

HP Real User Monitor

Software Version: 9.26

Real User Monitor What's New

Document Release Date: September 2015
Software Release Date: September 2015



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Overview

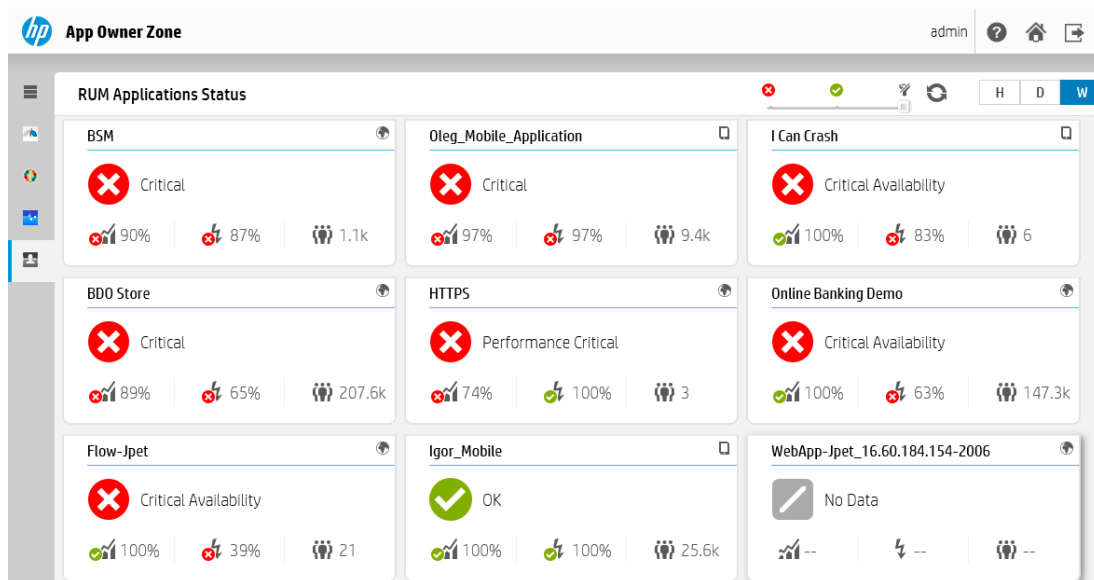
This document provides information about new features and enhancements in HP Real User Monitor [9.26](#), [9.25](#), [9.24](#), [9.23](#), [9.22](#), [9.21](#) and [9.20](#).

For customer escalation fixes and internal bug fixes made to Real User Monitor 9.26, see the [Real User Monitor 9.26 Release Notes](#).

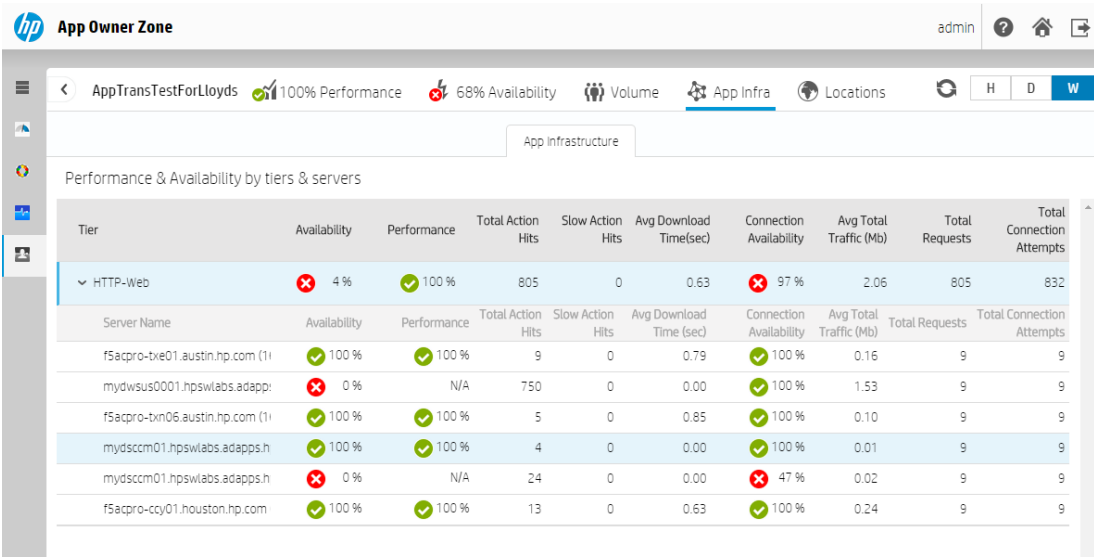
For new features and enhancements in earlier versions of Real User Monitor, see the [HP Software Support](#) site.

