MERCURY PERFORMANCE CENTER™

Viewer's Guide

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Mercury Performance Center™

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Version 8.1

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Mercury Performance Center Viewer's Guide, Version 8.1

Mercury Interactive Corporation
379 North Whisman Road
Mountain View, CA 94043
Tel: (650) 603-5200
Toll Free: (800) TEST-911
Customer Support: (877) TEST-HLP
Fax: (650) 603-5300

If you have any comments or suggestions regarding this document, please send them via e-mail to documentation@mercury.com.

PCVG8.1/01

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Viewing a Load Test Run

The Mercury Performance Center Web site displays load test data while a load test runs.

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- Monitoring Load Test Data
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About Viewing a Load Test Run

Performance Center allows you to view data about the running load test. After logging on to the Web site, you can monitor the load test run, including monitoring Vuser status and load test data. You can also view various graphs that display information about how the load generated by the Vusers affects your Web site.

Logging In and Out

You log in to the Performance Center Web site from the Performance Center login page.

To log in:

1. Type your login name in the **Login Name** box.
2. Type your password in the **Password** box.
3. Click **Login**.

➤ If you belong to just one project, the Performance Center Status page opens displaying the Project Dashboard, and the login process is complete. You can access the Project Dashboard at any time by selecting **Projects** > **Status** from the left navigation menu. For more details, see "The Project Dashboard," on page 4.

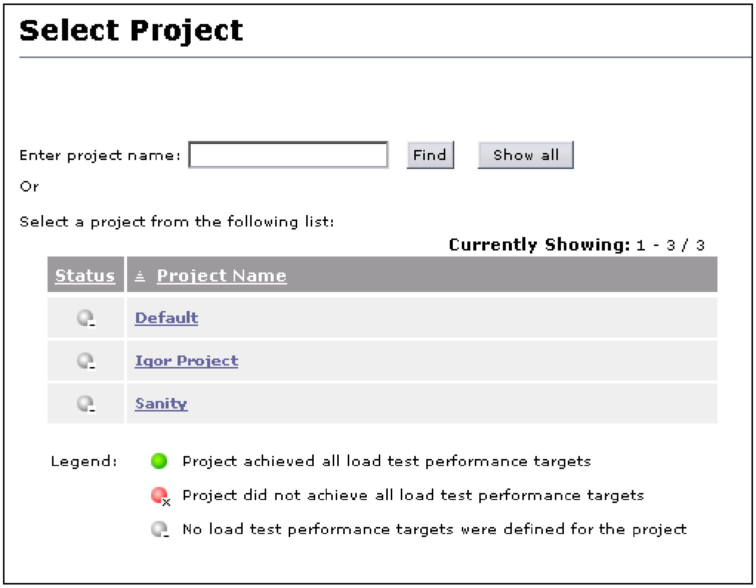
➤ If you belong to more than one project, the Select Project page opens. Select the project you want to enter. For more information, see "The Select/Change Project Page" on page 3.

To log out:

Click the **Logout** link at the top of the Web page.

The Select/Change Project Page

When you log in to Performance Center (if you belong to more than one project), the Select Project page opens displaying a list of all the projects you belong to and an overview of your project's status.



Note: After you have selected a project, you can change the project at any time by selecting **Projects** > **Change Project** from the left navigation menu.

The project status is determined by the condition of the last run of all load tests in the project that were posted to the Project Dashboard. For more information, see "The Project Dashboard," on page 4

A project can be assigned one of the following statuses:

Icon	**Description**
	Project reached all its load tests targets.
	Project did not reach all its load tests targets. If any load test fails to reach its targets, the project is assigned a red light.
	No load tests targets were defined for the project.

To select/change a project:

1. If the list of projects on the Select/Change Project page is a long list, enter the name of your project in the search text box and click **Find** to locate your project.

   To reshow the complete list of projects, click **Show all**.

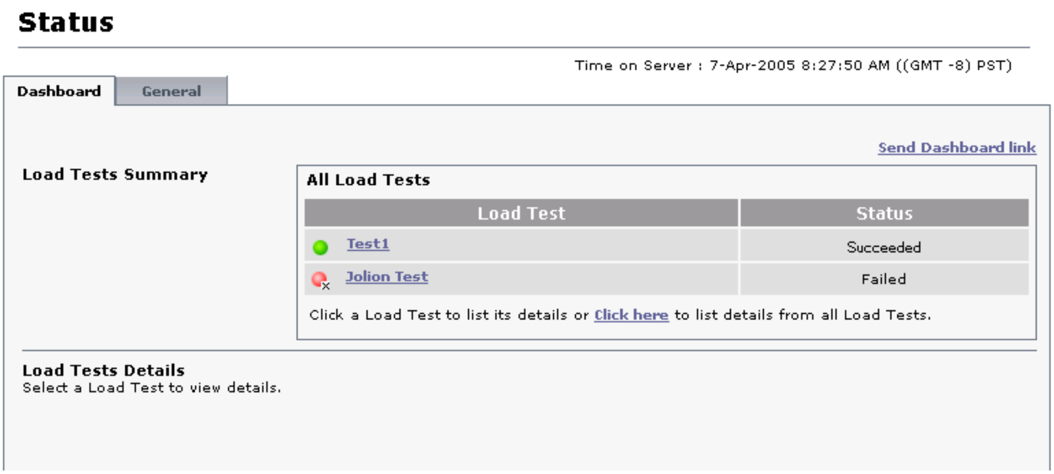
2. Click the name of the Performance Center project you want to enter. The Dashboard of the selected project opens. For details, see “The Project Dashboard” on page 4.

