

Web Dashboard User Guide

Version 10.2



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WebLOAD Dashboard User Guide

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RadView's Web Dashboard enables viewing, analyzing and comparing load sessions in a web browser, with full control and customization of the display.

- For explanations of the various measurements in the graphs, refer to the *WebLOAD Console User's Guide*.
- For explanations of the log messages in the log tables, refer to the *WebLOAD Console User's Guide*.

WebLOAD Documentation

WebLOAD is supplied with the following documentation:

WebLOAD[™] Installation Guide

Instructions for installing WebLOAD and its add-ons.

WebLOAD[™] IDE User's Guide

Instructions for recording, editing, and debugging load test Agendas to be executed by WebLOAD to test your Web-based applications.

WebLOAD[™] Console User's Guide

A guide to using WebLOAD console, RadView's load/scalability testing tool to easily and efficiently test your Web-based applications. This guide also includes a quick start section containing instructions for getting started quickly with WebLOAD using the RadView Software test site.

WebLOAD[™] Analytics User's Guide

Instructions on how to use WebLOAD Analytics to analyze data and create custom, informative reports after running a WebLOAD test session.

WebRM™ User's Guide

Instructions for managing testing resources with the WebLOAD Resource Manager.



WebLOAD[™] Scripting Guide

Complete information on scripting and editing JavaScript Agendas for use in WebLOAD and WebLOAD IDE.

WebLOAD[™] JavaScript Reference Guide

Complete reference information on all JavaScript objects, variables, and functions used in WebLOAD and WebLOAD IDE test Agendas.

WebLOAD[™] Extensibility SDK

Instructions on how to develop extensions to tailor WebLOAD to specific working environments.

WebLOAD[™] Automation Guide

Instructions for automatically running WebLOAD tests and reports from the command line, or by using the WebLOAD plugin for Jenkins

WebLOAD[™] Web Dashboard User Guide

Instructions for using RadView's Web Dashboard to view, analyze and compare load sessions in a web browser, with full control and customization of the display.

The guides are distributed with the WebLOAD software in online help format. The guides are also supplied as Adobe Acrobat files. View and print these files using the Adobe Acrobat Reader. Install the Reader from the Adobe website http://www.adobe.com.

Where to Get More Information

This section contains information on how to obtain technical support from RadView worldwide, should you encounter any problems.

Online Help

WebLOAD provides a comprehensive on-line help system with step-by-step instructions for common tasks.

You can press the **F1** key on any open dialog box for an explanation of the options or select **Help ➤ Contents** to open the on-line help contents and index.



Technical Support Website

The technical support pages on our website contain:

- FAQ (Frequently Asked / Answered Questions)
- Agenda Center
- Documentation
- RadView's Product Resource Center, where you can find prepared test scripts, product information, and industry related news.
- http://www.radview.com/support/index.asp

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Note: We encourage you to use e-mail for faster and better service.

When contacting technical support please include in your message the full name of the product, as well as the version and build number.





This section describes the standard Web Dashboard installation process. For information about other deployment options, refer to *Distributed Server Deployment* (on page 42).

Installation Instructions

To install Web Dashboard:

1. Install WebLOAD and select the Install WebLOAD Dashboard Server option.



Figure 1: Web Dashboard Installation Option



Enabling Importing of Remote Sessions

If you want to import sessions into Web Dashboard directly from remote Analytics or Console installations, perform the following:

- 1. Configure the database for remote connections. Refer to *Configuring PostgreSQL for Remote Connections* (on page 43).
- 2. Instruct WebLOAD Analytics or WebLOAD Console to import sessions to the desired database, as described in the following sections:
 - Instructing WebLOAD Console to Import Sessions to the Database
 - Instructing WebLOAD Analytics to Import Sessions to the Database

Instructing WebLOAD Console to Import Sessions to the Database

In the WebLOAD Console (version 10.2 and up), enable the importing of sessions to the desired database as follows:

1. Select **Tools** > **Global Options** > **Database**.



| Global Options | | | × | | | |
|---------------------|--|---|------------|--|--|--|
| General Advanced | Export Database | Export File Locations Data Drilling tabase Notification Mail Defect Tracking | | | | |
| Insert into databa | Insert into database Insert statistics into Postgres database during the session | | | | | |
| - Database configu | uration | | | | | |
| Database host na | ame: localhost | | | | | |
| Database port: | 5432 | | | | | |
| Database name: | radview | | | | | |
| User name: | reporter | | | | | |
| User password: | ••••• | • | | | | |
| | Test c | onfiguration | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | ОК Са | Incel Help | | | |

Figure 2: Console Global Options - Database Tab

- 2. Make sure the **Insert statistics into Postgres database during the session** checkbox is selected.
- 3. In the **Database host name** field, enter the database server name or IP address.

