Getting an overview of your Precise for Oracle application

This section includes the following topics:

- About the Dashboard tab
- How the Dashboard tab is structured
- How the Dashboard tab can help you identify performance problems

About the Dashboard tab

The Dashboard is the starting point for your Precise analysis since it displays an overview of all the instances available in the selected application and information that is also available in some of the other tabs.

The Dashboard tab displays availability, statistics over time, and resource consumption of all Oracle instances for the selected time frame. This tab can be used to monitor your system's current state by viewing all the available instances, a list of all active sessions, and the resource consumption for the last minute (Current tab). In addition, you can view the highest resource consumer in terms of work type, statistics over time, resource consumption over time, and top resource consumers within the selected time frame (on the Overview, Statistics, Applications, Current, Availability, and Activities tabs). If you are deploying the Oracle Real Application Clusters (RAC) option, the RAC Database tabs displays load balancing information, lists the top RAC events and top objects experiencing RAC wait.

The Dashboard tab provides answers to the following types of questions:

- Are all my Oracle instances up?
- Which instance is consuming the most resources?
- Which program is consuming the most resources for the specified instance and across all instances?
- From what types of performance problems is an instance suffering?

The All row in the All Oracle Instances table located in the Main area (left pane) displays the average availability of all instances. When you select the All row, a summary of the activities of all the instances and a comparison of application identifiers is displayed in the various tab pages viewed in the Instance Details area (right pane).

In general, launching to a tab from the All row focuses in on the Tier entity, which summarizes the data collected for all instances. Tabs that do not have a Tier entity, open on the default instance.

> If you are working with Oracle Applications, SAP, PeopleSoft, or Siebel and ERP support is installed, the Dashboard tab displays information on Oracle activity in relation to the ERP application and users, and specific information on executed views and transactions.

When an Interpoint for ERP is installed, the Precise for Oracle Collector divides Oracle activities into several groups, called work types.

The following table lists the work types available that are available per technology.

Table 1 Work types per technology

Technology	Work Type
Oracle Applications	Can be any of the following: • **OA Interactive**. Activities generated from the Oracle Applications interactive work process. • **OA Batch**. Activities generated from Oracle Applications batch processes. • **OA Self Service**. Activities generated from Oracle Applications self-service operations. • **OA CRM**. Activities generated from Oracle CRM activities.
SAP	Can be any of the following: • **SAP Dialog**. Activities generated from the SAP Dialog work process. • **SAP Update**. Activities generated from the SAP Update work process. • **SAP Spool**. Activities generated from the SAP Spool work process. • **SAP Background**. Activities generated from the SAP Background work process.
PeopleSoft	Can be any of the following: • **PS Interactive**. Activities generated from the PeopleSoft Interactive panel. • **PS Batch**. Activities generated from the PeopleSoft batch.
Siebel	Can be any of the following: • **Siebel Interactive**. Activities generated from a client request. • **Siebel Batch**. Activities that must be started manually, but require no user intervention. • **Siebel Background**. Activities generated in the background and require no user intervention.

See About Precise for Oracle tabs, About the Current tab, About the Activity tab, About the Objects tab, About the SQL tab, About the What-If tab, About the Statistics tab, and About the Oracle Applications tab.

How the Dashboard tab is structured

The Dashboard tab is divided into two areas the Main area and the Instance Details area. The Main area lists all the instances that are monitored by Precise for Oracle. The Instance Details area provides comparative information regarding the selected instance. You can filter the information shown in the Instance Details area so that only the contribution of certain entities is included. See Filtering data.

About the Main area in the Dashboard tab

The instance table displayed in the Main area lists all the instances that are monitored by Precise for Oracle. Each row corresponds to an instance. The All row displays the average availability (%) of all instances.

The following table shows the information displayed in the Instance table.

Table 2 Instance table

Column	Description
Icon	Indicates whether or not the instance is available.
Instance	Name of the instance.
Server	Name of the server.
In Oracle (Sum.)	Total In Oracle time of the instance within the selected time frame.
Executions	Total statements executions within the selected time frame.
Availability	Average percentage of time the instance was available within the selected time frame.
Last Update	Time the instance availability status was last updated.
Clustered	Indicates whether or not the instance belongs to a cluster.
Database	Displays the Oracle database name for the instance.
DB Name	Displays the Oracle database ID for the instance.
Instances	Indicates how many instances share the same database with the instance.

When you open the Dashboard tab, only the first few columns are displayed. To view additional columns (such as: Executions and Last Update columns), use the scroll bar at the bottom of the screen.

See Determining which table columns to display.

About the Instance Details area in the Dashboard tab

This area is divided into tabs and displays overall activity, active sessions, top performance findings, and statistical information for the selected instance. Clicking on the hyperlinked title of specific data items launches, in context, to the related tab from which the data was derived. For example, clicking In Oracle on the Overview tab launches the Activity tab, in context of the current instance (or all instances if you have selected the All row in the instance table), displaying the In Oracle overtime graph. Additionally there is also a Findings section at the bottom part of this area.