   If at any time during your session you want to change the project, you can return to the Change Project page by selecting **Projects** > **Change Project** from the left navigation menu. Choose a new Performance Center project to enter.

The Project Dashboard

When you log on to Performance Center and select a project, the Project Dashboard for the project opens. The Project Dashboard displays the overall project status of the most recent load test run (provided performance targets were set for the load test, and the load test and selected runs were published to the Dashboard). The Project Dashboard also provides the status of individual transactions and drill-down analysis of all included load tests when measured against the established performance criteria.

You can access the Project Dashboard at any time by selecting **Projects** > **Status** from the left navigation menu.



The Project Dashboard page displays:

User - Your user name.

Project - The name of the project you're viewing.

Load Test - The Load Tests table displays the status of each load test in your project that has been published to the Dashboard. The load test status is the overall status of the load test, determined by the condition of the last run of the load test. The Status information consists of a "Succeeded" or "Failed" rating. A load test receives a "Failed" status if any transaction within the test does not reach its performance targets and has a status of "Failed".

Send Dashboard link - Opens an e-mail with a link to the Dashboard page. The link opens a view of the Dashboard only.

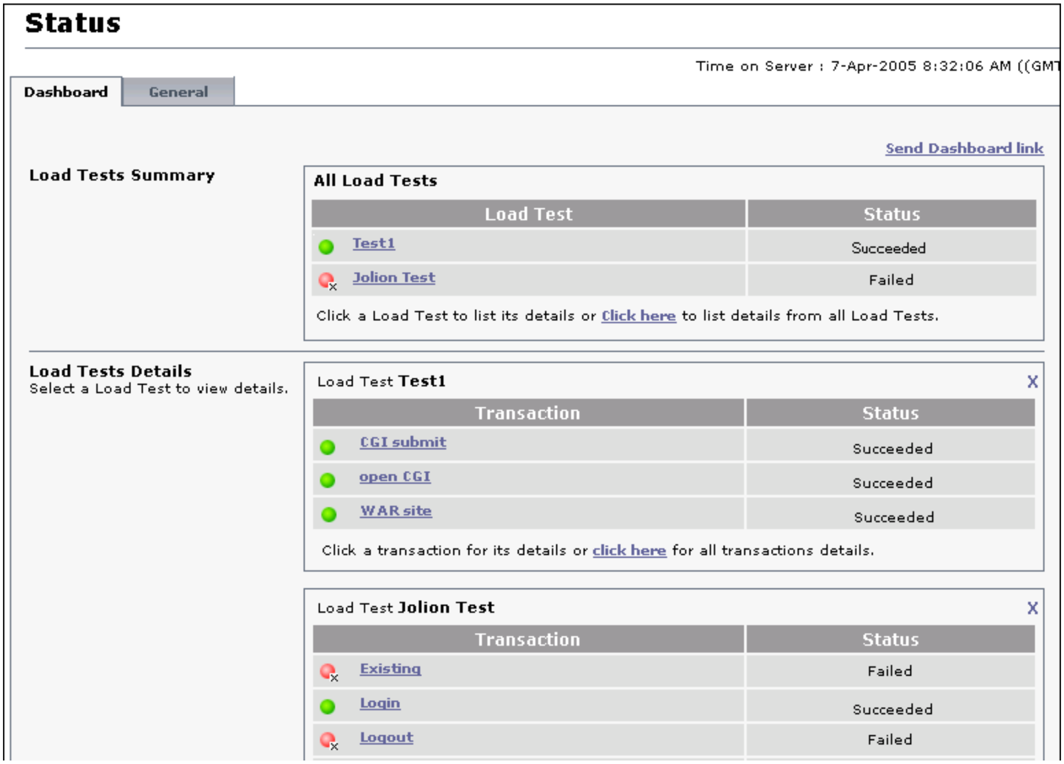
Note: The email recipient must have Network access to the server on which the User Site resides.

Viewing Load Test Transaction Information

You can view the status of individual transactions in a particular load test, or for all load tests in the Dashboard, from the load test transactions tables

To view transactions for a particular load test:

Click a load test in the All Load Tests table to open the transactions table for that load test. A transactions table opens in the Load Test Details section, displaying the individual transactions for that load test.



The Load Test Details section displays all the reported transactions for the selected load tests. The transaction status consists of a “Succeeded” or “Failed” rating. If a transaction has a “Failed” status, the table also provides a description of the load threshold(s) that caused the failure.

To view transactions tables for all load tests:

In the All Load Tests table, click the **Click Here** link to open transaction tables for all the load tests in the Dashboard. A transactions table for each load test opens in the Load Test Details section, displaying the individual transactions for each load test.

