Getting an overview of your Precise for SAP application

This section includes the following topics:

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

About the Dashboard tab

The Dashboard tab provides a comprehensive overview of all SAP systems in a selected application. The Dashboard tab serves as the starting point for your indepth analysis since it displays a preview of the information that is available in some of the other tabs and enables you to view relevant information on the selected application without having to open each of the tabs. This simplifies and shortens the time required to view information. The Dashboard tab also enables you to view summarized data, such as the activities of all monitored SAP systems, and to compare systems in terms of Response Time and Availability. See “About Precise for SAP tabs” on page 12, “About the Activity tab” on page 35, “About the Availability tab” on page 45, and “About the Jobs tab” on page 49.

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 SAP systems that are monitored by Precise for SAP in the selected application.

The Instance Details area provides comparative information regarding the selected system.

The following table describes the various tabs available in the Instance Details area that enable you to view additional information on the selected system.

Table 1 Information displayed in the Instance Details area

Tabs	Description
Overview	Displays the general behavior of the selected systems or all systems.
System	Displays system performance and availability information, broken down into groups.
Transactions	Shows SAP transactions service and all performance statistics.
RFC	Shows SAP RFC service and all performance statistics.

About the Main area in the Dashboard tab

The All SAP Systems table displayed in the Main area lists all the systems monitored by your SAP system. Each row corresponds to a system.

The following table shows the information displayed in the All SAP Systems table.

Table 2 All SAP Systems table

Column	Description
Icon	Indicates whether or not the SAP System is currently available.
System	Displays the name of the system (as configured during the Installation procedure).
Availability	Displays the average level of availability of the monitored SAP system, during the selected time period.
Response Time (Avg)	Displays the average response time (in seconds) of all SAP activities monitored by the SAP system.
Backend Response Time (Avg)	Displays the average response time (in seconds) of all SAP activities monitored by the SAP system, not including client time.
SLA Compliance	Displays a bar indicating the number of transactions executed during the selected time period. Sections of the bar are highlighted as follows, depending upon the transactions level of SLA compliance: • **Green**. Transaction did not exceed its SLA compliance level. • **Yellow**. Transaction has exceeded its SLA warning threshold. • **Red**. Transaction has exceeded its SLA critical threshold. The information displayed in the Instance Details area, for SLA compliance data, is normalized.
Transactions	Displays the total number of transactions monitored during the selected time period.

About the Instance Details area in the Dashboard tab

This area summarizes the general behavior of the selected system or systems. Clicking on the hyperlink for specific data items launches, in context, the related tab from which the data was derived, enabling you to quickly carry out a more indepth investigation.

Gaining an overview of system availability

The Overview tab displays the general behavior of the selected system or systems, within the specified time frame. This allows you to view, at a glance, the status of your system's availability and workload.

The following table shows the general information displayed for the selected systems.

Table 3 Information displayed in the Overview

Overview area	Description
Availability	Displays the SAP system's availability, over the selected time period. System availability is compared to the Availability SLA threshold. The Availability label functions as a hyperlink, and enables you to launch the Availability tab, in context. This enables you to continue to investigate an Availability problem or to continue to analyze Availability details.
Work load	Displays the workload imposed on the SAP system, over the selected time period. The workload is broken down into different types of activities that consume application servers resources, as follows: • **RFC**. Remote function calls • **Program**. SAP programs that are not associated with Tcodes • **Update**. Update SAP programs • **Dialog**. Dialog transactions (identified by Tcodes) The Work Load label functions as a hyperlink, and enables you to launch the Activity tab, in context. This enables you to focus on Activities in the monitored site.
Applications	Displays the average response times of SAP module's transactions. By default this table is sorted by the Response Time (Avg) column, meaning that transactions that have poor response times will be displayed first. The Applications label functions as a hyperlink, and enables you to launch the Activity tab, in context, with the same list of applications. This enables you to focus on Activities that are related to the application listed in the table by analyzing the response time, in more depth, or to drill down to a specific application.