What's New in Real User Monitor 9.26

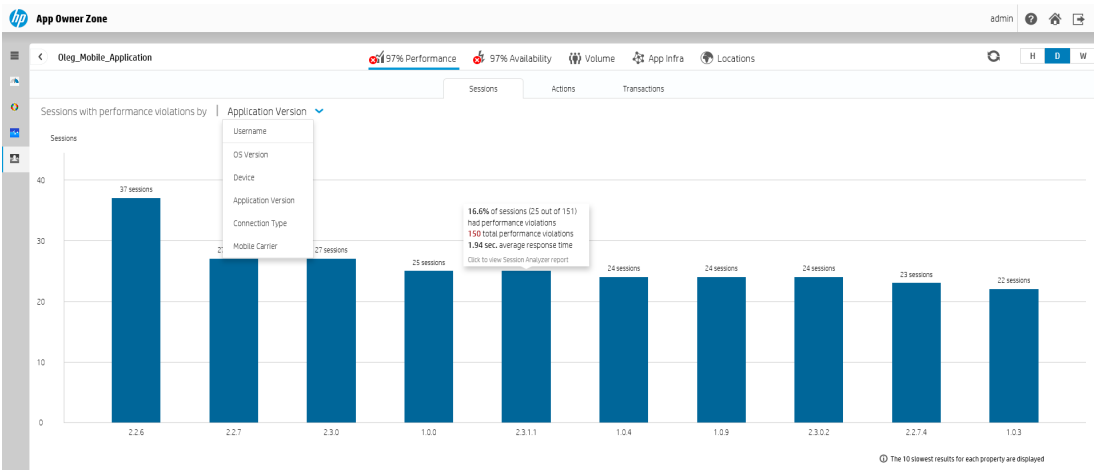
- Application Owner Zone – New set of RUM reports over the Application Owner Zone tailored specifically for application owners who are looking for high level status and isolation on their RUM applications
 - Landing Page – Displays overall status of all your applications in a single view



- App Infrastructure page – Isolate a specific problematic server causing availability/performance problems from a specific tier



- Performance Sessions page – Displays segmentation of your sessions according to different attributes for both web and mobile applications



Availability Actions page – View your worst actions that impact the application's availability

Availability Error Log page – View your errors that impact the application's availability

Oleg_Mobile_Application

97% Performance

97% Availability

Volume

App Infra

Locations

H

D

W

Sessions

Actions

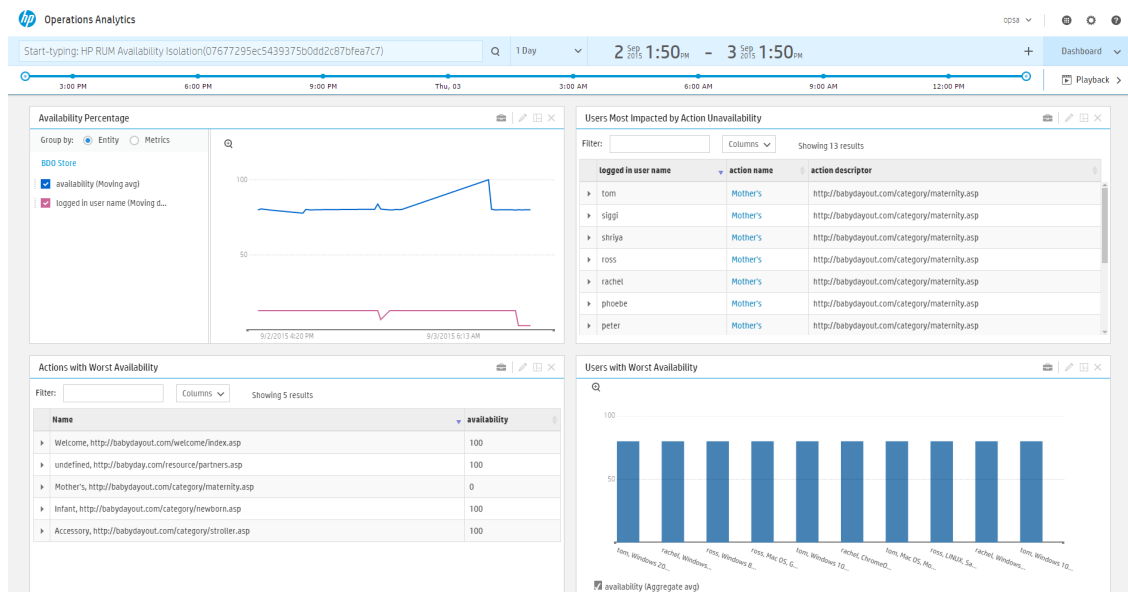
Transactions

Error Log

Error log

| Event Time | Event Name | Action | Server Name | End User Group | Event Details |
|------------------|-------------------|---------|-----------------------------------|----------------|---|
| 09/02/2015 14:39 | Server error | Default | www.gemto.org | Others | Status code 500 - Internal Server error |
| 09/02/2015 14:37 | Application Crash | | Oleg_Mobile_Application_Crashe... | Others | java.lang.OutOfMemoryError: "Failed to allocate a ... |
| 09/02/2015 14:36 | Application Crash | | Oleg_Mobile_Application_Crashe... | Others | RuntimeException: "This is an async exception" at ... |