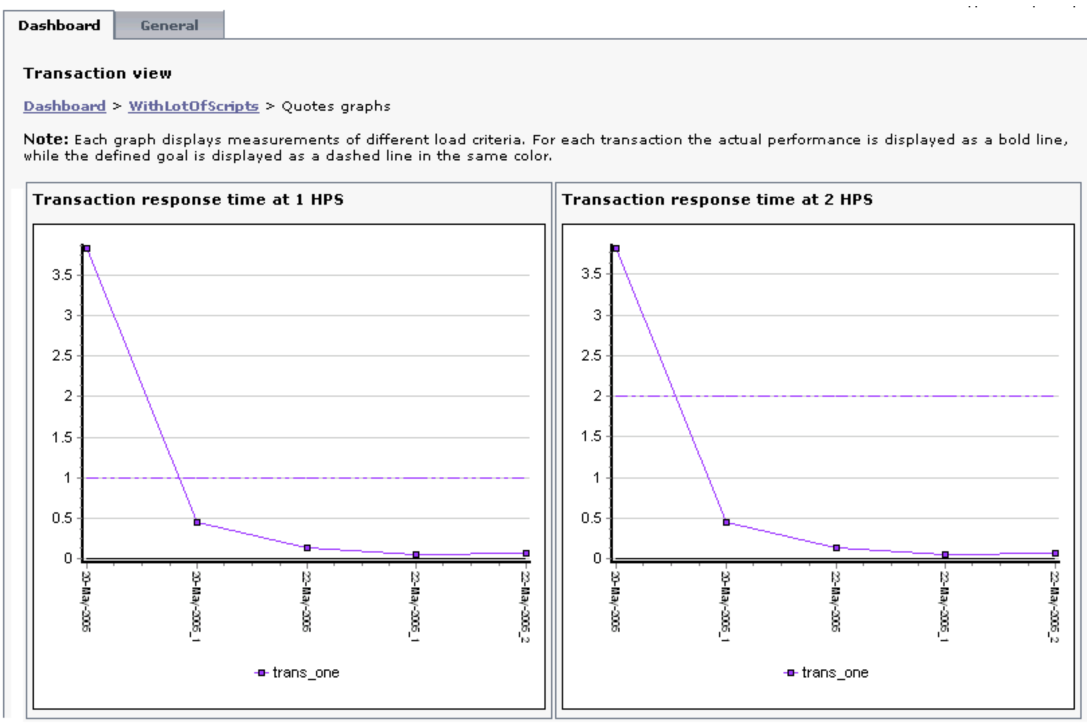
Understanding Drill-down Data

The Transactions table of the Dashboard enables you to view performance graphs for your transactions. The graphs chart the performance of transactions within an established threshold and display trend data.

You can view the performance graphs for a particular transaction, or for all transactions in the load test.

To display performance graphs for a particular transaction:

From the transactions table, click on a transaction to open the performance graphs for that transaction. Each graph displays measurements for the transaction at different Vuser loads.

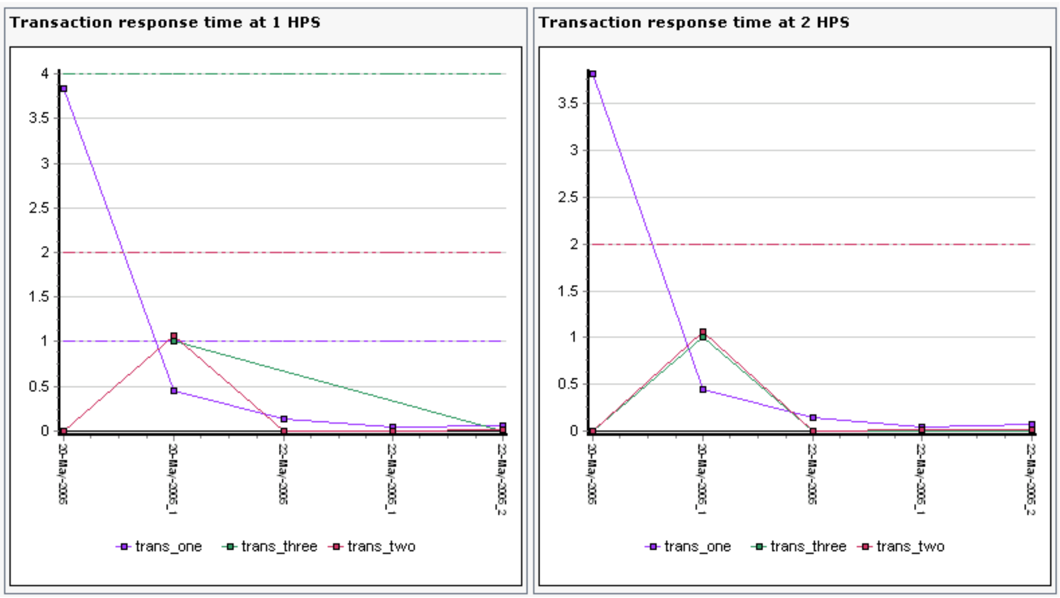


A set of transaction graphs is displayed for each load test. The graphs display trend data for the various load test runs posted to the Project Dashboard.

The graph's title bar provides the load test criteria and load value. For each transaction the actual performance is displayed as a bold line, while the defined goal is displayed as a dashed line in the same color. This allows you to evaluate trends and performance in your load tests.