Viewing system performance and availability

The System view displays performance and availability information of the monitored SAP systems. The following table describes the information displayed for the monitored SAP systems.

Table 4 Information displayed for monitored SAP systems

System	Description

Organizations	This table summarizes various parameters and shows the availability of SAP system organizations. By default this table is sorted by the Response Time (Avg) column, meaning that organizations that have poor response times will be displayed first. This table helps focus on organizations that suffer from performance problems or availability problems.
	
	• **Organization**. Displays the name of the organization.
	• **Availability**. The organization's average level of availability during the selected time period. Response Time (Avg)—displays the average response time (in seconds) of all SAP activities generated by the organization.
	• **Backend Response Time (Avg)**. Displays the average response time (in seconds) of all SAP activities monitored by the SAP system, not including client time.
	• **Transactions**. The total number of transactions carried out during the selected time period for the specified organization.
	• **SLA Compliance**. Displays a bar indicating the number of transactions executed during the selected time period. Sections of the bar are highlighted as follows, depending upon the transactions level of SLA compliance:
	  ◦ **Green**. Transaction did not exceed its SLA compliance level.
	  ◦ **Yellow**. Transaction has exceeded its SLA warning threshold.
	  ◦ **Red**. Transaction has exceeded its SLA critical threshold.
	
	The information displayed in the Instance Details area, for SLA compliance data, is normalized.
	
	When you view information on a specific system, the Organizations label becomes a hyperlink, and enables you to launch the Activity tab, in context, with the same list of organizations. This enables you to focus on Activities that are related to the organization listed in the table by analyzing the response time, in more depth, or to drill down to a specific organization. For more information on how to configure organizations, see the Precise Administration Guide.

Locales	This table summarizes various parameters and shows the availability and SLA compliance of your system's locales. By default this table is sorted by the Response Time (Avg) column, meaning that locales that have poor response times will be displayed first. This table helps focus on locales that suffer from performance problems or availability problems.
	
	• **Locale**. Displays the name of the locale.
	• **Availability**. The locale's average level of availability during the selected time period. Response Time (Avg)—displays the average response time (in seconds) of all SAP activities generated by the locale.
	• **Backend Response Time (Avg)**. Displays the average response time (in seconds) of all SAP activities monitored by the SAP system, not including client time.
	• **Transactions**. The total number of transactions carried out during the selected time period for the specified locale.
	• **SLA Compliance**. Displays a bar indicating the number of transactions executed during the selected time period. Sections of the bar are highlighted as follows, depending upon the transactions level of SLA compliance:
	  ○ **Green**. Transaction did not exceed its SLA compliance level.
	  ○ **Yellow**. Transaction has exceeded its SLA warning threshold.
	  ○ **Red**. Transaction has exceeded its SLA critical threshold.
	
	The information displayed in the Instance Details area, for SLA compliance data, is normalized.
	
	When you view information on a specific system, the Locales label becomes a hyperlink, and enables you to launch the Activity tab, in context, with the same list of locales. This enables you to focus on Activities that are related to the locale listed in the table by analyzing the response time, in more depth, or to drill down to a specific locale. For more information on how to configure locales, see the Precise Administration Guide.

Application servers	This table summarizes various parameters and shows the availability and SLA compliance of your system's application servers. By default this table is sorted by the Response Time (Avg) column, meaning that application servers that have poor response times will be displayed first. This table helps focus on application servers that suffer from performance problems or availability problems.
	
	• **Application Server**. Displays the name of the application server.
	• **Availability**. The application server's average level of availability during the selected time period. Response Time (Avg)—displays the average response time (in seconds) of all SAP activities generated by the application server.
	• **Backend Response Time (Avg)**. Displays the average response time (in seconds) of all SAP activities monitored by the SAP system, not including client time.
	• **Transactions**. The total number of transactions carried out during the selected time period for the specified application server.
	• **SLA Compliance**. Displays a bar indicating the number of transactions executed during the selected time period. Sections of the bar are highlighted as follows, depending upon the transactions level of SLA compliance:
	  ○ **Green**. Transaction did not exceed its SLA compliance level.
	  ○ **Yellow**. Transaction has exceeded its SLA warning threshold.
	  ○ **Red**. Transaction has exceeded its SLA critical threshold.
	