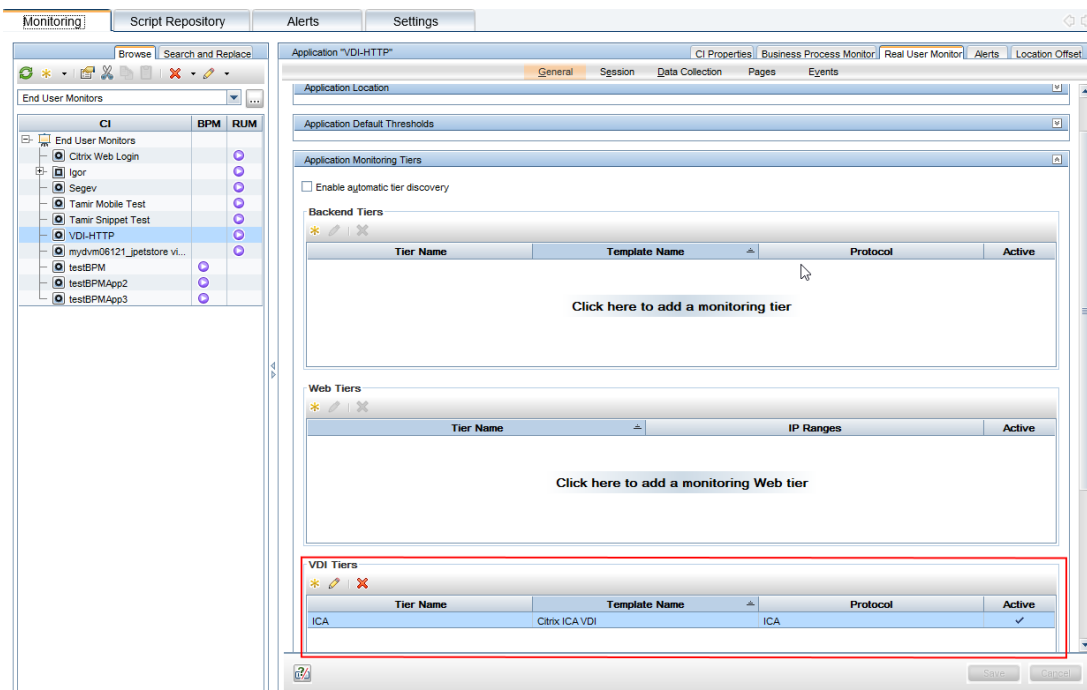
- Integrations Analytics integration – Out of the box RUM reports in OpsA that
 - Identifies root cause analysis using Dimension Analysis
 - Identifies root cause analysis using changes in RUM data (e.g., usage, performance, availability).
 - Provides business indicators about strength or weakness of the service in certain areas

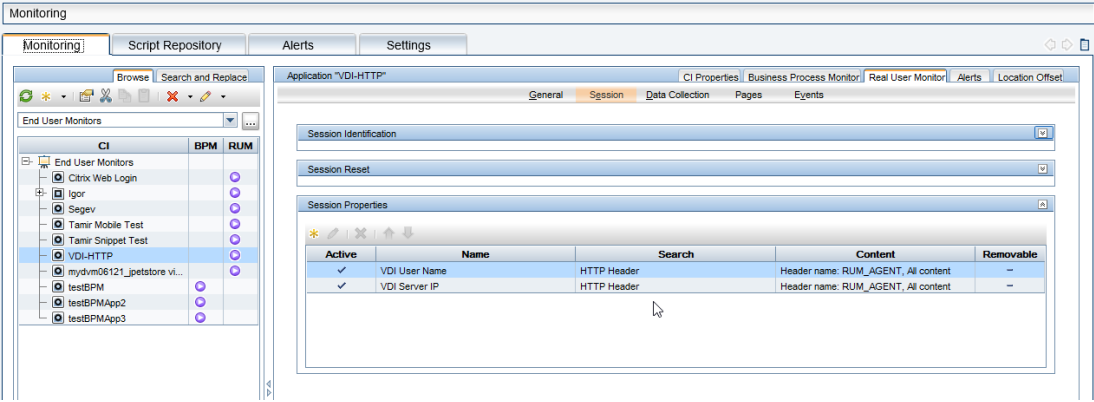
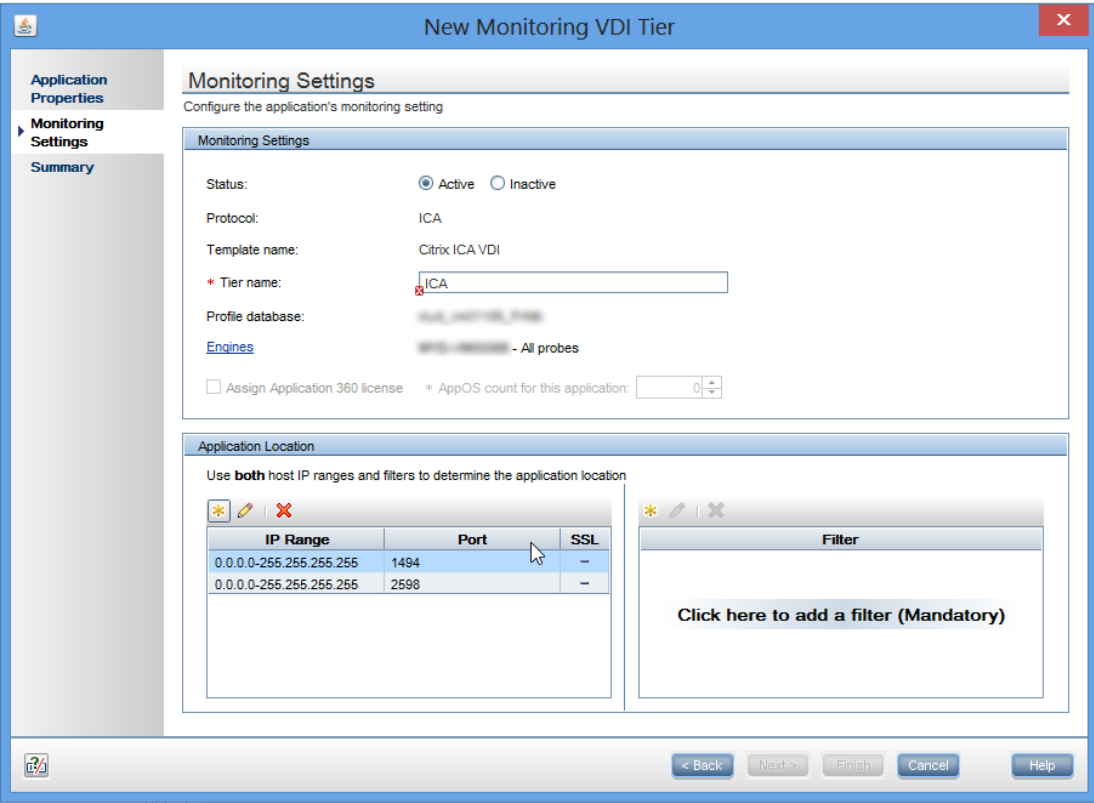