Instructing WebLOAD Analytics to Import Sessions to the Database

In WebLOAD Analytics, instruct the application to import sessions to the desired database as follows:

1. Select **Preferences** > **Database**.

| Preferences (Filtered) | | | |
|------------------------|-----------------------------|-----------|------------------------|
| type filter text | Database | | ⇔ ◄ ⇔ ◄ ◄ |
| Analytics Database | Database <u>h</u> ost name: | localhost | |
| Parameters | Database <u>p</u> ort: | 5432 | |
| | Database <u>n</u> ame: | radview | |
| | <u>U</u> ser name: | reporter | |
| | User password: | ****** | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | Restore Defaults Apply |
| | | | |
| 0 | | | OK Cancel |
| | | | |

Figure 3: Analytics Preferences - Database Tab

2. In the **Database host name** field, enter the database server name or IP address.





Launching Web Dashboard

To launch Web Dashboard:

1. Select Start > Programs > RadView > WebLOAD > Utilities-> Start Dashboard Server.

This launches the dashboard (and Elasticsearch) servers.

2. Navigate to <u>http://localhost:8080/</u>

Web Dashboard appears, displaying the default (Home) dashboard.





Figure 4: Web Dashboard Default Dashboard



Understanding the Dashboard

The high level UI components of the dashboard include:

- Dashboard Header– Contains global settings, filters and controls
- *Rows* Each row contains panels for data display
- Panels Display data in graph, text or log format



Figure 5: Dashboard Components

Dashboard Header

The following figure shows a typical dashboard header.



Figure 6: Dashboard Header Components

The main components of the Web Dashboard header include:

| Item | Description | For more information, see | |
|------|--|---|--|
| 1 | Dashboard name | | |
| 2 | Time format: Relative Time – Show the time since session start. useful for session comparison | <i>Selecting the Time Format</i> (on page 17) | |
| | • Absolute Time – Show the real time of the session when it ran. Useful for currently running sessions | | |
| 3 | Share dashboard – Enables sharing the current state of the dashboard | Sharing a Dashboard (on page 37) | |
| 4 | Zoom to Data – Sets the time filter to the extent of the data. This is done automatically when selecting data or a new session. | | |
| 5 | Zoom out | | |
| 6 | Time filter | Setting the Time Filter (on page 18) | |
| 7 | Refresh data | | |
| 8 | Save | <i>Saving your Customized Dashboard</i> (on page 34) | |
| 9 | Open a dashboard | Loading a Dashboard (on page 32) | |
| 10 | Back to your saved default dashboard | | |
| 11 | Settings – Enables configuring the dashboard's general settings | Customizing General Dashboard Settings (on page 29) | |
| 12 | Select session – Enables selecting the session(s) to be viewed and analyzed. | Specifying the Sessions (on page 15) | |



Rows

A row is a horizontal container for panels. A row can be hidden (collapsed) and its height controls its panels' height.

- To add a new row, click ADD A ROW
- To edit a row, click the green marker and select the desired option. For more information, refer to *Customizing Rows* (on page 19).



Figure 7: Row Editing Options

Panels

A panel is a data display unit. There are three types of panels – graph, text and log.

- To add a new panel, click the green marker of the desired row and select **Add Panel** (see Figure 7).
- To edit a panel, click the panel title and click **edit** in the box that appears. For more information, refer to *Customizing Panels* (on page 22).

Graph Panel

A graph panel presents session measurement data in graphic format. In each graph panel you can display multiple measurements from multiple sessions. You can also set various display options, such as colors, graph style (lines, bars, points), Y-axis formats (bytes, milliseconds, etc.) and more.



Figure 8: Graph Panel

Log Panel

A log panel presents log messages from specified sessions. You can sort the display by various parameters, and filter the display by message severity, session, or message text.

| 🖋 Log messages | | | | |
|----------------|-----------|----------------|-------------|--------------------------|
| All | Time↓ | All | Agenda | Message Search messaç |
| Info | 543.39001 | failed_session | | Test Failed: The n |
| Error | 538.70001 | failed_session | hello_world | Connection to www |
| Warning | 528.59003 | failed_session | hello_world | Unsupported proto |
| Warning | 528.59003 | failed_session | hello_world | Unsupported proto |
| Error | 525.90997 | failed_session | hello_world | Connection to www |
| * | 1 | 2 3 4 5 | 68 | > |

Figure 9: Log Panel



Text Panel

A text panel presents text. You can edit the text.

Welcome to WebLOAD Dashboard

- · The dashboard is made out of rows with panels.
- The rows is controlled from the green marker on the left, from which panels can be added.

- · The panel can be edited by clicking on it's title.
- · Use 'Select Session' to change the session, or use '+' to add session for comparison

Figure 10: Text Panel



Working with Web Dashboard

Specifying the Sessions

Web Dashboard dashboards are useful both for analyzing the results of a specific session, and for comparing the results of different sessions.

You can select any session(s) saved in the database. To do so, you may need to import sessions into the database. This section describes:

- Importing Sessions into the Database
- Selecting Sessions from the Database

Importing Sessions into the Database

You can import sessions into the database in any of the following ways:

- In the Web Dashboard, use the Upload option to upload a session from the network and import it into the database (see item 2) in Figure 11).
- Set WebLOAD Console to import session data during session execution. To do so, perform the steps described in *Enabling Importing of Remote Sessions* (on page 5).
- Import sessions from WebLOAD Analytics. To do so, perform the steps described in *Enabling Importing of Remote Sessions* (on page 5).
- In the Web Dashboard, use the Upload option to upload a session from the network and import it into the database (see item ② in Figure 11).