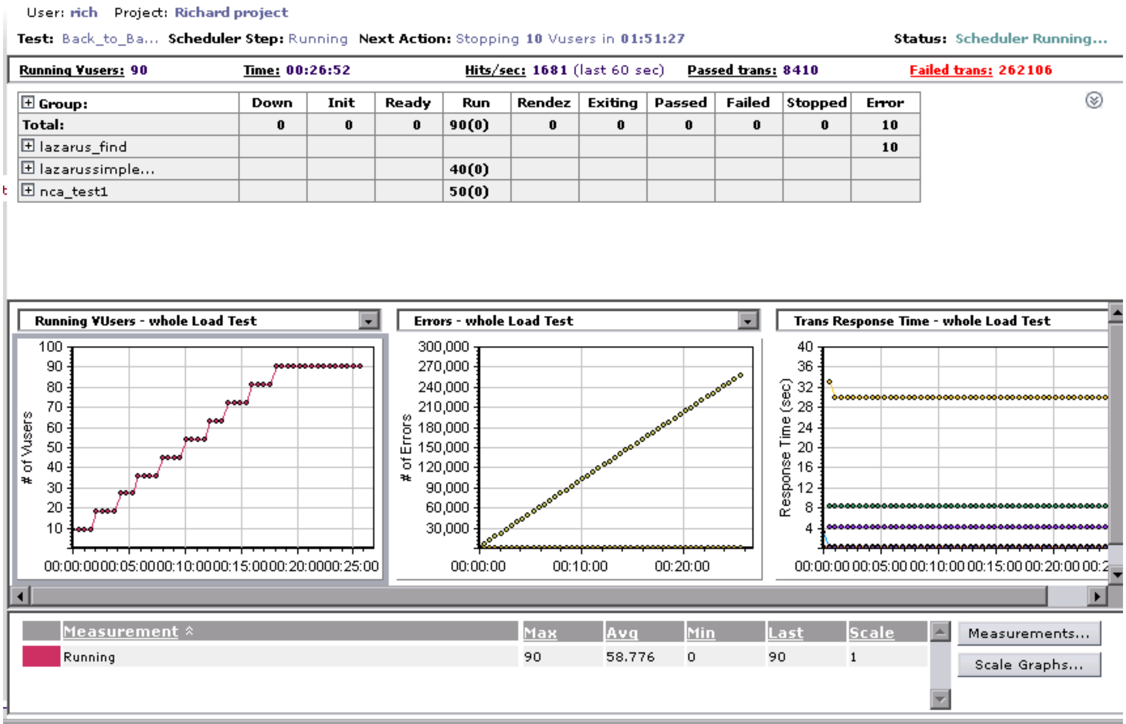
To display performance graphs for all transactions in a load test:

In the Load Test Details section, click the **Click Here** link to open the performance graphs for all transactions in the selected load test. Each graph displays measurements for all the transactions at different Vuser loads.



Monitoring the Load Test Run

When a load test is running, you monitor the run from the Load Test Run page.



At the top of the page, Performance Center displays several links:

- **Help -** Click here to access the Performance Center on-line help.
- **About -** Click here to enter and send your comments about the Performance Center Web site.
- **Log Out -** Click here to end the current Performance Center Web session.

On the Load Test Run page, you can:

- monitor key load test data. For details, see “Monitoring Load Test Data” on page 11.
- monitor Vuser status for each script. For details, see “Monitoring Vuser Status” on page 12.
- view online graphs. For details, see “Viewing Online Graphs” on page 14.

Monitoring Load Test Data

You monitor load test data during the load test run to get a quick overview of the test’s status and the effects of load on your Web server. At the top of the Load Test Run page, you can view the user and project name.

User: **Cyber Test** Project: **Shay project**

Test: Snapshot **Scheduler Step:** Run Ramp Up **Next Action:** Running **1** Vusers in **00:00:48** **Status:** Scheduler Running...

The status section displays the name of the running test, the step that the Scheduler is performing, the next action of the Scheduler, and the status of the load test. The Status statement and corresponding icon informs you of the status of the run.

Beneath the load test status section is a table containing the scripts, hosts, and the status of each Vuser involved in the load test. During a load test run, you use the groups table to monitor the actions of all Vusers and Vuser scripts in the load test. The status fields display the current state of each Vuser in the script. For more information, see “Monitoring Vuser Status,” on page 12.

Group:	Down	Init	Ready	Run	Rendez	Exiting	Passed	Failed	Stopped	Error
Total:	53	2	22	0	0	0	0	0	0	0
getvuserip	24		15							
purchaseor...	29	2	7							

You also monitor run time data, displayed beneath the Groups table, during the load test run.

Running Vusers: 9 **Time:** 00:00:52 **Hits/sec:** 767 (last 60 sec) **Passed trans:** 105 **Failed trans:** 2986

➤ **Running Vusers -** Shows the number of currently running Vusers.

Click **Running Vusers** to open the Running Vusers - whole Load Test graph. You can use the drop down menu to select and view any available graph.

➤ **Time -** Shows the number of currently running Vusers. Shows the start Time, elapsed Time, time remaining in the load test, and time remaining in the timeslot. The last 15 minutes of the timeslot are allocated to collate and analyze the load test data.