- RUM-PC-SHUNRA integration – Enrich RUM-PC integration with network data for integrating Shunra Network Virtualization (NV)
- Mobile
 - Web view module for iOS 8
 - Show network mobile type
 - Show full stack trace on session details
 - Support MultiDex based applications
 - Allow ACRA override
- Mandates
 - MySQL upgrade for latest 5.5 version to ensure security fixes
 - Red Hat Enterprise Linux Version 7 (RHEL7) – support for RUM sniffer probe and server collector
 - Java Runtime Environment Version 8 support

What's New in Real User Monitor 9.25

- Added full support for TLS (Transport Layer Security) versions 1.1/1.2 based traffic
- Improved support for VDI-based applications:
 - Simplified configuration for applications using Citrix





- Improved Isolation Flow for Citrix-based applications.

RUM Session Analyzer

| Start Time | Tier | End User Subgroup | Client | VDI Server IP | User Name | VDI User Name | Locatio | Active | Duration (hh:mm:ss) | Latenc (ms) | VDI Latency (ms) | Error Events | Informational Events | Slow Actions | Actions | Has Data for VuGen Scripts |
|-------------------|----------|----------------------------------|--------|---------------|-----------|---------------|-----------|--------|---------------------|-------------|------------------|--------------|----------------------|--------------|---------|----------------------------|
| 1/7/2015 10:05 PM | HTTP/Web | Others [0.0.0.0-255.255.255.255] | | | | | Palo Alto | No | 00:01:45 | 64.45 | 300.38 | 15 | 0 | 0 | 34 | No |
| 1/7/2015 3:53 PM | HTTP/Web | Others [0.0.0.0-255.255.255.255] | | | | | Palo Alto | No | 00:01:11 | 60.5 | 300.38 | 14 | 0 | 0 | 35 | No |
| 1/7/2015 3:17 PM | HTTP/Web | Others [0.0.0.0-255.255.255.255] | | | | | Palo Alto | No | 00:01:14 | 64.02 | 175.69 | 17 | 0 | 0 | 40 | No |
| 1/7/2015 3:14 PM | HTTP/Web | Others [0.0.0.0-255.255.255.255] | | | | | Palo Alto | No | 00:01:04 | 64.13 | 107.39 | 27 | 0 | 0 | 56 | No |
| 1/7/2015 2:41 PM | HTTP/Web | Others [0.0.0.0-255.255.255.255] | | | | | Palo Alto | No | 00:01:17 | 64.93 | 107.39 | 8 | 0 | 0 | 18 | No |
| 1/7/2015 2:32 PM | HTTP/Web | Others [0.0.0.0-255.255.255.255] | | | | | Palo Alto | No | 00:00:44 | 60.15 | 107.39 | 11 | 0 | 0 | 28 | No |
| 1/7/2015 1:54 PM | HTTP/Web | Others [0.0.0.0-255.255.255.255] | | | | | Palo Alto | No | 00:05:12 | 58.45 | 175.6 | 5 | 0 | 0 | 18 | No |
| 9/7 | | | | | | | | | | 62.74 | 308.86 | 98 | 0 | 0 | 220 | |

Real User Monitor What's New

What's New in Real User Monitor 9.25

Active Filters

Session Properties

End User Groups

Transactions

Servers

Locations

User Properties

Actions

Events

Tiers

| Application | Tier | Session Property | Operator | Value |
|-------------|----------|------------------|----------|-------|
| VDI-HTTP | HTTP-Web | VDI Server IP | ignore | |
| VDI-HTTP | HTTP-Web | VDI User Name | ignore | |

Session status: ☒ All ☐ Active ☐ Closed

☐ Show only sessions with data for generating VuGen scripts

☐ Only show sessions accessed via VDI tier

☐ Only show sessions accessed directly from application

Session Details 1/7/2015 10:04 PM-10:08 PM (GMT+02:00) Jerusalem

Refresh

Properties

Start time:

1/7/2015 10:05 PM

Client IP:

192.168.1.100

Application:

VDI-HTTP

Client host name:

N/A

End user:

Others [0.0.0.0-255.255.255.255]

User name:

N/A

Location:

Palo Alto

Server IP:

192.168.1.100

Total Traffic (KB):

793.9

Arrived from:

N/A

Duration (hh:mm:ss):

00:01:45

Client type:

Internet Explorer 8.0

Operating system:

Windows

HTTP version:

HTTP/1.1

Latency (ms):

64.45

Total action hits:

34

VDI Session Properties

Duration (hh:mm:ss):

00:36:14

VDI Latency (ms):

360.38

VDI Server IP:

192.168.1.100

Start time:

1/7/2015 3:52 PM

VDI User Name:

hpsvlab@vaud

General Events

No data was found.