Selecting Sessions from the Database

You can select a session for viewing by either:

- Selecting it from the **Select Session** drop-down list (item ③ in Figure 11). You can select as many additional sessions as you wish (item ④ in Figure 11).
- Searching for the session by name (item ① in Figure 11).





Figure 11: Session Selection

As soon as you select a session, the dashboard refreshes to show the session's data in the graph and log panels.

Selecting the Time Format

You can view dashboard data in either Relative time or Absolute time (see item ② in Figure 6). This affects the graphs' display as follows:

If you are viewing data for a single session:

- **Relative time** The start time is shifted over to zero.
- **Absolute time** Shows the real time. This format is useful for viewing currently running sessions.

If you are comparing sessions:

• **Relative time** – The graph shows the two sessions as if they occurred concurrently (within the same timeframe).



Figure 12: Comparing Sessions in Relative Time Display

• **Absolute time** – The graphs shows the real time.



Figure 13: Comparing Sessions in Absolute Time Display



Setting the Time Filter

If you selected the Absolute time format (see item 2) in Figure 6), you can set a time filter by clicking the arrow to the right of the current filter. By default, the time filter is set to the extent of the data when selecting data or a new session.

| Nov 3, 2014 12:04:06 to Nov 3, 2014 12:12:46 | | | |
|--|------------------------|--|--|
| Last 5m | | | |
| Last 15m | | | |
| Last 1h | | | |
| Last 6h | # Load Size | | |
| Last 12h | | | |
| Last 24h | $\sim \Lambda \Lambda$ | | |
| Last 2d | \sim V | | |
| Last 7d | | | |
| Last 30d | | | |
| Auto-Refresh | | | |
| Custom | | | |

Figure 14: Time Filter Options

You can also set the auto-refresh frequency.

| Last 5m | |
|---------------------------|-------------|
| Last 15m | |
| Last 1h | |
| Last 6h | & Load Size |
| Last 12h | |
| Last 24h | |
| Last 2d | |
| Last 7d | |
| Last 30d | |
| Auto-Refresh | Off |
| Custom | Every 5s |
| | Every 10s |
| | Every 30s |
| 0:01 00:02 00:03 | Every 1m |
| ad Size, result_50 🗕 Load | Every 5m |
| | Every 15m |
| | Every 30m |
| | Every 1h |
| | 2101) 111 |
| | Every 2h |

Figure 15: Auto-Refresh Options



Customizing a Dashboard

You can customize a dashboard as desired, and then save the customized dashboard if you wish. Note however that two types of changes are not considered customizations and are not saved: the selected sessions and the selected time filter.

To save your customizations, refer to Saving your Customized Dashboard (on page 34).

Customizing Rows

Adding a row

To add a new row, click • ADD A ROW

Editing a Row

To edit a row, click the green marker to the left of the row and select the desired option.



Figure 16: Row Editing Options



Collapse rowHides the row. To show the row again, press the button.Add PanelAdds a panel to the row, of the type you specify: graph, text, or
log.Set heightSets the row height, in pixels.MoveMoves the row up or down.Row editorEnables editing a row's settings. For information, refer to *Editing a*
Row's Settings (on page 20).Delete rowDeletes the row, following your confirmation.

The available options include:

Editing a Row's Settings

To edit a row's settings, click the green marker to the left of the row and select **Row** editor (see Figure 16). A **Row settings** pane appears, with a **General** tab and a **Panels** tab.

Editing Row Settings - General

| Row settings | General | Panels | |
|--------------|---------|----------|------------|
| Title | Height | Editable | Show title |
| Welcome | 300px | | |
| (1) | (2) | 3 | (4) |

Figure 17: Row Settings - General

In the General tab you can:

| Item | Description |
|------|--|
| 1 | Define the row title. |
| 2 | Set the row height. |
| 3 | Define whether the row is editable. |
| 4 | Specify whether to show the row title. |



Editing Row Settings - Panels

| Row set | | | | | |
|-------------|-------|------|---|---|---|
| Title | Туре | Span | | | |
| Welcome | text | 6 • | | * | × |
| Load Size | graph | 6 • | ۴ | | × |
| 1 | 2 | 3 | | 4 | 5 |

Figure 18: Row Settings - Panels

In the Panels tab you can:

| Item | Description |
|------|--|
| 1 | View the title of each panel. |
| 2 | View the panel type (text, graph, or log) of each panel. |
| 3 | Set the span (width) of each panel. |
| 4 | Switch between the location of panels in the row. |
| 5 | Delete a panel. |

Deleting a Row

To delete a row, click the green marker to the left of the row and select **Delete Row** (see Figure 16). Confirm the operation.



Customizing Panels

To edit a panel, click the panel title and click **edit** in the box that appears.



Figure 19: Panel Options

An editing pane appears, with various editing options that depend on the panel type (text, graph or log), as described below.