Click **Time** to open the Load Test Time Information dialog box.

➤ **Hits/sec -** Shows the number of hits made on the Web server by Vusers during each second of the load test run. This figure helps you evaluate the amount of load Vusers generated, in terms of the number of hits.

Click **Hits per second** to open the Hits per Second - Whole Load Test graph. You can use the drop down menu to select and view any available graph.

➤ **Passed trans -** Shows the number of completed, successful transactions performed during a load test run. This figure helps you determine the actual transaction load on your system at any given moment.

Click **Passed Transactions** to open the Total Passed Transactions - Whole Load Test graph. You can use the drop down menu to select and view any available graph.

➤ **Failed trans -** Shows the number of completed, unsuccessful transactions performed during a load test run.

Click **Failed Transactions** to open the Total Failed Transactions - Whole Load Test graph. You can use the drop down menu to select and view any available graph.

Monitoring Vuser Status

Performance Center enables you to track the status of each Vuser that runs during the load test. Performance Center displays the number and status of Vusers for each Vuser script.

As a load test runs, the Load Test Run page displays, for each script, the number of Vusers:

- **Down**: The Vuser is down.
- **Init**: The Vuser is being initialized on the host machine.
- **Ready**: The Vuser already performed the initial section of the script and is ready to run.
- **Run**: The Vuser is running. The Vuser script is being executed on the host machine.
- **Rendez**: The Vuser has arrived at the rendezvous point.
- **Exiting**: The Vuser has finished running or has been stopped, and is now exiting.
- **Passed**: The Vuser has finished running. The script passed.
- **Failed**: The Vuser has finished running. The script failed.
- **Stopped**: The Vuser stopped when the Stop command was invoked.
- **Error**: A problem occurred with the Vuser.

Viewing Online Graphs

During a load test run, Performance Center enables you to view graphs that display information about the load the Vusers generate on your Web server. Online graphs display data about the run, including Vuser data, transaction data, and server-related data.

Click the drop-down graph list located above any of the graphs and select a graph. The page reloads with the selected graph.

Click on a graph to display measurements for the graph in the graph legend.

The following graphs are available from the Load Test Run page:

Runtime Graphs

- **Running Virtual Users - Whole Load Test -** Provides information about the status of the running Vusers in the current load test. Note that this graph also appears by default in the right frame.
- **Errors - Whole Load Test -** Displays the number of errors that occurred over the course of the load test.
- **Errors - Last 180 sec -** Displays the number of errors that occurred in the previous 180 seconds.
- **Vusers with Errors - Whole Load Test -** Displays the number of Vusers with specific errors that occurred over the course of the load test.

Web Resource Graphs

- **Throughput - Whole Load Test -** Displays the amount of throughput on the server during the load test. Throughput is measured in Kilobytes and represents the amount of data that the Vusers received from the server at any given second. Note that this graph also appears by default in the right frame.
- **Throughput - Last 180 sec -** Displays the amount of throughput on the server for the last 180 seconds of the load test. Throughput is measured in Kilobytes and represents the amount of data that the Vusers received from the server at any given second.
- **Hits per Second - Whole Load Test -** Displays the number of hits on the Web server as a function of the elapsed time in the load test.

- **Hits per Second - Last 180 sec -** Displays the number of hits on the Web server as a function of the elapsed time in the load test, for the previous 180 seconds.
- **HTTP Responses per Second - Whole Load Test-** Displays the number of HTTP status codes returned from the server during each second of the load test run, grouped by status code.
- **Pages Downloaded per Second -** Displays the number of Web pages downloaded from the server during each second of the load test run.
- **Connections - Whole Load Test -** Displays the number of attempted server connections over the course of the load test.
- **Connections per Second - Whole Load Test -** Displays the number of attempted server connections during each second of the load test.
- **SSL per second - Whole Load Test -** Displays the number of new and reused SSL Connections opened in each second of the load test. An SSL connection is opened by the browser after a TCP/IP connection has been opened to a secure server.

Transaction Graphs

- **Trans Response Time - Whole Load Test -** Displays the response time of transactions in seconds as a function of the elapsed time in the load test.
- **Trans Response Time - Last 180 sec -** Displays the response time of transactions in seconds as a function of the elapsed time in the load test, for the previous 180 seconds.
- **Trans/Sec (Passed) - Whole Load Test -** Displays the number of successful transactions performed per second as a function of the elapsed time in the load test.
- **Trans/Sec (Passed) - Last 180 sec -** Displays the number of successful transactions performed per second as a function of the elapsed time in the load test, for the previous 180 seconds.
- **Trans/Sec (Failed) - Whole Load Test -** Displays the number of failed transactions per second as a function of the elapsed time in the load test.
- **Trans/Sec (Failed) - Last 180 sec -** Displays the number of failed transactions per second as a function of the elapsed time in the load test, for the previous 180 seconds.

- **Total Passed Transactions - Whole Load Test -**Displays the total number of passed transactions that occurred over the course of the load test.
- **Total Failed Transactions - Whole Load Test -** Displays the total number of failed transactions that occurred over the course of the load test.
- **Total Trans/Sec (Passed) - Whole Load Test -** Displays the total number of successful transactions performed per second over the course of the load test.