The following table describes the information displayed in the Instance Details area.

Table 3 Information displayed in the Instance Details area

Tab	Information Displayed
Overview	The Overview tab displays In Oracle data and performance findings for the selected instance, over the selected time period.
Applications	The Applications tab displays the top resource-consuming programs, users and machines, for the selected instance, over the selected time period.
RAC Database	Displays information related to the RAC database, such as top RAC events, top objects experiencing RAC wait, and a graph comparing the time spent by the selected instance In Oracle vs. the average time spent by all instances in the same RAC database. (if applicable)

More	The following options are available in the More tab: • The Activities tab displays the top resource-consuming statements, objects, and files for the selected instance, over the selected time frame. • The Current tab displays active sessions that occurred within the last minute for the selected instance. • The Availability tab displays the average percentage of time the instance was available or unavailable, as compared to the Availability SLA.

If you select the All row, the information displayed reflects the average availability of all instances, and the Current tab is not available.

About the overview of your system's performance

The Overview tab displays overall activity and performance findings for the selected instance, within the selected time frame. Items on this tab can launch the Activity, SQL, or Object tab in context for further investigation.

The following table describes the entities displayed on the Overview tab.

Table 4 General instance data

General instance data	Description
In Oracle	Displays the total time spent In Oracle over time, broken down into the different In Oracle wait states, such as Using CPU, I/O Wait, Application Lock Wait, and so on. See Wait stats - In Oracle.
Findings	Displays top performance findings. All problems are ranked by severity and lets you launch the finding, in context, to the appropriate tab. The information is displayed in the findings table.
Availability	Displays the Availability SLA (as defined in AdminPoint) vs. the actual availability over time. See the Precise Administration Guide.

About top resource-consuming entities

The Applications tab displays the top resource-consuming programs, users, and machines for the selected instance, over the selected time frame.

All entities in this display launch the Activity tab, in context of the Oracle instance.

See Precise Interpoint - how resource consumption of packaged applications is examined.

About RAC database activity

Oracle RAC allows two or more instances to simultaneously access a single database. This allows an application to connect to either computer and have access to the same data. Because all instances access the same database, it is essential that data changes on different computers are coordinated. The RAC Database tab displays activities related to the RAC database, such as top RAC events, top objects experiencing RAC wait, and a graph comparing the time spent by the selected instance In Oracle vs. the average time spent by all instances in the same RAC database. This lets you monitor the RAC activity in your system and check how well Oracle is synchronizing its buffer pool caches.

Table 5 RAC Database tab display

Display	Description
In Oracle: Instance vs. All Instances in Same RAC database (Avg.)	Displays a graph comparing the time spent by the selected instance In Oracle vs. the average time spent by all instances In Oracle, in the same RAC database. This indicates whether or not the database is balanced.
Top RAC Events	Displays the top RAC events experienced by the selected instance. Lets you compare the average amount of time spent by the top RAC wait events of all the instances in the RAC database to the amount of RAC wait time spent by the selected instance.
Top Objects Experiencing RAC Wait	Displays the top objects experiencing RAC wait, sorted by how much they suffered from RAC wait. Lets you compare the average amount of time spent by the top objects of all the instances in the RAC database to the amount of RAC wait time spent by the objects of the selected instance. It also displays the object name and schema name of the object and indicates whether it is a table, index or cluster. The launch icon lets you launch directly to the Objects tab with the selected object in context, to continue your analysis.

About top resource-consuming statements, objects, and files

The Activities tab, accessed from the More tab, displays the top resource-consuming statements, objects, and files for the selected instance, over the selected time frame.

All entities in this display launch the Activity tab, in context of an Oracle instance or Tier. The following table describes the information displayed in the Statement activities table.

Table 6 Statement activities

Column	Description
Statement	Statement name. This is either a numeric hash value or a user-defined name.
In Oracle (Sum.)	Total In Oracle time of the statement, broken down into the different In Oracle wait states. See Wait stats - In Oracle. Click the respective icon to display the data in this column in a stacked graph, bar graph, or numerical format.
Executions	Number of executions of the statement.

The following table describes the information displayed in the Object activities table.

Table 7 Object activities

Column	Description
Object	Name of the object.
Type	Type of the object, typically a table or index.
In Oracle (Sum.)	Total In Oracle time of the object, broken down into the In Oracle wait states relevant to Objects. See Wait stats - In Oracle. Click the respective icon to display the data in this column in a stacked graph, bar graph, or numerical format.

The following table describes the information displayed in the File activities table.