Editing a Panel's General Options

A panel's General options are identical for all panel types.

| General options | | |
|-----------------|------|--------|
| Title | Span | Height |
| Load Size | 6 🔻 | |
| | | |

Figure 20: Edit Panel – General Options

In the General options you can edit the following panel settings:

| Title | Edit the panel's title |
|--------|------------------------------------|
| Span | Edit the span (width) of the panel |
| Height | Edit the panel's height |



Editing a Text Panel

To edit the text in a Text panel, click the panel's title and select **edit** (see Figure 19), then select the **Panel** tab.

| Т | text settings | General | Panel | |
|----|---|-------------------------------|---------------------------|--|
| Mo | de narkdown • | | | |
| Co | ntent (This area uses Ma | rkdown. HTML | is not supp | orted) |
| # | ### Welcome to Webl | _OAD Dashb | oard | |
| * | The dashboard is mad | de out of row | s with pan | els. |
| * | The rows is controlled The panel can be edit | from the gre ed by clickin | een marke a on it's ti | r on the left, from which panels can be added. le |
| * | Use 'Select Session' to | o change the | e session, | or use '+' to add session for comparison |

Figure 21: Text Settings – Panel Tab

You can:

- Select the mode:
 - Text Plain text
 - Html HTML
 - Markdown Markdown markup syntax
- Edit the text as desired.

Editing a Log Panel

You can customize a log panel's display directly in the dashboard.

| | | | 🖋 Log messages | | |
|--------------|-----------------------------------|-------|--------------------------|--------|-------------------------|
| Sev curre | rerity nt: All O | Time↓ | Session current All O | Agenda | Message Search messa |

Figure 22: Log Panel Header

The header of the log panel provides the following options:

- Sorting the table display Clicking any column head sorts the table by that column in ascending or descending order.
- Filtering by severity By clicking the down arrow 🔮 in the **Severity** column head, you can select whether to view messages of all severity types, or of a certain type.



• Filtering by Session – By clicking the down arrow 🔮 in the **Session** column head, you can select whether to view messages for all currently-selected sessions, or for a specific one of them.

If you wish to view log messages for sessions not currently selected, click the panel's title and select **edit**. In the dropdown box below the log table, select a session or select **All**.

• Filtering by a message string – Enter a text string in the **Search** message box to filter the display by messages that contain that text string

Editing a Graph Panel

A graph panel can be customized in various ways, as described below.

Changing the Span

At the click of a mouse, you can select a region to zoom into.

• Use the mouse to select a specific time range in the panel.



Figure 23: Selecting a Time Range

RADVIEW



The dashboard refreshes to show the graph for the selected time range only.

Figure 24: Display of a Selected Time Range

Specifying Sessions and Measurements

You can specify which measurements to display for which sessions.

To specify measurements and sessions:

- 1. Click the panel's title and select **edit**.
- 2. Select the **Metrics** tab. The sessions and measurements currently displayed in the graph are displayed in the table.

| Graph General | | Metrics | Axes & Grid | Display Styl | es | | | | | | | | |
|---------------|---|---------|-------------|--------------|------------|----------------|-------------|-------|-----------|------|---------------------|--------------|------|
| | A | ۲ | \$session | Total | Performanc | e Measurements | Load Size | Test | Summary | Max | (| ¢ | × |
| | В | ۲ | \$session | Total | Performanc | e Measurements | Hits Per Se | econd | Current s | lice | Sum (Current Value) | ¢ | × |
| | | | | | | | | | | | | | |
| _ | | | | | | | | | | | | | |
| | | | | | | | | | | | webload 👻 | Add measurem | nent |

Figure 25: Graph Settings – Metrics

3. To add a session or measurement, click **Add Measurement**. A new line appears in the table.



| .11 | Gra | aph G) (2) | eneral | Metrics Axes & Grid | Display Style: | s 6 | 7 |) | 8 |)(9) |
|-----|-----|----------------|--------|--------------------------|----------------|-------------|---------|---------------------|--------------|------|
| A | ۲ | \$session | Total | Performance Measurements | Load Size | Test Summai | y Ma | × | ¢ | × |
| в | ۲ | \$session | Total | Performance Measurements | Hits Per Sec | ond Curren | t slice | Sum (Current Value) | 0 | × |
| С | ۲ | \$session | Total | Performance Measurements | select metric | 2 | | | 0 | × |
| | | | | | | | | | 10 | |
| | | | | | | | | webload 👻 | Add measurem | ent |

Figure 26: Graph Settings – Adding a New Measurement Line

- 4. Edit the new line:
 - Select a session for the new line you added (column 2) in Figure 26).
 - Select measurements for the new line you added (columns ③, ④, ⑤, ⑥, ⑦ in Figure 26).
- 5. Optionally edit the selection of a session or measurement in an existing line.

