

Installing Oracle tier collectors

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Based on your application, you can install special Collectors (Interpoints) that gather information on the activities and resource consumption of special application components. The Interpoints then correlate this information with Oracle information so that you can see ERP users, transactions, reports, and so on.

You can install the following Interpoints:

- Interpoint for Oracle Applications
- Interpoint for PeopleSoft
- Interpoint for SAP
- Interpoint for Siebel

See the appropriate section for installing each Interpoint.

Installing on Oracle Multitenant architecture (Containerized databases)

You can install Precise on Oracle Multitenant architecture (containerized databases) on Oracle 12c R2.

Precise monitors the container root and all of the open pluggable databases.

At the time of installing the Precise for Oracle collector for a containerized 12.2 Oracle instance, all pluggable databases (PDBs) should be open and not in restricted mode. Any PDBs that are in a closed state or in restricted mode at the time of instance installation are ignored for collector schema creation. If and when such PDBs are opened, the Precise for Oracle collector schema must be manually created on those PDBs using manual schema scripts.

When a new PDB is added to an Oracle 12c R2 instance monitored with Precise, the Precise for Oracle schema must be created on it based on the instructions for Precise for Oracle manual schema collector installation and the Precise for Oracle collectors must be restarted.

Pre-installation tasks

Most of the screens in this installation require you to input details regarding your information systems. Before installing an Oracle Tier instance, compile a list of all required user inputs based on the screen names and tables below. Each table (in the sections below) lists the options per screen.

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

- Use the Precise Framework Installer to install framework components
- If you intend to install SAP Interpoints:
 - Install the SAP GUI on the server that the Oracle Tier Collector is installed on.
If you intend to install an SAP Interpoint on a 64-bit Windows server, you need to install the SAP GUI for 64-bit Windows.
 - Verify that the RFC functions STUM_WP_SERVER_ACTIVITY and TH_SERVER_LIST are enabled in your application.
 - Configure an additional working process (dialog type) for the use of the SAP Interpoint.
For more information on the RFC usage, see the technical note: How Precise Interpoint for SAP Impacts SAP Application Server Load and Performance.
 - Create an SAP user account that the SAP extension will use to access the system. If you install Precise for SAP, you can use the same user as is used by Precise for SAP.
For more details on the required authorizations, see Pre-installation tasks on page 26.
 - Verify that a JDBC connection from the Oracle FocalPoint to the monitored instance server is enabled.
This means that the DBA needs to configure the Oracle Listener port, otherwise only local connections will be enabled.

Pre-installation tasks for the Oracle Tier on a Windows server

To perform pre-installation tasks for an Oracle Tier on an Oracle server

1. If you want to install on a Windows server, add the "precise" user to the 'ora_dba' group.
2. Verify that you have an Oracle DBA user name and password. The user should also have SYSDBA privileges. During the Oracle Tier installation, the installer creates a schema in the Oracle database. To do so, it is required to specify an Oracle DBA user. This user is used only during the installation. Precise products do not use or save the DBA user name or password for future use.
3. Set the Init.ora parameter.
For all versions, set: timed_statistics = TRUE
4. When installing a new Oracle Agent on Windows with Oracle 12c and later where:
 - the listener is already installed
 - the Oracle service is running using Oracle home user who is a standard Windows user and not part of the Admin group
 - a. Allow full access to the Oracle home user on the Precise root directory on the monitored machine (the machine where the Oracle Agent is being installed or the Oracle instance is running).
 - b. Add the Oracle home user to the performance monitoring group.

Pre-installation tasks for the Oracle Tier on a UNIX server

To perform pre-installation tasks for an Oracle Tier on a UNIX server

1. If you want to install on a UNIX server, add the "precise" user to the same group as the Oracle software owner.
The Precise for Oracle agent reads the Oracle SGA directly. To do so, the user must be in the same group as the Oracle user to have access to the Oracle shared memory.
2. If you are installing on a Sun Solaris operating system, verify that the /proc file system is available.
3. Verify that the file system where you plan to install the software is mounted with the SETUID option.
4. Verify that the shared library path variable (LD_LIBRARY_PATH, SHLIB_PATH, or LIB_PATH, depending on the operating system) is not set in the "precise" user application.
5. Verify that you have an Oracle DBA user name and password. For Oracle 9i and later, the user should also have SYSDBA privileges.
During the Oracle Tier installation, installer creates a schema in the Oracle database. To do so, it is required to specify an Oracle DBA user. This user is used only during the installation. Precise products do not use or save the DBA user name or password for future use.
6. Set the Init.ora parameter.
For all versions, set: timed_statistics = TRUE

