracle Applications was installed successfully. If it was installed successfully, most likely the issue was caused by erroneous text in the system profile. If the issue persists, contact Precise Customer Support.

To update the system profile for one user only

1. Log in to Oracle Applications with a user that has system administrator privileges.
2. Open the System Administrator application.
3. Select Profile > System; then click **Open**.
4. In the Find System Profile Values form, select the **Site** and **User** check boxes.
5. To the right of the User check box, enter the name of the user whose profile you want to change.
6. Type the following value in the Profile text box: Init%SQL%Custom
7. Click **Find**.
8. In the System Profile Values form, type the following in the User text box: begin veritas_custom_profile; end;
9. Close the System Profile Values form and log in to Oracle Applications with the user selected in Step 8.
10. Open any form.

If the form opens cleanly, you can update the Oracle Applications' system profile.

For more information, see [Manually updating Oracle Applications system profile \(Oracle applications 11.5 or higher\)](#).

If an issue occurs, verify again that the Interpoint for Oracle Applications was installed successfully. If it was installed successfully, most likely the issue was caused by erroneous text in the system profile. If the issue persists, contact Precise Customer Support.

Correcting problematic profiles

When the Interpoint for Oracle Applications does not correlate some of its information with the Collector agent, the following scenario may be applicable:

The Interpoint for Oracle Applications collects some of its data from the Oracle Applications using the initialization of every form that is declared in the System Profile. The System Profile contains 4 profile levels, one for each level. Listed from the weakest to the strongest are: Site, Application, Responsibility, User. The Interpoints' code is on the weakest link here, meaning, Site level. When you customize one or more profiles at a stronger level, the code that resides at Site level is hidden.



In this query we expect to have Interpoints' code ("begin veritas_custom_profile; end;") in all entries, otherwise there is no correlation.

To find problematic profiles

1. Use the following query:

```
select a.profile_option_value, DECODE(a.level_id, 10001, 'Site',
10002, 'Application', 10003, 'Responsibility', 10004, 'User', a.level_id) as "System Profile Level", a.
level_value, to_char (a.last_update_date, 'YYYY-MON-DD') LAST_UPDATE_DATE
from FND_PROFILE_OPTION_VALUES a, FND_PROFILE_OPTIONS b, fnd_profile_options_tl c
where
  a. profile_option_id = b.profile_option_id and
  b. profile_option_name = c.profile_option_name and
  c. user_profile_option_name = 'Initialization SQL Statement - Custom' order by a.LEVEL_ID;
```
2. Add the Interpoints' code within the profile (By changing the relevant profile in Oracle Applications). I.e. verify that the profile_option_value looks like: "begin veritas_custom_profile; <customer code goes here (or empty)> end;"

This query shows all relevant profiles affecting the code.

Correcting typing errors in the system profile

Typing errors in the system profile may prevent Oracle Applications forms from opening, including the system profile form. To validate that there is no other definition that overrides your profile definition and to correct any typing errors, you need to log in to the Oracle database externally using SQL*Plus.

To correct typing errors

1. Log in to your Oracle database with the APPLSYS account.
2. Run the following command to view erroneous text:

```
Select * from FND_PROFILE_OPTION_VALUES where PROFILE_OPTION_VALUE like '%veritas%';
```

You may search for any expression by replacing '%veritas%' in the where clause with the string you are looking for. For example, to search for the profiles that were entered on July 13, 1975, execute the following command:

```
Select * from FND_PROFILE_OPTION_VALUES where last_update_date=to_date ('13-JUL-75', 'DD-MON-YY');
```
3. Run the following command to correct the errors:

```
update FND_PROFILE_OPTION_VALUES set PROFILE_OPTION_VALUE = 'begin veritas_custom_profile; end;' where PROFILE_OPTION_VALUE like '%veritas%';
```

You may update any expression by replacing '%veritas%' in the where clause with the string you are looking for. For example, to update all profiles that were entered on July 13, 1975, execute the following command:

```
update FND_PROFILE_OPTION_VALUES set PROFILE_OPTION_VALUE='begin veritas_custom_profile;end;' where last_update_date=to_date ('13-JUL-75', 'DD-MON-YY');
```
4. Commit the changes.