Actions

There are 34 actions in the session with 34 frame units, of which 34 units are for the selected application.

Session Replay

Session VuGen Script

| Action | Start Time | Application | Events | Total Time (sec) | Server Time (sec) | Network Time (sec) | Client Time (sec) | Think Time (sec) | Total Traffic (KB) | Snapshot |
|----------------------|------------|-----------------|--------|------------------|-------------------|--------------------|-------------------|------------------|--------------------|----------|
| 1/7/2015 10:05:54 PM | VDI-HTTP | Request refused | 0.122 | 0.017 | 0.105 | 0.000 | 0.001 | 1.9 | Yes | |
| 1/7/2015 10:55:54 PM | VDI-HTTP | - | 0.512 | 0.012 | 0.000 | 0.000 | 1.0 | No | | |
| 1/7/2015 10:55:54 PM | VDI-HTTP | - | 0.489 | 0.048 | 0.420 | 0.000 | 8.954 | 55.0 | No | |
| 1/7/2015 10:56:54 PM | VDI-HTTP | - | 0.229 | 0.007 | 0.213 | 0.000 | 2.805 | 1.3 | No | |

Session Groups

Group session by

VDI User Name

| Value | Number of Sessions | Number of Subgroups | Error Events | Info Events | Performance Events | Total Actions | Unavailable Actions | Latency (ms) | Total Traffic (KB) | VDI Latency (ms) |
|---------------|--------------------|---------------------|--------------|-------------|--------------------|---------------|---------------------|--------------|--------------------|------------------|
| 192.168.1.100 | 2 | 1 | 23 | 0 | 0 | 58 | 23 | 62.31 | 1,403.4 | 175.74 |
| 192.168.1.101 | 5 | 1 | 75 | 0 | 0 | 171 | 75 | 62.88 | 4,053.7 | 320.92 |
| 192.168.1.102 | 7 | 1 | 98 | 0 | 0 | 229 | 98 | 62.74 | 5,457.1 | 308.86 |

Detailed Subgroups

Group session by

VDI Server IP

| Value | Number of Sessions | Error Events | Info Events | Performance Events | Total Actions | Unavailable Actions | Latency (ms) | Total Traffic (KB) | VDI Latency (ms) |
|---------------|--------------------|--------------|-------------|--------------------|---------------|---------------------|--------------|--------------------|------------------|
| 192.168.1.100 | 2 | 23 | 0 | 0 | 58 | 23 | 62.31 | 1,403.4 | 175.74 |
| 192.168.1.101 | 2 | 23 | 0 | 0 | 58 | 23 | 62.31 | 1,403.4 | 175.74 |

RUM Tier Summary 01/07/2015 10:54:30 AM-01/08/2015 10:54:30 AM (GMT+02:00) Jerusalem

View

Fast day

From: 1/7/15 10:54 AM

To: 1/8/15 10:54 AM

Set as default period

Applications:

VDI-HTTP

Active Filters:

None (Restore Default Settings)

Highlights

Application

Network

| Tier | Tier Availability (%) | Total Action Hits | Slow Action Hits | Total Time (sec) | Total Requests | Connection Availability (%) | Total Connection Attempts | Total Traffic (MB) | Latency (ms) |
|----------|-----------------------|-------------------|------------------|------------------|----------------|-----------------------------|---------------------------|--------------------|--------------|
| HTTP-Web | 100.00 | 300 | 0 | 0.44 | 3,183 | 100.00 | 117 | 7.6 | 73.46 |
| ICA | 100.00 | - | - | - | - | 100.00 | 15 | 1.2 | 198.80 |