Table 8 File activities

Column	Description
Oracle File	Path and name of the Oracle file.
I/O Wait	Total I/O wait time of the file, broken down into I/O wait states relevant to files. See I/O wait. Click on the respective icons to display the data in this column in a stacked graph, bar graph, or numerical format.

About the session activity within the last minute

The Current tab, accessed from the More tab, displays active sessions that occurred within the last minute for the selected instance.

All items in this display launch the Current tab, in context of an Oracle instance or Tier. The following table describes the information displayed in the Session statistics table.

Table 9 Session statistics

Counter	Description
Connected	Total number of sessions connected to the selected instance.
Active	Total number of sessions currently active.
Locked	Total number of locked sessions.

The following table describes the information displayed in the Session activity table.

Table 10 Session activity

Column	Description
Status icon	Indicates the current In Oracle sub-state.
Session ID	The current session ID.
Program	The name of the program that opened the session.

Sub-State	A snap-shot of the current In Oracle sub-state of the session, as recorded by the Collector at the last sample point.
In Oracle (Last Minute)	Total In Oracle time for the session occurring within the last minute, broken down into the different In Oracle wait states.

In addition, two pie charts summarize the overall activity and the In Oracle activity that occurred within the last minute, broken down into Overall Activity states and In Oracle wait states, respectively. See Overall activity and Wait stats - In Oracle.

About the availability of an instance

The Availability tab, accessed from the More tab, displays the average percentage of time the instance was available or unavailable, as compared to the Availability SLA. The second graph shows the number of times for unavailability.

About the Findings area in the Dashboard tab

The Findings area in the Dashboard tab displays performance problems detected in the select instance(s). The findings list is displayed according to severity (highest to lowest).

To view the details of a specific finding, hover over the finding name. The area for the selected finding will expand, displaying information and recommended actions. Click on the relevant link to launch the appropriate tab in context, or **Learn more** to open the help for that finding.

For more information about identifying performance problems in the Dashboard tab, see How the Dashboard tab can help you identify performance problems.

How the Dashboard tab can help you identify performance problems

You can identify a performance problem by doing one or more of the following:

- Examining Oracle instance availability
- Identifying the most resource-consuming instance
- Identifying the top resource consumers in various entities

Examining Oracle instance availability

It is possible to examine the availability of Oracle instances and observe their current status as well as their level of availability over time. In addition, you can determine whether their level of availability meets the SLA standard defined in the SLA availability setting in AdminPoint.

> The Availability SLA is defined in AdminPoint.

For more information, see the Precise Administration Guide and See How Precise for Oracle monitors availability.

The following example shows how to examine the availability of an Oracle instance, observe its current status, and its availability over time.

A blank area in the graph denotes periods when the Collector was down. To examine Oracle instance availability

1. In the Time Frame list, choose the period of time you want to analyze.
2. In the Main area of the Dashboard tab, check the icon status. The icon displayed in the first column indicates the current availability state of the instance. A currently running instance displays a running figure icon.
3. Move the mouse pointer over the icon to display a ToolTip. The ToolTip shows the current status of the instance.
4. Under the Availability column in the All Oracle Instances table, check the average availability (percentage) of the instance. The Availability column represents the average availability (percentage) of the instance within the selected time frame.
5. In the Instance Details area, click the **More>Availability tab**. This displays the instances' availability over time with respect to the configured SLA. If Precise for Oracle is integrated with Alerts, an alert is issued at the time an SLA is breached.

Identifying the most resource-consuming instance

Precise for Oracle enables you to determine which are the most resource-consuming instances, indicating a potential performance problem.

The following example shows how to determine which instance consumes the most resources. This example can show the top resource-consuming instances, as measured by the total time spent executing In Oracle.

To identify the most resource-consuming instance

1. In the Instance list, choose the instance you want to analyze.
2. In the Time Frame list, choose the period of time you want to analyze.
3. In the Instance Details area, click **More>Statistics**.
4. Check the physical reads.
5. Check the redo graph.
6. Use any of the following options to investigate further:
    - Launch the Statistics tab for the selected instance.
    - In the Activity tab, check what the application was doing at specific times.

Identifying the top resource consumers in various entities

A look at the Applications tab quickly helps you identify the top resource-consuming entities. The following example shows how to identify the top resource-consuming entities.

To identify the top resource consumers in various entities

1. In the Instance list, choose the instance you want to analyze.
2. In the Time Frame list, choose the period of time you want to analyze.
3. In the Instance Details area, click **Applications**. For example, a SAP database, PS8 on hp8, is monitored by Interpoint for SAP.
   The Application tab shows the following SAP-related top entities:
   - Background work type
   - SAP user SUPER
   - Transaction SAP_CCMS_MONI_BATCH_DP Most likely, these entities are related.
4. To investigate further, click an entity to launch the Activity tab. In the Activity tab you can confirm the connection between the problematic entities. For this example, you can identify a background SAP transaction run by the SAP CCMS administration tool.