	The information displayed in the Instance Details area, for SLA compliance data, is normalized.
	
	When you view information on a specific system, the Application Servers label becomes a hyperlink, and enables you to launch the Activity tab, in context, with the same list of application servers. This enables you to focus on Activities that are related to the application server listed in the table by analyzing the response time, in more depth, or to drill down to a specific application server.

Viewing SAP transactions and performance data

The Transactions view displays the SAP transaction's service and performance data. The following table describes the information displayed in the Transactions view.

Table 5 Information displayed in the Transactions view

Transaction	Description
SLA compliance	Shows an overtime graph that displays the number of transactions executed during the selected time period. Each transaction's response time is compared to its SLA (Service Level Agreement) and an indication of its SLA status is displayed, as follows: No SLA, SLA OK, SLA Near-Breach, SLA Breach. The SLA Compliance label functions as a hyperlink, and enables you to launch the Activity tab, in context. This enables you to focus on a transaction's level of service.
Response time (Avg)	Shows an overtime graph that displays the average response time for transactions, during the selected time period. Response time is broken down into Client time, Queue time Application time and DB time. The Response Time (Avg) label functions as a hyperlink, and enables you to launch the Activity tab, in context. This enables you to focus on a transaction's response time.

Transactions	Summarizes the information displayed in the SLA Compliance and Response Times graphs and displays the transaction names and the number of times they were executed during the selected time period.
	
	• **Transaction**. Displays the name of the transaction.
	• **Response Time (Avg)**. Displays the average transaction's response time, in seconds.
	• **Backend Response Time (Avg)**. Displays the average response time (in seconds) of all SAP activities monitored by the SAP system, not including client time.
	• **Transactions**. Displays the total number of times the transaction was executed during the specified time period.
	• **SLA Compliance**. Displays a bar indicating the number of transactions executed during the selected time period. Sections of the bar are highlighted as follows, depending upon the transaction's level of SLA compliance:
	  ○ **Green**. Transaction did not exceed its SLA compliance level.
	  ○ **Yellow**. Transaction has exceeded its SLA warning threshold.
	  ○ **Red**. Transaction has exceeded its SLA critical threshold.
	
	The information displayed in the Instance Details area, for SLA compliance data, is normalized.
	
	The Transactions label functions as a hyperlink, and enables you to launch the Activity tab, in context, with the same list of transactions. This enables you to focus on a specific transaction's response time.

Viewing RFC service and performance data

The RFC view displays the SAP RFC service and performance data.

The following table describes the RFC service and performance data displayed in the RFC area.

Table 6 RFC service and performance data

RFC service and performance data	Description
SLA compliance	Shows an overtime graph that displays the number of RFCs executed during the selected time period. Each execution time (call time) is compared to its SLA (Service Level Agreement) and an indication of its SLA status is displayed, as follows: No SLA, SLA OK, SLA Near-Breach, SLA Breach. The SLA Compliance label functions as a hyperlink, and enables you to launch the Activity tab, in context. This enables you to perform further analysis on a specific RFC's service level.
Call time (Avg)	Shows an overtime graph that displays the average call time for RFC functions, during the selected time period. Call time is broken down into average Exe time and Wait time. The Call Time (Avg) label functions as a hyperlink, and enables you to launch the Activity tab, in context. This enables you to perform further analysis on a specific RFC's call time.

RFC functions	Summarizes the information displayed in the SLA Compliance and Call Times graphs and displays the RFC function names and the number of times they were executed during the selected time period.
	