LoadTest System Resource Graphs

- **Hosts - CPU Utilization - Last 60 sec -** Displays CPU usage data for the last 60 seconds.
- **Hosts - Memory Utilization - Last 60 sec -** Displays memory usage data for the last 60 seconds.
- **Hosts - Disk Utilization - Last 60 sec -** Displays disk usage data for the last 60 seconds.

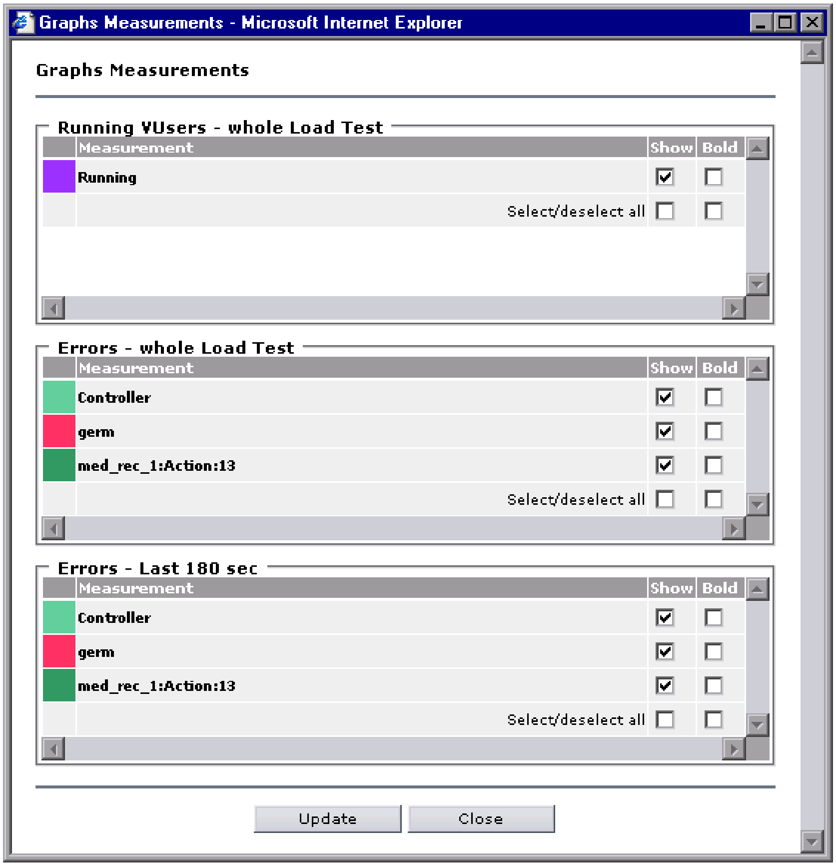
Configuring Online Graphs

You can configure the following settings in your online graph: graph measurements, graph legend, graph scale, and measurement display type.

To view online graphs during the load test run:

1. Select a graph from the drop-down graph list. The page reloads with the selected graph. The graphs are tiled to enable you to view three graphs simultaneously.
2. The graph legend below the graph displays details about the maximum, average, minimum, and last values for each measurement, and the graph scale. To sort the measurements by one of these values, click the column heading (**Max**, **Avg**, **Min**, **Last**, or **Scale**). An icon is displayed beside the column heading, showing you whether the measurements are sorted in ascending or descending order.

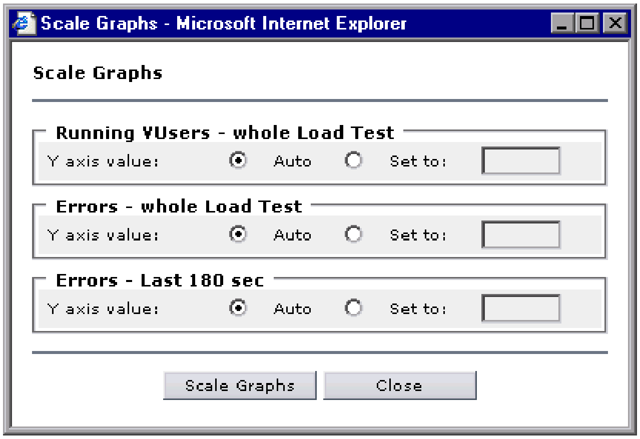
3 To select the measurements you want to view and how the measurement is displayed in the graph, click **Measurements.** The Graph Measurements dialog box opens.



Choose the options to configure each graph, and click **Update**.

- **Show -** displays this measurement on the graph
- **Bold -** displays this measurement in bold on the graph
- **Select/Deselect all -** selects or deselects the entire column