The following table describes all the operations available in the **Metrics** tab.

| Item | Description | | | | | | | |
|------|--|--|--|--|--|--|--|--|
| 1 | Toggles between showing and hiding the measurement in the graph. | | | | | | | |
| 2 | Enables selecting which sessions to display in the graph: | | | | | | | |
| | * - All sessions in the database | | | | | | | |
| | • \$session – All the currently selected sessions | | | | | | | |
| | • Any specific session you select in the list. | | | | | | | |
| 3 | Enables selecting a category of statistics: | | | | | | | |
| | • Total – Sums the values for each statistic across all the Agendas running during the test. | | | | | | | |
| | AgendaName::Total – Sums the values for each statistic across all instances of the specified Agenda running during the test. | | | | | | | |
| | AgendaName@LoadGenerator – Sums the values for each statistic across all instances of the specified Agenda running under the specified Load Generator during the test. | | | | | | | |
| 4 | Depending on your choice in ③, enables selecting a sub-category of statistics. | | | | | | | |
| 5 | Depending on your choice in $\textcircled{4}$, enables selecting a sub-category of statistics. | | | | | | | |



| Item | Description |
|------|--|
| 6 | Depending on your choice in ⑤, enables selecting a sub-category of statistics. |
| 7 | Depending on your choice in ⑥, enables selecting a statistic. |
| 8 | Duplicates the line in the table. |
| 9 | Deletes the line. |
| 10 | Adds a new line in the table for defining a new measurement in the graph. |

Defining the Axes and Grid Display

To edit a panel's axes and grid display:

- 1. Click the panel's title and select **edit**.
- 2. Select the **Axes & Grid** tab.

A pane appears, displaying the current axes and grid definitions. You can change any of the definitions, and the graph display changes accordingly.

| .11 | Grapl | 1 Genera | I Metrics | Axes & Grid | Display Styles | | | |
|------|----------|-----------------|----------------|---------------|----------------|------------|-----------------|---------------|
| Left | Y Axis | | | | | Right Y Ax | is | |
| Form | nat 🕜 | Min / Auto ★ | Max/A | uto 🖈 🛛 Labe | 1 | Format 🚱 | Min / Auto ★ | Max / Auto ★ |
| sh | ort | • | | | | short | • | |
| Leg | end sty | les | | Gi | rid thresholds | | | Show Axes |
| Shov | v legend | Include values | Align as table | Right side Le | vel1 Col | or Level2 | Color Line mode | X-Axis Y-axis |
| (| | | | | 8 | | | |

Figure 27: Graph Settings – Axes & Grid

Defining the Display Styles

To edit a panel's display styles:

- 1. Click the panel's title and select **edit**.
- 2. Select the **Display Styles** tab.

A pane appears, displaying the display definitions. You can change any of the definitions, and the graph display changes accordingly.



| .11 | Graph | General Me | etrics A | Axes & Grid | Disp | olay Styles | | | | | |
|------|-----------------|---------------|------------|--------------|--------|-------------|---|----------------|-------|------------|--------------|
| Cha | art Options | Line optio | ns | | | | | | Multi | ple Series | Tooltip |
| Bars | S Lines Points | Line Fill | Line Width | Point Radius | Null p | oint mode 🔞 | | Staircase line | Stack | Percent 🕜 | All series 🔞 |
| | | 1 🔻 | 1 🔻 | 1 • | con | inected | • | | | | |
| Ser | ies specific o | verrides 😡 | | | | | | | | | |
| × | alias or rege> | /Hits Per Sec | ond.*/ | 🗙 Y-axis: 2 | + | | | | | | |
| A | dd series overr | ide rule | | | | | | | | | |

Figure 28: Graph Settings – Display Styles

Adding Panels

To add a panel in a row, click the green marker to the left of the row and select **Add Panel** (see Figure 16). Select the panel type: graph, text or log.

A new empty panel of the selected type appears in the row.

Define the display in the panel by editing the panel, as described above.

Duplicating a Panel

The duplication feature is useful if you wish to create a panel that is very similar to an existing one, or that is based on an existing panel.

To duplicate a panel:

1. Click the panel's title and select **duplicate**.

A new panel – a duplicate of the original – is created in the dashboard. You can now edit it as desired.



Deleting a Panel

To delete a panel:

1. Click the panel's title and select the **X** in the top right corner.



Figure 29: Delete Panel button

2. Confirm the deletion.

Customizing General Dashboard Settings

You can customize various general dashboard settings.

To configure general dashboard settings:

1. Click the Configure Dashboard icon 🕸 in the top right of the dashboard header.



Figure 30: Configure Dashboard icon

A **Dashboard settings** pane appears, with multiple tabs.

2. Set the General settings as desired. For example, edit the dashboard's title.

| ✿ Dashboard settings | General | Rows Features Timepicker |
|----------------------|---------|--|
| Title default | Theme | Time correction Hide controls (CTRL+H) |
| Tags add tags | | |

Figure 31: Dashboard Settings - General



- 3. Set the **Rows** settings as desired. You can:
 - Use the up and down arrows to switch between the locations of rows in the dashboard.

| 0 | \$ Dashboar | d settings | General | Rows | Features | Timepicker |
|---|--------------|------------|---------|------|----------|------------|
| | Welcome | | ¥ | | x | |
| | Transactions | ↑ | ÷ | | × | |
| | New row | ↑ | | | × | |

• Use the red X to delete a row.

Figure 32: Dashboard Settings - Rows

4. Set the **Features** settings as desired.



Figure 33: Dashboard Settings - Features

For example, if you select **Shared Crosshair**, then hovering over one the graphs causes a corresponding crosshairs to appear in all the graphs.





