

Oracle® Real User Experience Insight

Release Notes

12c Release 1 for Linux x86-64

E35528-04

July 2012

Oracle Real User Experience Insight (RUEI) provides you with powerful analysis of your network and business infrastructure. You can monitor the real-user experience, define Key Performance Indicators (KPIs) and Service Level Agreements (SLAs), and trigger alert notifications for incidents that violate them.

RUEI is a Web-based utility to report on real-user traffic requested by, and generated from, your Web infrastructure. It measures the response times of pages and user transactions at the most critical points in your network infrastructure. An insightful diagnostics facility allows Application Managers and IT technical staff to perform root-cause analysis.

This document provides information about the changes introduced to Oracle Real User Experience Insight (RUEI) in release 12.1.0.1.1. Known issues and limitations are also described. It is recommended that you review its contents before installing the product or upgrading to this version of the product.

This document contains the following sections:

- ["New Features Included in the Release"](#)
- ["Installation/Upgrade Procedure"](#)
- ["Known Issues and Limitations"](#)
- ["Compatibility Issues"](#)
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Important

If you are upgrading from a release other than the most recent previous release, it is *strongly* recommended that you review the *Release Notes* for each of the intermediate releases for information about possible compatibility issues. This information is available at the following location:

<http://www.oracle.com/technetwork/documentation/realusereui-091455.html>

1 New Features Included in the Release

The sections below provide information on the new features for RUEI release 12.1.0.1.1 and release 12.1.0.1.

1.1 1.1 RUEI Release 12.1.0.1 New Features

- **User action monitoring for Rich applications**

The monitoring of applications that use a Rich framework (such as Ajax) has been significantly enhanced with the ability to specify an action-naming scheme. This is particularly useful when you want insight into the interactive user actions performed on specific pages. Action information is available through a new Actions view in the All pages and Problem Analysis groups, and the Session Diagnostics facility. It is also possible to specify actions as part of your KPI filter definitions. For further information, see section 8.2.20 of the *Oracle Real User Experience Insight User's Guide*.

- **Enhanced support for touch-based interfaces**

Support has been added for the use of RUEI with touch-based devices (such as Apple's iPad). This support has been verified against iOS 5. Note that there are known scrolling issues with earlier versions of iOS.

- **Possibility to abort running actions**

Through the addition of a **Cancel** option in the loading indicator, it is now possible to abort actions that are taking longer than expected.

- **Alert log extended with Data Browser and KPI correlation Functionality**

The Alert log facility has been extended so that it is now possible to jump directly from an alert to the Data Browser with its associated KPI filters pre-selected within the appropriate group. Access to the KPI correlation facility is also available. In this way, more information is readily available about the context within which the alert was generated. For further information, see section 6.3.2 of the *Oracle Real User Experience Insight User's Guide*.

- **New client device dimension**

Previously, the client device was reported within both the Operating system and Browser dimensions. Now, the actual OS and browser are reported, and the brand information is reported in the new Client device dimension. For further information, see appendix W of the *Oracle Real User Experience Insight User's Guide*. If you are upgrading from a previous version, it is recommended that you review the information in the "[Compatibility Issues](#)" section.

- **Creation of dashboard templates based on individual user dashboards**

The dashboard facility has been extended to enable the Administrator to create public dashboard templates based on individual user dashboards. This is useful when it is felt that particular private dashboards might be valuable to other users. For further information, see section 5.8 of the *Oracle Real User Experience Insight User's Guide*.

- **Wildcards within KPI filter values**

For most dimension levels, it is now possible to specify one or more wildcard (*) characters as part of a KPI filter value. For further information, see section 7.2 of the *Oracle Real User Experience Insight User's Guide*.

- **Session details page viewable outside RUEI**

The zip file generated by the Export session details facility has been extended to include an `index.html` file. This makes the exported session details viewable outside RUEI (for example, by developers and other interested parties) as they would appear within the Diagnostics facility, with access to source, page and object details, and element identification. For further information, see section 4.4 of the *Oracle Real User Experience Insight User's Guide*.

- **Custom dimensions available within the Session Diagnostics facility**

The reporting of user interactions within the Session Diagnostics facility has been extended so that you can now specify which custom dimensions are used to report a user action. This enables the display of full contextual information per user click reported, and provides for greatly improved readability of user actions in the Session Diagnostic facility. For further information, see Section 4.5 of the *Oracle Real User Experience Insight User's Guide*.

- **Addition of new User flows completed group**

The reporting of user flows has been enhanced with the addition of a new User flows completed group. This provides additional analysis capabilities for timed out, aborted, and completed user flows. If you are upgrading from a previous version, it is recommended that you review the information in the "[Compatibility Issues](#)" section.