4 To scale the graphs, click **Scale Graphs**. The Scale graphs dialog box opens.

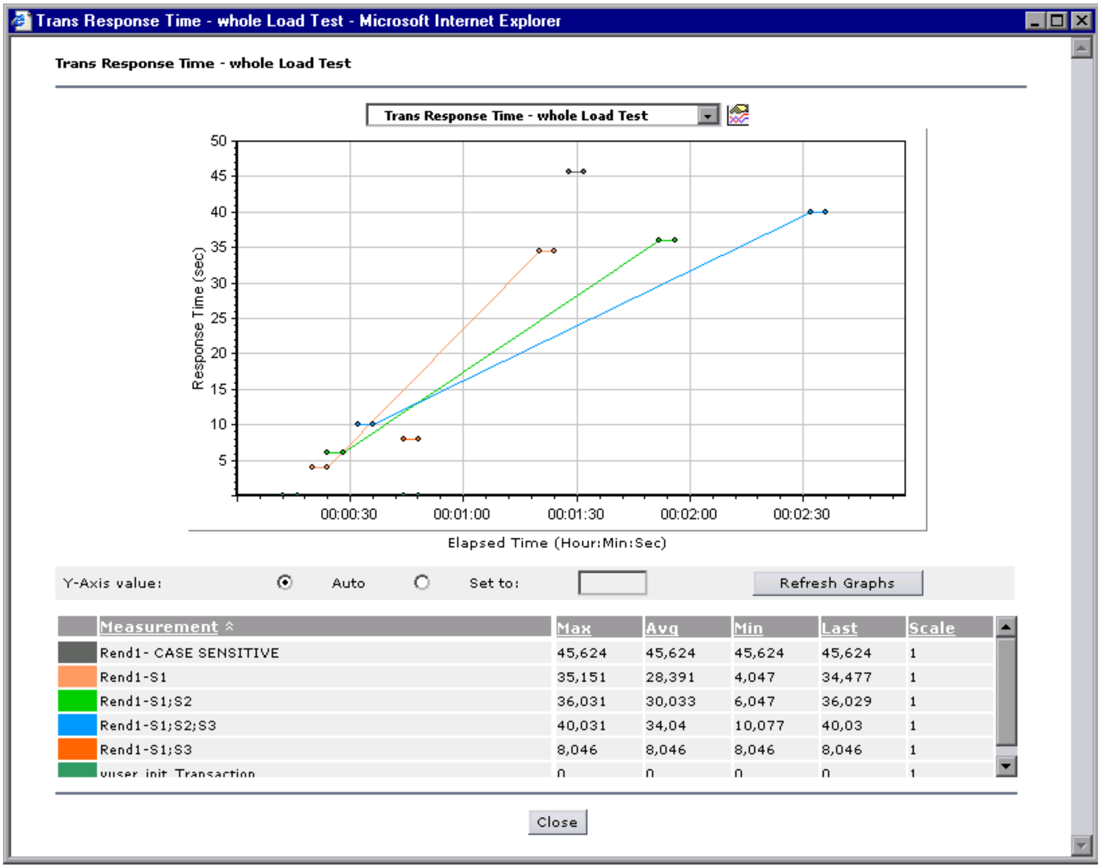


Select **Set to**, specify the desired y-axis value for each graph, and click **OK**. Performance Center redraws the graph with the specified value as the upper limit of the y-axis.

To view the graph scaled normally, select **Auto** and click **OK**. The scale is automatically set to the most suitable value for displaying the graph. By default, Performance Center uses the automatic scaling option.

5 To change the graphs displayed on the page, select different graphs from the drop-down list.

6 To enlarge an online monitor graph, double-click the graph. The enlarged graph is opened in a new window.

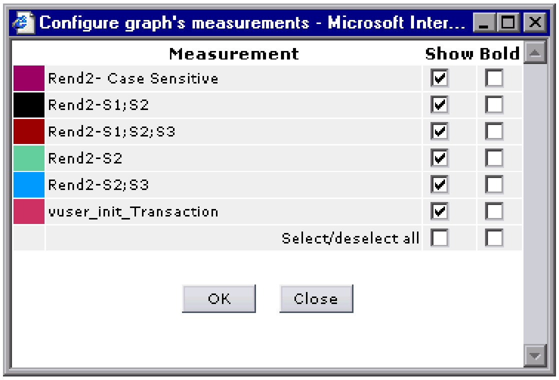


Note: You can open up to 10 large graphs windows simultaneously.

To configure the enlarged graph during the load test run:

1 To change the graph displayed in the large graph window, select a different graph from the drop-down graph list. The window reloads with the selected graph.

2 To select the measurements you want to view and how the measurement is displayed in the graph, click the **Measurements** icon. The Graph Measurements dialog box opens.



Choose the options to configure the graph, and click **OK**.

➤ **Show** - displays this measurement on the graph

➤ **Bold** - displays this measurement in bold on the graph

➤ **Select/Deselect all** - selects or deselects the entire column

3 To scale the graph, click **Set to**, specify the desired y-axis value for the graph, and click **Refresh**. Performance Center redraws the graph with the specified value as the upper limit of the y-axis.

To view the graph scaled normally, select **Auto** and click **Refresh**. The scale is automatically set to the most suitable value for displaying the graph. By default, Performance Center uses the automatic scaling option.

4 In the graph legend below the graph, you can sort the measurements by the maximum, average, minimum, and last values for each measurement, and the graph scale. To sort the measurements by one of these values, click the column heading. An icon is displayed beside the column heading, showing you whether the measurements are sorted in ascending or descending order.

5 Click **Close** to close the large graph window.

2

Personal Information

You can enter Privilege Manager from Performance Center and view your personal information.

This chapter describes:

- Accessing Privilege Manager
- Viewing Your Personal Information
- Modifying Your Personal Information
- Viewing Your Access List

About Personal Information

Privilege Manager manages the users, projects, and access rights within Performance Center. You can use it to view your user information.