Critical

OK

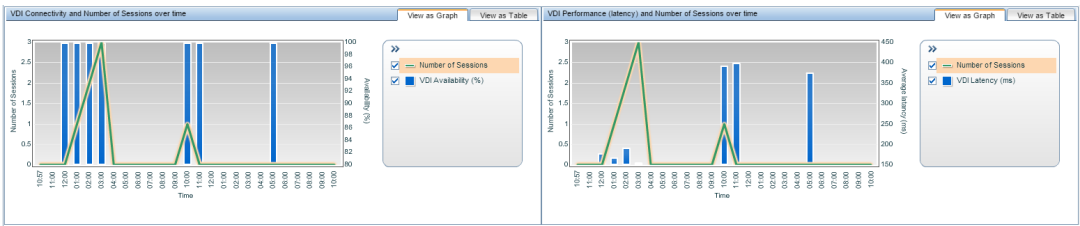
Minor

No data

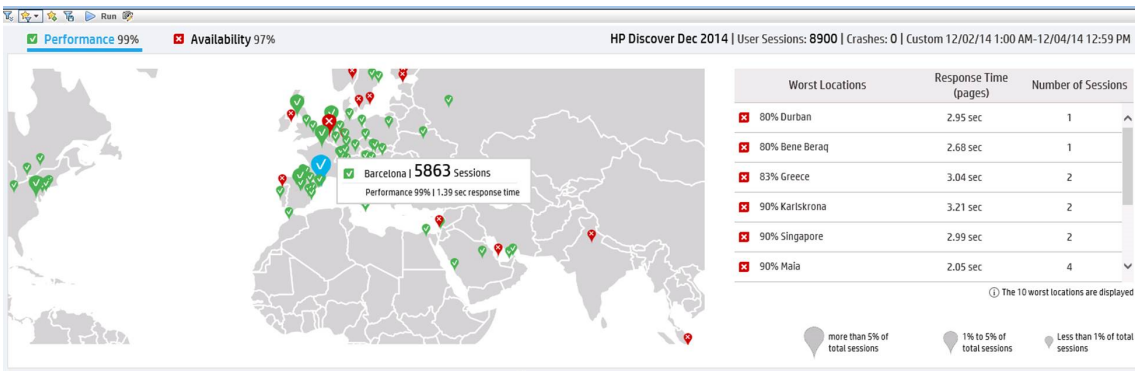
Downtime

Unknown

- Enriched Application Health report showing impact of Citrix measurements on overall health



- Updated Geo Location database with the IP address of the location in both mobile and sniffer-based traffic



- Added ability to use static configuration to extract user data with strict rules for instrumented mobile applications

Mobile Application Instrumentation for Android

Use this tool to instrument Android applications.
For iOS instrumentation instructions refer to the Real User Monitor Installation and Upgrade Guide.

* APK file: No file chosen

☒ **Instrument for Production** (use this option to enable you to upload the instrumented application to the Play Store)

* Application:

* RUM Client Monitor Probe URL:

(Example: [http://www.example.com/monitor](#))

Application Signing (leave blank if you want to sign the application later using Javas jarsigner.exe utility)

Keystore file: No file chosen

Keystore password:

Key alias:

Key password:

☐ Add "Access Network State" permission to the application (required for RUM to determine the user connection type: WiFi or Mobile)

Allow access to http content (parameters extraction, user name extraction, unhide query parameters)

☐ Do not allow content extraction

☒ Apply content extraction configuration change at instrumentation time only

☐ Apply any configuration changes to the mobile device even after instrumentation

☐ **Instrument for Testing** (use this option to test monitoring functionality without uploading the application to the Play Store)

* Application:

* RUM Client Monitor Probe URL:

(Example: [http://www.example.com/monitor](#))

☐ **Instrument for Offline Testing and Data Collection** (In this mode the instrumented application will not report data to the RUM Client Monitor probe)

☐ Store monitored data locally Monitored data will be saved to "Android/data/app_package_name/data" folder on the mobile device. This data includes POST content of requests, which can assist you in defining Extracted Parameters in BSM.

- Added support for Microsoft Windows Server 2012 (64-bit) Standard Edition
- Added support for Java version 7 update 72

- Enhancements
 - Updated calculation for stopped pages

Edit Stopped Page Eve...

X

* Name:

Stopped page

Status:

☐ Active

☒ Inactive

Classification:

☒ Error

☐ Information

Scope:

☒ Global

☐ Selective

OK

Cancel

Help

Actions

There are 13 actions in the session with 13 frame units, of which 13 units are for the selected application.

| Action | Start Time | Application | User Name | Events |
|---|-----------------------|----------------|-----------|--------------|
| HP Page Load - Citrix Testing - 10/2/2014 11:30:46 AM | 10/2/2014 11:30:46 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:31:10 AM | 10/2/2014 11:31:10 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:31:27 AM | 10/2/2014 11:31:27 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:31:01 AM | 10/2/2014 11:31:01 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:31:30 AM | 10/2/2014 11:31:30 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:31:32 AM | 10/2/2014 11:31:32 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:31:55 AM | 10/2/2014 11:31:55 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:31:57 AM | 10/2/2014 11:31:57 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:32:00 AM | 10/2/2014 11:32:00 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:32:30 AM | 10/2/2014 11:32:30 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:32:33 AM | 10/2/2014 11:32:33 AM | Citrix Testing | - | - |
| HP Page Load - Citrix Testing - 10/2/2014 11:33:51 AM | 10/2/2014 11:33:51 AM | Citrix Testing | - | Stopped page |

- Added ability to match exact page sequence with no intermediate or repeated pages in transaction matching

Add Business Transaction and its Real User Monitor Configuration

General Settings

* **Name:**

Description:

Monitoring Settings

Transaction Page Settings

Select the transaction matching rule.

☐ Include intermediate pages in measurements

☐ Ignore page order

☒ Match exact sequence (only include sequences with no intermediate or repeated pages)

Define the pages included in the transaction and their order.