In addition, the reporting of user flow durations has been enhanced to clearly indicate the time components when users were active, idle, and outside the user flow. These are available through the new User flow active/idle time, User flow outside/duration time, and User flow loading/active time views. For further information, see chapter 9 of the *Oracle Real User Experience Insight User's Guide*.

- **User flow duration reporting**

The reporting of user flow durations has been enhanced to clearly indicate the time components when users were active, idle, and outside the user flow. These are available through the new User flow active/idle time, user flow outside/duration time, and user flow loading/active time views.

- **Reported average page-load times within user flows**

The calculation of the average page-load time within user flows has been optimized to more accurately reflect user progression. For further information, see chapter 9 of the *Oracle Real User Experience Insight User's Guide*.

- **Diagnostics drill-out for frustrated pages within user flows**

User flow support has been extended so that you can now click the reported number of frustrated page views within the Flow status view and immediately analyze the relevant sessions within the Diagnostics facility. For further information, see section 9.7 of the *Oracle Real User Experience Insight User's Guide*.

- **Configurable reporting of optional user flow steps**

It is now possible to specify whether optional steps should be included when reporting cumulative user flow information. This facility is useful when, for example, you want to view progress through user flows excluding their optional steps. For further information, see chapter 9 of the *Oracle Real User Experience Insight User's Guide*.

- **Application logout events**

It is now possible to specify events that, if reached, will automatically be regarded as the end of the current user session. Any subsequent user actions will then be reported as part of a new user session. For further information, see section 8.2.10 of the *Oracle Real User Experience Insight User's Guide*.

- **Customization of user interface items**

It is now possible to customize the translations of all data items (such as Data Browser group and field names) that appear in the RUEI user interface in order to meet your specific requirements. For further information, see section 15.13 of the *Oracle Real User Experience Insight User's Guide*.

- **ECID search added to Session Diagnostics facility**

The Session Diagnostics facility has been extended so that it is now possible to locate sessions based on the Execution Content ID (ECID). This ID is used to track requests as they move through the Oracle stack architecture. For further information, see section 4.1 of the *Oracle Real User Experience Insight User's Guide*.

- **Export report data facility extended**

The Export report data facility has been extended to allow the specification of the file format in which the data should be exported. In addition, in the case of reports that make use of filters, you can specify the appropriate dimension value. For further information, see section 2.13 of the *Oracle Real User Experience Insight User's Guide*.

- **Receipt of Security Officer rights configurable for Administrators**

In previous versions, Administrators automatically received Security Officer rights. It is now possible to specify whether Administrators should receive these rights. Note that the Super Administrator always receives these rights, and they cannot be withdrawn. For further information, see section 14.3 of the *Oracle Real User Experience Insight User's Guide*. If you are upgrading from a previous version, it is recommended that review the information in the "[Compatibility Issues](#)" section.

- **Controlling the reporting of robot traffic**

The reporting of robot traffic has been enhanced so that it is now possible to specify the user agent that should be used to identify its origin. For further information, see section 12.16 of the *Oracle Real User Experience Insight User's Guide*.

- **Excluding client traffic from data collection**

It is now possible to specify that traffic associated with specific client IP addresses and request headers, as well as all identified robot traffic, should be excluded from data collection. For further information, see section 12.17 of the *Oracle Real User Experience Insight User's Guide*.

- **Collector data retention policies extended to Collector profiles**

Previously, it was only possible to define Collector data retention policies for each application, suite, or service across all Collectors attached to a Reporter system. Now it is also possible to define them for each Collector profile. This provides for greater insight into the operation of your Collector profiles and enhanced management of replay data storage. For further information, see section 13.8 of the *Oracle Real User Experience Insight User's Guide*.

- **Problem analysis views extended with Slow functions group**

The Problem analysis category of views has been extended with the addition of a Slow functions group. This provides in-depth information about the slowest 5000 function calls per 5-minute period detected by the system, based on the call's end-to-end time. By default, function calls must have an end-to-end time of at least 2000 milliseconds to be reported in this view. Note that this threshold is configurable, and also applies to the Slow URLs group. For further information, see section 12.5 of the *Oracle Real User Experience Insight User's Guide*.

- **Port ranges when managing of scope of monitored traffic**

It is now possible to specify a range of port numbers when managing the scope of monitored traffic. Previously, it was necessary to separately specify each required port number. For further information, see section 13.3 of the *Oracle Real User Experience Insight User's Guide*.

