

About getting an overview of your Precise for Sybase 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 tab provides a preview of the information displayed in the other Precise for Sybase tabs. The Dashboard is the starting point for your in-depth 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 statistics and resource consumption of all Sybase instances during 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 resource consumption for the last minute (Current tab). In addition you can view statistics over time, resource consumption over time and top resource consumers during the selected time frame (in the Overall, Statistics, and Activities tabs).

The Dashboard tab provides answers to the following types of questions: "Which instance is consuming the most resources?" or "Which program is consuming the most resources for the specified instance and across all instances?"

When you select the All row, in the All Sybase Instances table, located in the Main area (left pane), 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 a tab from the All row, focuses on the Tier entity, which summarizes the data collected for all instances. Tabs that do not have an Tier entity, open on the default instance.

See [About Precise for Sybase tabs](#), [About the Current tab](#), [About the Activity tab](#), [About the Statistics tab](#), and [About the SQL 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 the Precise for Sybase Tier. The Instance Details area provides comparative information regarding the selected instance.

The figure below shows the structure of the Dashboard tab.

Figure 1 Dashboard tab structure

About the Main area in the Dashboard tab

The Instance table displayed in the Main area lists all the instances that are monitored by the Precise for Sybase Tier. Each row corresponds to an instance. The All row enables you to view information for the entire Tier.


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

Table 1 Instance table

Column	Description
Instance	Name of the instance.
In Sybase	Breakdown of In Sybase duration of the instance during the selected time frame.
Statement Executions	Total statement executions during the selected time frame.
Sessions	Total number of sessions during the selected time frame.
Replication in Sybase	Total in Sybase resulting from the replication program in the selected time frame.
RepAgent Cmds	Number of Commands sent to replication by the selected ASE in the selected time frame.
Outbound Backlog	Number of commands delayed in the outbound processing phase in the selected time frame. This column is calculated as follows: sum (SQMR Cmds Read - SQM Cmds Written).

About the Instance Details area in the Dashboard tab

This area displays overall activity, active sessions and statistical information for the selected instance. Clicking on the hyperlink for specific data items launches, in-context, the related tab, from which the data was derived.

 If you select the **All** row, the Current tab will not be available.

Gaining an overview of your system's performance

The Overall tab displays overall activity of the selected instance during the selected time frame.

All items in this display launch the Activity tab with an instance or Precise for Sybase Tier context. The table below describes the information displayed in the Overall tab.

Table 2 General instance data

General Instance Data	Description
In Sybase	Displays a breakdown of the total In Sybase duration over time, for the selected instance during the selected time frame, into states such as, Using CPU, I/O Wait, Lock Wait, and so on.
Load	Displays the total number of sessions over time, for the selected instance during the selected time frame.
Response Time	Displays the average response time over time, for the selected instance during the selected time frame.

Observing top resource-consuming databases, programs and batches

The Activities tab displays the top resource-consuming databases, programs and batches, during the selected time frame.

All entities in this display launch the Activity tab, in-context of an instance or Tier. The table below describes the information displayed in the Databases table.

Table 3 Databases table

Column	Description
Database	Displays the names of the top resource-consuming databases.
Sessions	Displays the total number of sessions opened, during the selected time frame.
In Sybase	Displays the resource consumption of the database broken down into states such as, Using CPU, I/O Wait, and Lock Wait states. Click the respective icons to display the data in this column in a stacked graph or numerical format.

The table below describes the information displayed in the Programs table.

Table 4 Programs table

Column	Description
Program	Displays the names of the top resource-consuming programs.
Sessions	Displays the total number of sessions opened, during the selected time frame.
In Sybase	Displays the resource consumption of the program broken down into states such as, Using CPU, I/O Wait, and Lock Wait states. Click the respective icons to display the data in this column in a stacked graph or numerical format.

The table below describes the information displayed in the Batches table.

Table 5 CMDBatches table

Column	Description
Batch	Displays the IDs of the top resource-consuming batches.
Duration (Avg)	Displays the average duration of the batch, during the selected time frame.
In Sybase	Displays the resource consumption of the database broken down into states such as, Using CPU, I/O Wait, and Lock Wait states. Click the respective icons to display the data in this column in a stacked graph or numerical format.

Examining Replication for an instance

The Replication tab provides predefined graphs displaying the activity results from replication in the selected ASE, the outbound processing performed for the selected ASE, and the commands sent for replication by the selected ASE.

The table below describes the information displayed in the Replication tab.

Table 6 Replication graphs

Statistical Data	Description
Total In_Sybase vs. Replication activity (outbound)	Displays the total In_Sybase of the instance versus the In_Sybase resulting from replication activity in the selected time frame. The In_Sybase resulting from replication activity is displayed as a stack bar which represents the various states. This graph can give an indication of how much the replication activity is taking out of the entire instance activity. In addition, you can see a change in the activity trend. You can click on the graph title to launch to the Activity tab to see more details regarding the activity resulting from replication.
Outbound Load	<p>Displays counters related to outbound processing that can indicate latency in one of the outbound components during the selected time frame. The following counters are displayed in this graph:</p> <ul style="list-style-type: none">• SQM Cmds Written• SQMR Cmds Read• DSIE Cmds Read• DSIE Cmds Applied <p>Clicking the graph title launches the Statistics tab, allowing further investigation.</p>
Inbound Load	<p>Displays the number of commands sent by the selected ASE for replication during the selected time frame.</p> <ul style="list-style-type: none">• RepAgent Cmds Sent <p>Clicking the graph title launches the Statistics tab, allowing further investigation.</p>

Examining statistics for an instance

The Statistics tab displays statistical information for the selected instance, as reported by Sybase and collected by the Precise for Sybase Collect Instance Statistics Process during the selected time frame.