Pre-installation tasks for an Oracle Tier on an AIX server



When installing an Oracle Tier instance, the Oracle FocalPoint, by default, is installed on the same server as the Precise Framework. Therefore, if the Precise Framework is installed on a AIX server and you are not changing the default installation, you must follow the pre-installation task below.

If you want to install a Precise for Oracle FocalPoint on an AIX server, first verify that the server on which the FocalPoint will run has Asynchronous I/O (AIO) available.

To check whether the AIO subsystem is available

- Perform the following command:
`lsdev -C | grep aio`
The result should be similar to:
`aio0 Available Asynchronous I/O`
If the result is:
`aio0 Defined Asynchronous I/O`, then you need to make the AIO subsystem available.
To make the AIO subsystem available:
- Perform the following command:
`/usr/sbin/mkdev -l aio0`

To check whether the AIO subsystem is configured to be available upon the next system startup

1. Perform the following command:
`lsattr -El aio0`
2. Check the value of the autoconfig parameter. It should be equal to available and not to defined.

To configure the AIO subsystem to be available upon the next system startup

- Perform the following command:
`/usr/sbin/chdev -l aio0 -P -a autoconfig=available`

Installing an Oracle Tier instance

This section describes the procedures that are needed to install an Oracle 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 on page 200.

Adding an Oracle 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 screen information below.

To add a Tier instance


1. From StartPoint, click the AdminPoint tab.
2. Click the Installation tab. The list of Applications appears.
3. If the Application exists, click **Edit** to edit the Application. If this is a new Application, then click **Add**, and then follow the details for adding an application.
4. Once the Application tab is opened, then click **Oracle**.
5. Select **Add** from the Oracle tab.
6. If the Oracle instance is new, then select **Add**. If the Oracle instance exists in an existing application, select **Add Existing**.

 Always refresh AdminPoint after adding an instance.


Defining Oracle property settings

To enter the properties of an Oracle Tier instance


1. Click the drop-down menu and select the server with the Oracle instance. Click **Add** to enter the name of a server not on the list. For more information, see [Adding a new server](#).
2. Click the drop-down menu and select the Oracle SID from the list. If this is a Container Database, this must be the CDB name.
3. Enter the Oracle home folder. If it does not appear correctly, click the **browse (...)** button to search for the appropriate home folder.
4. Click the drop-down menu and select the Oracle version.

 This is the Oracle release version of the instance, which is either 10g, 11g, 12c R1, or 12c R2.


5. Click the drop-down menu and select the Oracle Listener port.
6. Enter the user name.

 The name of the Oracle user that has DBA privileges. This user is used for the initial connection with the Oracle database and to create a user named "precise" in the database. The DBA user is used only for the above tasks during the installation. Once it finishes its tasks, it is not used any more.

7. Enter the password.

 This is the password for the Oracle DBA user, encrypted using the Precise CLI utility. The DBA password is not saved by Precise.

8. Click the drop-down menu and select the method of connection.
 - The Oracle Tier installation requires creating objects (views and packages) in the SYS schema and therefore, a privileged access to the SYS schema is required. Use the "Connect As" option to allow connecting to your Oracle instance with a user that has SYSDBA privileges.
 - If you did not use the manual schema installation, it is required that you connect with a DBA user as 'SYSDBA'.
 - To connect as 'SYSDBA', you should enter the Oracle initialization parameter remote_login_passwordfile as a password file, meaning that this parameter must be set to share or exclusive, and grant SYSDBA privileges to the DBA user for the Oracle Tier installation.
9. Click **Next** to continue to the next screen.

 If a browse screen appears, select the file that appears in the "File of type" field, on the installation disk, in the folder Precise /distribution.