*

| Page Name | Optional |
|-----------|--------------------------|
| pageA | <input type="checkbox"/> |
| pageB | <input type="checkbox"/> |
| pageC | <input type="checkbox"/> |

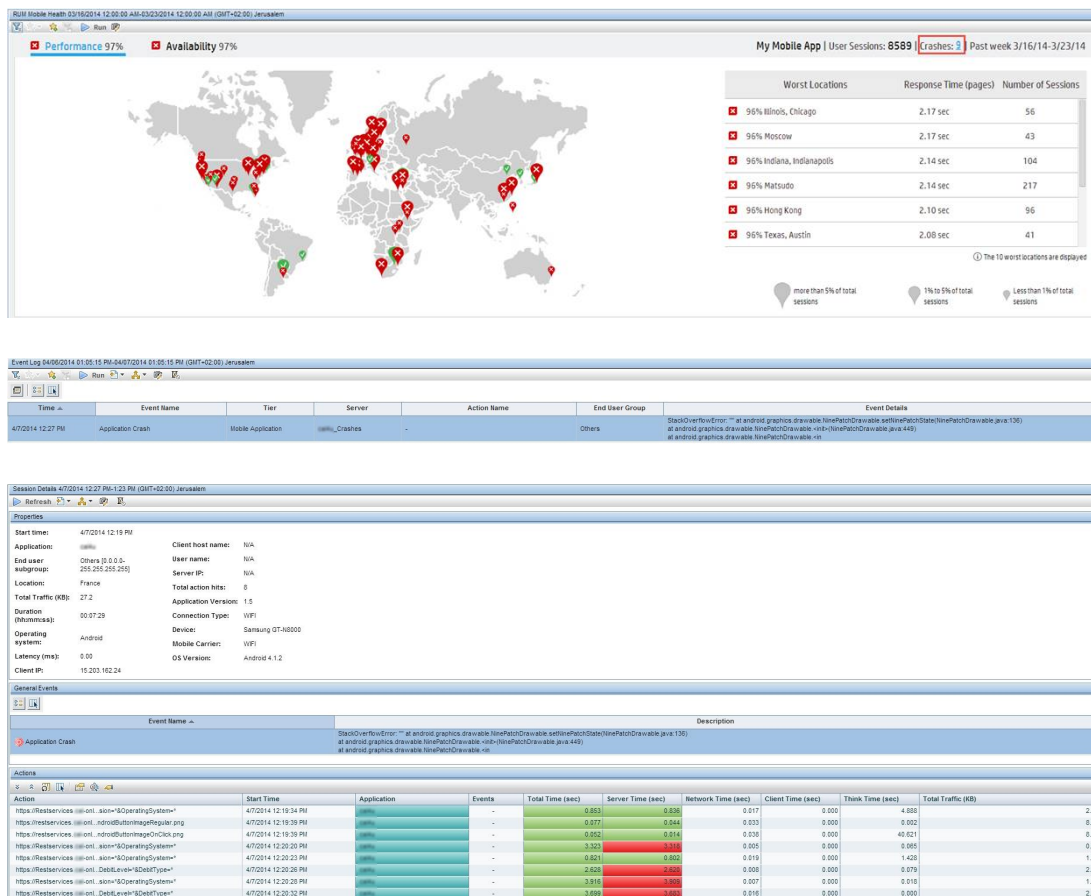
Advanced Settings

OK Cancel

- Assorted bug fixes

What's New in Real User Monitor 9.24

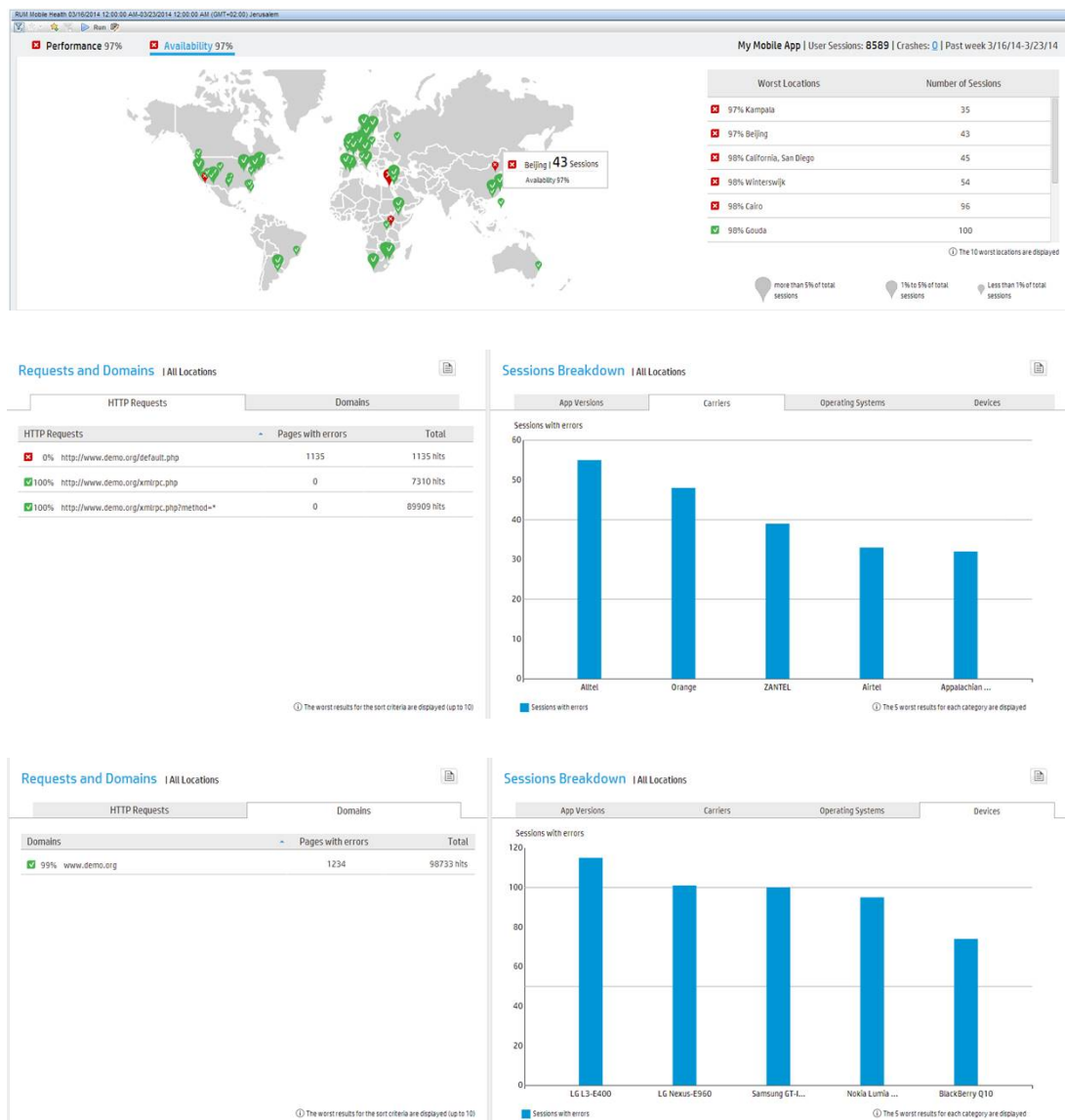
- RUM Mobile Solution Enhancements
 - Mobile Crash analysis data – Shows crashes along with device, carrier, OS, and application version. Enables mobile developers to quickly analyze crashes.