All items in this display launch the Statistics tab with an Instance or Precise for Sybase Tier context. The table below describes the information displayed in the Statistics tab.

Table 7 Instance statistics

Statistical Data	Description
Engine utilization	Displays the Engine utilization for the selected instance during the selected time frame.
Committed transactions	Displays the number of committed transactions during the selected time frame.
Connections opened	Displays number of connections opened during the selected time frame.

Observing top resource-consuming entities

The Activators tab displays the top resource-consuming machines, logins and users during the selected time frame. All entities in this display launch the Activity tab, in-context of the instance.

The table below describes the information displayed in the Machines table.

Table 8 Machines table

Column	Description
Machine	The names of the top resource-consuming machines.
Sessions	Total number of sessions opened during the selected time frame.
In Sybase	The resource consumption of the machine broken down into states such as, Using CPU, I/O Wait, and Lock Wait states. Click the respective icons to display the data in this column in a stacked graph or numerical format.

The table below describes the information displayed in the Logins table.

Table 9 Logins table

Column	Description
Login	The names of the top resource-consuming logins.
Sessions	Total number of sessions opened during the selected time frame.
In Sybase	The resource consumption of the login, broken down into states such as, Using CPU, I/O Wait, and Lock Wait states. Click the respective icons to display the data in this column in a stacked graph or numerical format.

The table below describes the information displayed in the Users table.

Table 10 Users table

Column	Description
User	The names of the top resource-consuming users.
Sessions	Total number of sessions opened during the selected time frame.
In Sybase	The resource consumption of the user, broken down into states such as, Using CPU, I/O Wait, and Lock Wait states. Click the respective icons to display the data in this column in a stacked graph or numerical format.

Observing your system's current activity

The Current tab displays the overall activity and active sessions that occurred within the last minute for the selected instance. All items in this display launch the Current tab, in the context of an instance. The table below describes the information displayed in the Sessions Activity area.

Table 11 Sessions activity

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

The table below describes the information displayed in the Current Activity graphs

Table 12 Current activity graphs

Item	Description
Overall Activity (Last Minute)	Provides a graphical display of the overall activity that occurred within the last minute, for the selected instance, broken down into the following states: Waitfor command, Synchronized Wait, Other Wait, Request Wait and In Sybase.
In Sybase (Last Minute)	Provides a graphical display of In Sybase activity that occurred within the last minute, for the selected instance, broken down into states, such as, Using CPU, I/O Wait, and Lock Wait.

The table below displays a list of all the active sessions that occurred within the last minute, for the selected instance.

Table 13 Active sessions (Last minute)

Item	Description
Icon	Represents the current session's state (such as, Lock Wait, Request Wait).
SPID	The session ID.
Program	The name of the program that opened the session.
State In Sybase	The current state of the session. Total In Sybase entities for the session, occurring within the last minute, broken down into states (such as, Using CPU, I/O Wait, and Lock Wait).

How the Dashboard tab can help you identify performance problems

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

- [Determining which instance consumes the most resources](#)
- [Identifying the highest resource consumers in various entities](#)
- [Examining instance statistics](#)

- [Monitoring a session activity during the last minute](#)

Determining which instance consumes the most resources

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

To determine which instance consumes the most resources

1. In the All Sybase Instances table, observe the total In Sybase statistics and statement executions for an instance during the selected time frame.
2. View its resource consumption over time to identify problematic time periods and get an idea of the general trend of resource consumption.

Identifying the highest resource consumers in various entities

Precise for Sybase lets you determine which are the most resource-consuming application components (such as, Machines, Logins, Users, Databases, Programs, and Batches).

To identify the highest resource consumers in various entities

1. Identify the most resource-consuming instances.
2. Select the Activators and Activities tabs in the Instance Details area to determine which are the most resource-consuming application components.
3. Launch the Activity tab to continue the performance tuning process on the selected component.

Examining instance statistics

You can examine instance statistics over time to confirm that Engine utilization and Load (Committed Transactions and Connections Opened) are within normal ranges. A continually high Engine utilization may indicate the need to improve the application or to add more engines to the machine to enhance performance.

To examine instance statistics

1. Select the Statistics tab in the Instance Details to view Engine utilization during the selected time frame.
2. Launch the Statistics tab to observe additional instance statistics that can help you locate performance problems in various other aspects of your system, such as I/O and Network.

Monitoring a session activity during the last minute

Monitoring a session's activity during the last minute in Sybase, can help you locate anomalous activities such as Locking, Internal Waits, and so on.

To monitor a session's activity during the last minute

1. Select the Current tab in the Instance Details area to view all the active sessions and an In Sybase breakdown into states, such as, Using CPU, I/O Wait, and Lock Wait.
2. Launch the Current tab to view additional information on the current sessions.