	• RFC Function. Displays the name of the function.
	• Call Time (Avg). Displays the average call time, in seconds.
	• Calls. Displays the total number of times the function was executed during the specified time period.
	• SLA Compliance—displays a bar indicating the number of transactions executed during the selected time period. Sections of the bar are highlighted as follows, depending upon the transactions level of SLA compliance:
	  ○ Green. Transaction did not exceed its SLA compliance level.
	  ○ Yellow. Transaction has exceeded its SLA warning threshold.
	  ○ Red. Transaction has exceeded its SLA critical threshold.
	
	The information displayed in the Instance Details area, for SLA compliance data, is normalized.
	
	The RFC Functions label functions as a a hyperlink, and enables you to launch the Activity tab, in context, with the same list of functions. This enables you to focus on specific RFCs and carry out further analysis on their call times.

How the Dashboard can help you identify performance problems

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

- Identifying which SAP systems are currently down
- Comparing the response time and availability of different SAP systems
- Examining system behavior

Identifying which SAP systems are currently down

The Dashboard tab displays a list of all your SAP systems and their level of availability. A status icon located in the first column of the All SAP Systems table shows the current status of the SAP system. This is a good place to start your analysis. When the non-availability icon is displayed, this indicates that a system has stopped running, its application servers are not available and it is not possible to connect to the system. You can focus on this system and view the Availability graph in the Overview tab. Verify that the relevant time range is selected.

The Availability graph shows you whether the downtime period started now or whether your system has been unavailable for a period of time. It is possible to select a different time frame to gauge the availability of the system in question, for different periods of time.

Comparing the response time and availability of different SAP systems

The Main area of the Dashboard tab displays a list of all SAP Systems that are part of your application and enables you to examine differences in their availability and in the average response times that users are experiencing for each systems.

The SLA Compliance column shows you how each system is performing, in reference to its SLA setting. A red section in the stacked bar graph indicates whether a system is experiencing a performance problem and whether users are experiencing poor response times.

You can sort the list according to the Availability column to determine which systems have the poorest level availability within the selected time frame. You can do the same with the response time and determine which systems show the poorest average response time level for their transactions.

Notice that those two indicators are not always correlated and there can be systems that show a poor availability level yet a very good (low) response time. This would mean that the system is experiencing availability problems and was unavailable for all or much of the time users were trying to access the system, but whenever the system was available, the response time was good.

Having a high level of availability and poor response times may indicate that the system is available most of the time, but is still experiencing performance problems.

Scrolling to the Transactions column in the All SAP Systems table enables you to compare systems in terms of transaction volume.

Examining system behavior

When viewing the Dashboard tab there is always one system in focus (in the Main area, on the left). The selected system's information is displayed in the Instance Details area on the right, in a number of different information tabs.

The Overview tab enables you to locate time range when the system' availability breached its SLA. The Availability bars for this time unit will then be below the SLA and highlighted in red. To view more about the availability of that system click on the graph's label and launch the Availability tab. The Work Load graph displays the time consumption of the system's application servers divided by the different work types, over the specified time period. It is possible to determine what type of activities consume most of the system's resources and identify any abnormal behavior. Viewing the Work Load and Availability graphs together enable you to determine if there is any correlation between your system's availability and work load.

The Applications table summarizes the data available on the applications used by the selected system, including each application's response time and SLA compliance.

If you want to further investigate the system's applications to discover which transactions were executed or which users are using the application, click on the Application label. This launches the Activity tab which provides more detailed information on the system's applications and provides you with additional investigative tools.

The other tabs in the Instance Details area provide additional information on the selected system.

The System tab can help you determine which are the most problematic user groups (Organization, Locales) or application servers in terms of response time and availability.

The Transactions and RFC tabs provide additional details on the average response time and SLA compliance of the system, over the selected time range, together with the top transactions or RFCs for the specified time range. Once you detect a time range that seems problematic, or any deviation from normal behavior that needs further investigation, you can click on the label of the relevant graph or table to launch the Activity tab, in context, and view additional details.