Figure 34: Shared Crosshair

- 5. Set the **Timepicker** settings as desired. You can set:
 - **Relative time options** Determines the options that will appear in the Time Filter dropdown (see Figure 14).
 - **Auto-refresh options** Determines the options that will appear in the **Time Filter** > **Auto-Refresh** dropdown (see Figure 15).

| 🕫 Dashboard settings | General | Rows | Features | Timepicker | | | |
|---|---------|--------------------------------------|----------|------------|--|--|--|
| Relative time options comma seperated | | Auto-refresh options comma seperated | | | | | |
| 5m,15m,1h,6h,12h,24h,2d,7d,30d | | 5s,10s,30s,1m,5m,15m,30m,1h,2h,1d | | | | | |
| • For these changes to fully take effect save and reload the dashboard. | | | | | | | |

Figure 35: Dashboard Settings - Timepicker





In Web Dashboard you can manage any dashboard saved in the database, as well as create new dashboards, delete dashboards, import and export dashboards in JSON format, and save your customized dashboards.

Loading a Dashboard

When you access Web Dashboard, the default Home dashboard is displayed. You can however select to display any other dashboard from the database, as described in this section.

Note that you can also import a dashboard that was saved as a JSON file, as described in *Importing a Dashboard* (on page 33).

To load a dashboard:

1. Click the **Open** icon.

A list of all the dashboards in the database is displayed.

| Ł | RADVIEW | WebLOAD Das | hboard - default | Relative 🥝 | Share Dashboard 🖻 | Zoom To Data | Ð | B | # | ٥ |
|---|------------|-----------------------|------------------|------------|-------------------|--------------|-------|---------|------------|-------|
| o | | | | | | | | | | |
| Q | Select Se | ssion: failed_session | + | | | | | | | |
| 0 | Search | title: | | | taį | gs 📰 New | 🕹 imp | ort 🕨 | Playli | st |
| | Absolute [| Dashboard | | | | | | 🖻 share | ≭ d | elete |
| = | default | | | | | | | 🖻 share | x d | elete |
| | default1 | | | | | | | 🖻 share | ¥ d | elete |
| = | Dudu Das | hboard | | | | | | 🖻 share | x d | elete |
| | my dash | | | | | | | 🖻 share | x d | elete |
| = | my Dashb | pard | | | | | | 🖻 share | ×d | elete |



- 2. Optionally enter a text string in the **Search** box to filter the display by dashboards whose name contains that text string.
- 3. Select a dashboard from the list. Web Dashboard displays the selected dashboard.

Exporting & Importing a Dashboard in JSON Format

You can export a dashboard as a JSON file, and import dashboards that were saved in JSON file format.

Exporting a Dashboard as a JSON File

To export a dashboard as a JSON file:

1. Select **Save** > **Export Dashboard**.

A JSON file of the dashboard is created in your Downloads directory. Its name is the dashboard name followed by the current timestamp.

2. Save the file to a desired location.

Note that you can view the contents of the JSON file in the dashboard. To do so, select **Save > Dashboard JSON**.

Importing a Dashboard

To import a dashboard that was saved in JSON file format:

1. Select **Open > Import**.

| _R/ | NDVIEW | WebLOAD Das | hboard - default | Relative 🥝 | Share Dashboard 🖻 | Zoom To Data | B (| | # | ¢ |
|-----|---------------|-----------------------|------------------|------------|-------------------|--------------|---------|-----|----------|------|
| 0 | | | | | | | | | | |
| Q 0 | Select Ses | ssion: failed_session | + | | | | | | | |
| Q | Search | title: | | | ta | ags 🗮 New | 🛓 Impor | t I | Play | list |
| Cho | al File 🛛 | o file chosen | | | | | | | | |

Figure 37: Importing a Dashboard

- 2. Click Choose File.
- 3. Specify the desired JSON file.

Web Dashboard displays the selected dashboard.



Creating a New Dashboard

You can create a new empty dashboard and define it as desired.

To create a new dashboard:

1. Select **Open > New**.

| | RADVIEW | WebLOAD Das | hboard - Yael test | Relative ⊘ | Share Dashboard 🖻 | Zoom To Data | B | | # | ¢ |
|---|---------------|---------------------|--------------------|------------|-------------------|--------------|--------|-----|------|------|
| ø | | | | | | | | | | |
| Q | O Select Sess | ion: failed_session | + | | | | | | | |
| | Q Search | title: | | | ta | ags 📰 New | 📩 Impo | ort | Play | list |

Figure 38: Create a New Dashboard

A new empty dashboard appears.

Define it as desired. Refer to *Customizing a Dashboard* (on page 19) for more information.

Saving your Customized Dashboard

After changing a dashboard as desired, you can save the customized dashboard to keep all the changes. Note that two changes are not saved: the selected sessions and the selected time filter.

To save a customized dashboard:

1. Click the **Save** icon.

| oard 🖻 | Zoom To Data | | | |
|------------------|----------------|---|--|--|
| default | | B | | |
| Save a | Save as Home | | | |
| Reset | Reset Home | | | |
| Mark a | s favorite | | | |
| Dashb | Dashboard JSON | | | |
| Export dashboard | | | | |
| Share | temp copy | | | |

Figure 39: Saving a Customized Dashboard



2. Give your dashboard a unique name by editing the current name, which appears in the dashboard name field.

Note that you can share a customized copy without having to save it as a dashboard. To do so, select **Save > Share temp copy**.