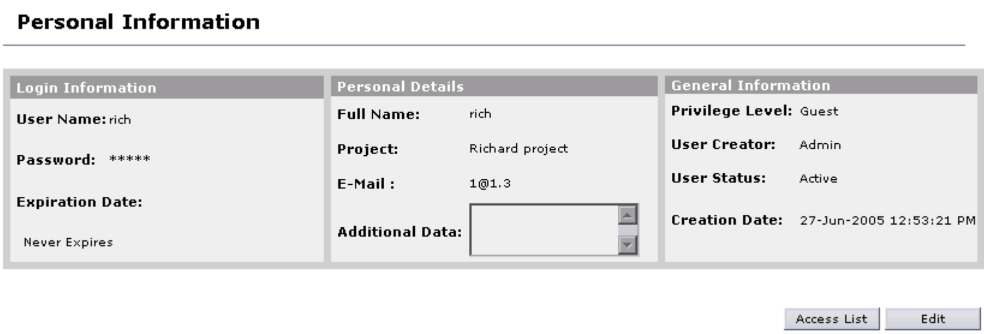
Accessing Privilege Manager

You can access Privilege Manager from the left navigation menu on any page in the Performance Center Web site, or from the Select Project page.

To access Privilege Manager, do one of the following:

Click the **Privilege Manager** link in the left navigation menu.

When you enter Privilege Manager, your personal information page opens.



To return to the User Site:

Click the **User Site** link in the left navigation menu.

To log out:

Click **Logout** at the top right of the page. You return to the Performance Center login page.

Viewing Your Personal Information

Your personal information page stores your user information, such as your user name, password, project, privilege level, and user status. It includes the following fields:

- **User Name -** your user name for logging in.
- **Password -** your password for logging in.
- **Expiration Date -** the date you will be deleted from the project.

- **Full Name -** your full name.
- **Project -** your project's name.
- **E-Mail -** your e-mail address.
- **Additional Data -** any additional relevant information.
- **Privilege Level -** your privilege level. Your privilege level determines your access rights throughout Performance Center.
- **User Creator -** the name of the user who added your information to the system. This field is automatically filled in when a user is added and cannot be edited.
- **User Status -** the status of a user can be active or non-active. A user with a non-active status cannot log on to the system.
- **Creation Date -** the date on which your user information was first entered into the system.

Modifying Your Personal Information

You can edit some of the details in your personal information page.

To modify your personal information:

1. Click **Edit**. Your user name, password, full name, email address and additional data fields become editable.
2. Edit the fields.

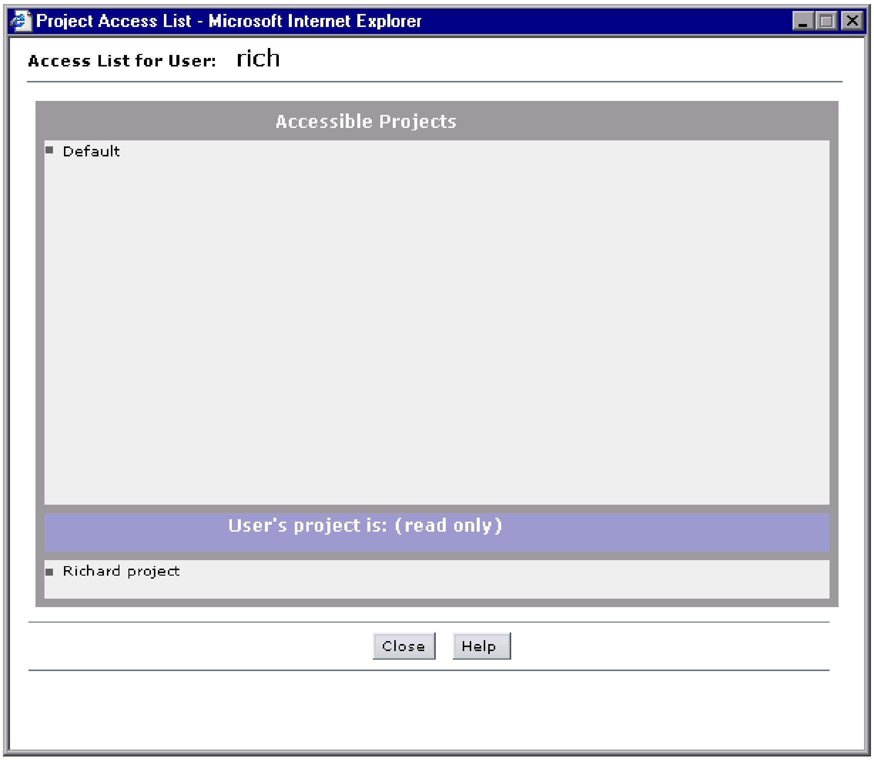
   Click **Cancel** to undo the changes, or click **Save** to save the changes.

Viewing Your Access List

You may be able to access Performance Center through more than one project. Your access list tells you which projects, other than your own, will allow you to access Performance Center.

To view your access list:

Click **Access List**. Your access list opens.



You can view the Performance Center projects that you have the right to access.

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