Entering a user for an Oracle Schema credential

To enter a new user for an Oracle Schema credential

1. Select "Create new user."
2. Enter the user name. If this is installed in an Oracle Container Database, the user must be prefixed **C##**.
3. Enter the appropriate password.
4. Re-enter the password.
5. Click **Next**.

To enter an existing user for an Oracle Schema credential

1. Select "Use an existing user."
2. Click **Find User** to locate an existing user name.
3. On the Find User dialog screen, click **Find** to filter for an existing (available) user name.
4. Select an available user name, and then click **OK**. If this is installed in an Oracle Container Database, the user must be prefixed **C##**. The selected user name now appears on the Oracle Schema credential screen.
5. On the Oracle Schema credential screen, enter the appropriate password for the existing user.
6. Click **Next**.

About the tablespace creation screen

The tablespace creation script screen enables the user to activate default tablespace creation, or to create customized tablespaces.

Click **Next** to activate default tablespace creation.

If you want to modify Oracle instance tablespace creation, copy the text that appears on the screen to SQL*PLUS and run as you wish. Then click **Next** to continue installation while using the tablespaces you have created.

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.

Installing an Oracle cluster

Configuring a cluster is supported for Oracle RAC (Real Application Clusters). For more information on how to install an Oracle instance for RAC, see the Installing the Oracle instance section. The Cluster setting dialog is available only in case you have Oracle clusters or instances. For information on editing or removing an existing instance, see Editing or removing Tier instances or clusters on page 200.

Adding an Oracle cluster

You can add an Oracle cluster via the Cluster Settings dialog box.

To add a cluster

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 clusters** tree item.
5. At the bottom of the Display Instances and Clusters screen, click **Add Cluster**. An Add New Cluster dialog box appears.
6. Select the Oracle technology from the list.
7. Select the application from the list.
If the desired application is not on the list, follow steps a-d:
 - 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 cluster in an application, you must have an explicit `ADMINISTRATE . INSTALL` for the application in which you want to install the cluster. 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 a cluster.

10. Insert the name for the cluster in the Name text box.
11. Select the DB from the drop-down menu. Based on the selected database, the related instances are shown in the table under All instances.
12. Select the required instances and move them to the Selected cluster's instances table.

 Cluster must include at least one instance.

13. Click **OK**. The new cluster will be added to the available clusters list, in the main Clusters Settings dialog box.

Post-installation action items

When the Oracle Tier schema is installed, post-installation tasks may be required. This mainly depends on factors such as the Oracle version, the operating system, and the granted privileges. In addition, this depends on whether Precise for Storage or Interpoint is installed.

For installation details, see the appropriate section for the specific product.

Installing the Interpoint for PeopleSoft Collector's trigger

If you have installed the Interpoint for PeopleSoft Collector to monitor PeopleSoft activities, you need to create a trigger on the table PSPRCRQST in the PeopleSoft database. In addition, you need to enable the database monitoring parameter in the PeopleSoft configuration file.

To install the Interpoint for PeopleSoft Collector's trigger and enable the database monitoring parameter

1. Verify that you have a valid Interpoint for PeopleSoft license.
2. Open the PeopleSoft configuration file psappsrv.cfg (usually located in the PT%version%\appserv\%domainName% folder). If EnableDBMonitoring=1, proceed to step 7. Otherwise, proceed to step 3.
3. Disconnect all PeopleSoft users.
4. Shut down all PeopleSoft application servers.
5. Set the database monitoring parameter to TRUE: EnableDBMonitoring=1
6. Restart the PeopleSoft application servers.
7. Connect to the database that PeopleSoft is installed on. Use the user that owns the PeopleSoft database.
To find out who owns this database, run the following query:

```
select owner from dba_objects where object_name = 'PSPRCRQST';
```


The owner returned is the one who owns the PeopleSoft database.
8. Run the following SQL script:

```
create or replace trigger precise_psprcrqst_register after update of runstatus on psprcrqst for each row
when (new.runstatus = 7 and old.runstatus != 7) begin dbms_application_info.set_client_info(:new.oprid
|| ',' || :new.prcsinstance || ' ' || :new.prcsname
|| ');
exception when others then null;
end;
/
```