- **Extended support for XPath content scanning**

Support for the use of XPath queries has been enhanced so that processing can be optimized to prevent the unnecessary scanning of large numbers of documents which can lead to excessive memory and CPU usage on a Collector system. In particular, content strings can now be configured to be compared to the start of the document's message content to determine its content type. In addition, a default content type (HTML or XML) can be configured for unmatched documents. For further information, see section F.5 of the *Oracle Real User Experience Insight User's Guide*.

- **KPI alert information extended with calculation period**

The SNMP message and mail generated for KPI alerts have been extended with information about the KPI's calculation period. For further information, see section 7.5.6 of the *Oracle Real User Experience Insight User's Guide*. If you are upgrading from a previous version, it is recommended that you review the information in the "[Compatibility Issues](#)" section.

1.2 RUEI Release 12.1.0.1.1 New Features

- **User flow reporting**

User flow reporting has been extended so that the "Duration per flow" item now indicates individual time components for when the user was active, idle, and outside the user flow. For further information, see section 6.1.7 of the *Oracle Real User Experience Insight User's Guide*.

2 Installation/Upgrade Procedure

The installation procedure, together with the procedure to upgrade an existing RUEI 11.1 or 12.1.0.0.x installation to version 12.1.0.1.1, is fully described in the *Oracle Real User Experience Insight Installation Guide*. Upgrading from release 12.1.0.1 to this patch release 12.1.0.1.1 is described in the `README.txt` file included in the distribution zip.

Note: It is recommended that you check the availability of all hot fixes for the release to which you are upgrading, and apply (if relevant) before starting the upgrade procedure.

Important: Filtering Network Traffic Based on Domain Names

Article 1320386.1 describes how network traffic can be filtered based on domain names. If you are using the implementation described in this article, you should follow the procedure described in the article 1198923.1 after upgrading to 12.1.0.1.1. Otherwise, you may experience traffic flooding.

3 Known Issues and Limitations

The following issues are known to exist with the release:

- **Vertical bar chart visualizations not available within dashboard items**

Due to size constraints, the vertical bar chart visualization is only available for time-based dashboard items.

- **External JavaScript files need to be downloaded within Replay viewer**

If you are using the Internet Explorer browser within the Replay viewer, when clicking a link to an external JavaScript file, you are first prompted to download the external file. In addition, when replaying a page which includes a download hit file (such as an .exe or .rpm), you are prompted to save the file. This does not occur with Mozilla Firefox.

- **Long dimension level values are truncated**

All dimension level values (such as page names) are limited to 254 characters. If a name is longer than this, it is automatically truncated. Note truncated data is indicated by ending with an ellipse (...).

- **Mismatches between previewed reports and generated PDFs**

Some characters are not rendered in the generated PDF file as they appear in the preview. This is because the preview facility uses locally installed client fonts, while the PDF generation facility uses the RUEI server installed fonts. The default font will cover most customer requirements. However, there are known issues with Asian and Eastern European bold characters. If necessary, you can install a suitable alternative font to resolve this issue. For further information, see the *Oracle Real User Experience Insight Installation Guide*.

- **URL reporting**

RUEI reports URLs in a human-readable format. This means the reported URLs, although they appear to be real URLs, cannot always be copied and pasted into the browser address bar. It is not possible to distinguish between the raw format (received by the Web server) and the more readable format (reported by RUEI). As a result, the following characters might receive a different meaning: (comma), [,], ;, @, !, \$, ', (,), *, and +.

- **Pages within the Replay Viewer**

Application pages may not be available via the Replay Viewer within the Session diagnostics facility, or may appear garbled, if they are based on Rich Internet Applications (RIAs). Examples of RIA frameworks include Ajax, Curl, GWT, Adobe Flash/Adobe Flex/AIR, Java/JavaFX, Mozilla's XUL, OpenLaszlo, and Microsoft Silverlight. However, if the page contains JavaScript code, the JavaScript replay facility can be used to modify the rendering of replayed pages. This is described in section 6.3 of the *Oracle Real User Experience Insight User's Guide*.

- **Overlapping or repeated tagging definitions**

Specifying identification definitions, as well as functional error definitions, that overlap (or are identical) across multiple applications, suites, or services can lead to unexpected results. This restriction applies to page-naming schemes, and any configuration based on custom tags, custom functions, and response content.

- **Service naming schemes within ruling facility**

When a group and name source exist for both service group and name schemes, two levels can be delivered for each source resulting in 4-level service names.

- **Users with application-specific permissions unable to view data within the All user flows group**

Users who have only application-specific permissions cannot view generic user flows, even if these contain parts (such as conditions or triggers) that meet the user's authorization.