Setting the Default (Home) Dashboard

You can set any desired dashboard as your Home (default) dashboard, and you can also revert to the global Web Dashboard default any time.

To set the Home dashboard:

1. Click the **Save** icon.

| oard 🖻 | Zoom To Data | | | |
|------------------|--------------|---|--|--|
| default | | B | | |
| Save as | Save as Home | | | |
| Reset H | lome | | | |
| Mark as | s favorite | | | |
| Dashboard JSON | | | | |
| Export dashboard | | | | |
| Share t | emp copy | | | |

Figure 40: Setting the Home Dashboard

- 2. To save the current dashboard as the local default, select **Save as Home**.
- 3. To revert to the global default, select **Save > Reset Home**.



Deleting a Dashboard from the Database

To delete a dashboard from the database:

1. Click **Open**.

A list of all the dashboards in the database is displayed.

| R/ | DVIEW | WebLOAD Das | hboard - default | Relative 🛛 | Share Dashboard 🖻 | Zoom To Data | Ð | Þ | # | ø |
|-----|--------------|----------------------|------------------|------------|-------------------|--------------|--------|---------|--------|--------|
| o | | | | | | | | | | |
| Q 0 | Select Sess | sion: failed_session | + | | | | | | | |
| Q | Search | title: | | | ta | gs 📲 New | 📩 impo | ort 🕨 | Playli | ist |
| | Absolute Da | shboard | | | | | | 🖻 share | ×d | elete |
| | default | | | | | | | 🖻 share | ×d | elete |
| | default1 | | | | | | | 🖻 share | ¥ d | elete |
| == | Dudu Dashb | oard | | | | | | 🖻 share | ×d | lelete |
| | my dash | | | | | | | 🖻 share | ×d | elete |
| | my Dashboa | ard | | | | | | 🖻 share | ×d | elete |

Figure 41: Deleting a Dashboard

- 2. Optionally enter a text string in the **Search** box to filter the display by dashboards whose name contains that text string.
- 3. Click **delete** in the row displaying the name of the dashboard you wish to delete.



Chapter 7 Sharing a Dashboard or Panel

You can easily share an entire dashboard, or a panel, by providing the appropriate URL.

Sharing a Dashboard

To share a dashboard:

1. Select Share Dashboard in the dashboard header.



A Share window appears, displaying a link to the dashboard.

| 40 | A A |
|---|-------|
| Current time range Include template variables Include session variables | |
| http://54.69.168.98/#/dashboard/file/default.json?from=20000&to=540000&sessions=failed_session%2B | |
| Lunsaved Changes, Please Save 4 | close |

Figure 42: Share Dashboard window

Using the options in the Share window, you can produce a link to various variants of the dashboard, as described in the following table.

| Item | Description |
|------|--|
| 1 | Determines whether the linked page will display data for the selected time range or for the entire session time range. |
| 2 | Determines whether the linked page will include template variables. |



| Item | Description | | |
|------|---|--|--|
| 3 | Determines whether the linked page will displays the data for the currently selected session(s), or for the sessions appearing when the dashboard was last saved. | | |

Note that the linked page will not display any customizations you made to the dashboard if you did not save the customized dashboard. Therefore, if you made any customizations and did not save the dashboard, a warning appears at the bottom of the Share window (see item ④ in Figure 42).

You can however share a customized copy without having to save it as a dashboard. To do so, select **Save > Share temp copy**.

Sharing a Panel

Sharing a panel is very similar to sharing a dashboard, with the additional option of sharing the specific panel. Panel sharing is often useful when you want to share a specific segment (time range) of a panel.

To share a panel:

- 1. Optionally select a specific time range in the panel. Refer to *Changing the Span* (on page 24).
- 1. Click the panel's title and select **share**.

A Share window appears, displaying a link to the panel.

| Dashboard | |
|---|-------|
| C Share Link | |
| | |
| Current time range To this panel only Include template variables Include session variables | |
| | |
| | |
| http://54.69.168.98/#/dashboard/file/default.json?from=20000&to=540000&sessions=&panelId=5&fullscreen | |
| | |
| ▲ Unsaved Changes, Please Save 5 | close |
| | |





| Item | Description |
|------|---|
| 1 | Determines whether the linked page will display data for the selected time range or for the entire session time range. |
| 2 | Determines whether the linked page will display this panel or the entire dashboard. |
| 3 | Determines whether the linked page will include template variables. |
| 4 | Determines whether the linked page will displays the data for the currently selected session(s), or for the sessions appearing when the dashboard was last saved. |

Using the options in the Share window, you can produce a link to various variants of the panel or dashboard, as described in the following table.

Note that the linked page will not display any customizations you made to the dashboard if you did not save the customized dashboard. Therefore, if you made any customizations and did not save the dashboard, a warning appears at the bottom of the Share window (see item ^⑤ in Figure 43).

Chapter 8 Defining and Running a Playlist

You can run a playlist of specific dashboards. Only dashboards marked as favorites can be included in a playlist.