- Application Availability broken down by device, carrier, OS, and application version; helps to quickly identify regressions due to version release and poorly supported platforms; displays errors on HTTP requests and domains; helps to identify problematic third parties and actions.

Real User Monitor What's New

What's New in Real User Monitor 9.24



- Enrichment of RUM single event alert with action name, description, user name and client IP data
- Updated/additions to the supportability metric
 - Support for Microsoft Windows Server 2012 R2 (64-bit) Standard Edition
 - Support for Java 6 update 45 and Java 7 update 51
 - Support for additional Internet Explorer versions (9/10/11) in VDI (RUM HTTP) solution

What's New in Real User Monitor 9.23

- RUM Mobile Solution
 - Support for mobile monitoring of iOS, Android, and hybrid applications.
 - Simplified administration for configuring and editing mobile applications in BSM, for monitoring by RUM.
 - RUM Mobile Health Report – New report that supplies an overview of mobile application end user experience.
 - Application performance, availability, and volume broken by device, carrier, OS and application version; helps to quickly identify regressions due to version release and poorly supported platforms.
 - Map view detailing the user experience in different geographies.
 - Poorly performing HTTP requests and domains; helps to identify problematic third parties and actions; ability to drill down to further investigate problems using other RUM reports or drill to HP Diagnostics.
 - RUM multi-tier monitoring provides end to end status of applications by leveraging RUM's back-end monitoring capabilities.
- Windows Communication Foundation (WCF) protocol support.
- Improved classification algorithm for web-HTTP based applications.
- Assorted bug fixes.
- Documentation Changes
 - Planning and deployment guides are now available from the HP SSO Product Manuals Site, to ensure that the most accurate and up-to-date versions of these documents are accessible to customers. The **Get_Documentation.htm** file, which is available from the Real User Monitor release media and from the Real User Monitor Online Help system, provides deep links into all the documents needed to plan and install or upgrade Real User Monitor.
 - The Real User Monitor Online Help system now uses a new Webhelp engine that improves performance, enables more robust search capabilities (including boolean and string searching), provides quick toggling of the navigation pane, and enhances navigation with options for going to the previous or next topic.

What's New in Real User Monitor 9.22

- RUM Mobile for Android apps helps ensure user mobile experience by monitoring Android native applications from the actual user device. Troubleshoot application performance problems across devices, networks, and back-end layers.
- RUM User Flow Analytics report identifies application flows which are frequently accessed by real users. The report provides visibility to real user sessions that include the flow and presents a simplified approach to configure RUM transactions. The report is based on an advanced HP Labs analytics algorithm.
- RUM Engine performance was significantly enhanced. A RUM Engine can now process up to 2000 pages per second.
- RUM Sniffer Probe stability improvements.
- Security fixes.
- Java, MySQL, and JBoss updates.
- Support for smart card authentication.

What's New in Real User Monitor 9.21

- Supports monitoring of real-user experience using the new RUM Browser solution, based on JavaScript injection, without network sniffing.
- Supports the new RUM Server Collector (a virtual server tap) enabling the direction of traffic to the RUM probe directly from the server, without the need to perform special settings on the network.
- Supports remote span port over ERSPAN.
- New API for exporting raw data from RUM for external analysis.
- Bug fixes.

What's New in Real User Monitor 9.20

- Support span port also over GRE tunnel (for Cisco Nexus virtual switches).
- Support for SAP GUI protocol.
- Bug fixes.

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We appreciate your feedback!