To define and run a dashboard playlist:

- 1. Mark the desired dashboards as favorites. To mark a dashboard as a favorite:
 - a. Load the dashboard, as described in *Loading a Dashboard* (on page 32).
 - b. Select **Save > Mark as favorite**.



Figure 44: Marking a Dashboard as Favorite

2. Select **Open > Playlist**.

| RADVIEW WebLOA |) Dashboard - default | Relative 🥝 | Share Dashboard 🖻 | Zoom To Data | B ⊨ # 🌣 |
|-----------------------------|-----------------------|------------|-------------------|--------------|--------------------|
| 0 | | | | | |
| Q O Select Session: failed_ | | | | | |
| Q Search title: | | | ta | gs New | ▲ Import Playlist |

Figure 45: Selecting Playlist



3. A playlist pane appears, listing all the dashboards you marked as favorites. You can specify which dashboards to include in the playlist, and set the timespan between dashboard change.

| Start dasht | board pla | ylist | | |
|---------------------------------|-----------|--------------------|---|-------------------------|
| Dashboard | Include | Remove as favorite | • dashboards available in the playlist are only the ones marked as favorites (stored in local browser storage). to mark a dashboard as favorite, use save icon in the menu and in the dropdown select mark as favorite | Timespan between change |
| default | | × | | |
| my Dashboard | | × | | |
| ► Start | | | | Ø Close |

Figure 46: Specifying the Dashboards in the Playlist

4. Click Start.

The playlist start running. Note that most menu buttons and dashboard controls are hidden while the playlist is running.

5. To stop the playlist, click **Stop Playlist** at the top right of the page. A playlist continues running indefinitely until stopped.

Distributed Server Deployment

This appendix describes all the Web Dashboard deployment options. It first discusses the *Web Dashboard components*, goes on to describe the various *Deployment options*, and finally provides an *Installation procedure for distributed server deployment*.

Web Dashboard components

- WebLOAD Installation. This includes:
 - Session Results Database The PostgreSQL database which is used by WebLOAD Analytics
 - WebLOAD Session Importer (optional) for importing sessions to the database
- Dashboard.zip, which contains:
 - WebLOAD Dashboard back-end server a Java based application server
 - WebLOAD Dashboard front end front end static files
- ElasticSearch (optional) a database to save/load changes in dashboards

Deployment options

Server deployment

The dashboard components are all deployed in a single, dedicated server.

Team member import their sessions to the server and access the results from their browser.

Personal deployment

The dashboard is lightweight enough that it can be fully deployed on a user's desktop machine for personal viewing of his Analytics database results.



Distributed server deployment

The dashboard components can each be deployed on a separate server if required.

Installation procedure for distributed server deployment

Step 1: Install a Session Results Database (PostgreSQL)

The session results database is a PostgreSQL database. It is the same database used by WebLOAD Analytics.

The easiest way to install and configure PostgreSQL is to install WebLOAD – the installation process automatically installs the database and configures it.

The other option is to manually download and install the database. After installation, the 'radview' database needs to be created by editing and running the script in C:\Program Files (x86)\RadView\WebLOAD\bin\database\deploy-database.bat

Configuring PostgreSQL for Remote Connections

This step is only required if you want to import sessions to the database directly from remote Analytics installations.

By default, PostgreSQL only allows connections from the same machine. To open the database to remote access:

- 1. Edit pg_hba.conf (default location: c:\Program Files (x86)\postgre\data). For
 example, to add access from all machines, add access control:
 host all all 0.0.0/0 md5
- 2. Edit postgresql.conf (default location: c:\Program Files (x86)\postgre\data). Set the listen address, for example, to bind to all local address: listen_addresses = '*'
- 3. Open the database port (by default 5432) in the firewall.
- 4. Restart the database service.

Refer to the PostgreSQL documentation for more details.

Step 2: Install the WebLOAD Dashboard Server

The dashboard server is included in the dashboard.zip. The first step is to extract the zip somewhere (e.g., C:\dashboard). The directory structure and main files are:



- dashboard.bat main execution file. Contains setting for App server
- dashboard.jar App Server jar
- **static** Front-end code, deployed in a Web Server which is included in the zip package
- **config.js** Front End configuration file

Installing the Back-end Application Server

The Dashboard Application Server is self-contained in a single jar called dashboard.jar.

To start it, execute java -jar dashboard.jar, or call dashboard.bat.

By default, the server runs on port 8080.

The server uses Java options for configuration. Change them, for example, when a remote postgreSQL database is used instead of the local one. (See dashboard.bat for options.)

Installing the WebLOAD Dashboard front-end server

The front end client files are static pages, which can be found in the 'static' folder after extracting the dashboard.zip. They can optionally be served from any web server (IIS, Apache, etc.).

The back-end application server is shipped with a built in web-server that is preconfigured to deliver the static content from the 'static' folder.

The front-end configuration file is "config.js" and should be edited when using a back-end server or ElasticSearch server that is not on the same host.

Step 3: Install ElasticSearch

Dashboards can be customized and saved. The customized dashboard can be saved and shared in an ElasticSearch database.

To install:

- 1. Download the zip from <u>http://www.elasticsearch.org/download</u>.
- 2. Extract the zip.
- 3. Run bin/elasticsearch.bat.



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