- **Not all time periods available for non-generic user flow dashboard widgets**

Non-generic user flow dashboard widgets (that is, those that are application, service, or suite specific) are only available when the selected period is the last hour or last 5 minutes. Selection of any other period results in these widgets reporting "N/A".

- **User flow funnel dashboard widgets need to be re-created after upgrading**

When upgrading to 12.1.0.1.1, existing user flow funnel dashboard widgets will no longer work. They must to be re-created (or existing ones edited) by selecting "User flow completion" as the data source, "User flows" as the View category, and "Funnel" as the view name.

4 Compatibility Issues

If you are upgrading from a previous release, you should be aware of the reporting differences highlighted in this section.

- **Receipt of Security Officer rights by Administrators**

In previous versions, Administrators automatically received Security Officer rights. When upgrading, existing Administrators will retain these rights. By default, new Administrators (other than the Super Administrator) do not receive them. If you wish them to do so, you must explicitly authorize it.

- **Addition of new client device dimension**

As explained in "[New Features Included in the Release](#)", the client device was previously reported within both the Operating system and Browser dimensions (for example, `Mobile » Nokia`). Now, the actual OS and browser are reported, and the brand information is reported in the new Client device dimension. It is recommended that you review any defined filters that make use of either the client OS or browser dimensions.

- **Inconsistent reporting of KPI percentage values**

In releases prior to 12.1.0.1, KPI percentage values were sometimes reported as a number between 0 and 1, rather than between 0 and 100. Reporting has now been standardized. While best effort has been made to ensure that historical data and target values are correctly transformed as necessary, it is recommended that you review KPI reporting and target configuration to ensure they meet your requirements.

- **Loading satisfaction levels renamed**

In previous versions, loading satisfaction was reported using the levels Satisfactory, Tolerable, or Frustrating. These have now been renamed to Good, OK, or Poor. In addition, their default thresholds can also be modified.

- **Enriched data export facility**

In version 12.1.0.1.1, the structure of the database tables generated for use with the Enriched data exchange facility has been modified. The `TENANT_ID` column has been added to the `WG__BIDATA_MASTER` table, and the `FORMS_CLIENT_BODY` and `FORMS_SERVER_BODY` columns (representing the data exchanged between the client and Forms server) have been added to the `WG__BIDATA_SUITE_EBS` table. It is recommended that you review the design of any SQL queries that make use of these tables.

- **Collector data retention policy**

In previous versions, the Collector data retention settings applied to all Collectors attached to a Reporter. In version 12.1.0.1.1, it is possible to specify them for each Collector profile. As part of the upgrade procedure, the currently defined settings are assigned to each Collector profile. It is recommended that you review these settings after upgrading to ensure that they meet your reporting requirements.

- **SNMP message enhancement**

As explained in the "[New Features Included in the Release](#)" section, the SNMP message generated for a KPI alert has been extended with an indication of the KPI's calculation period. It is recommended that you download the latest version of the RUEI Management Information Base (MIB) definition file, and incorporate it into your address book of managed objects.

- **Reporting of application-level dimensions**

As explained in the "[New Features Included in the Release](#)" section, the page reporting within the Session Diagnostics and Enriched data exchange facilities has been enhanced to remove the duplication of dimension levels. Previously, a page might be reported as follows:

- Application: shop
- Group: shop » menswear
- Page: shop » menswear » hat

It is now reported as follows:

- Application: shop
- Group: menswear
- Page: hat

Note that historical data will still be reported within the Session Diagnostics facility in the previous format.

- **Reporting of service function groups and names**

In version 12.1.0.1.1, the reporting of service function groups and names has been modified to more closely match your configuration settings. Consider the following configuration for the `shop` service:

- Function group scheme: URL base
- Function name scheme: URL argument "payment"

and the following URL is encountered:

<http://myhost.com/basket/product/checkout?payment=creditcard>

Previously, these were reported throughout RUEI as follows:

- Function group: shop » basket
- Function name: shop » basket » product » checkout » creditcard

In version 12.1.0.1.1, these will now be reported within Data Browser groups and reports as follows:

- Function group: shop » basket » **product » checkout**
- Function name: shop » basket » product » checkout » creditcard

while within the Session diagnostics and Enriched data exchange facilities, they are now reported as follows:

- Function group: basket » product » checkout
- Function name: creditcard

If you have defined function group filters, it is recommended that you review their specification to ensure that they meet your reporting requirements.

■ **User flow reporting**

As explained in the "[New Features Included in the Release](#)" section, a new User flows completed group has been introduced. In addition, the All user flows group has been renamed to User flows activity. If you have defined user flows, you are prompted during the upgrade procedure to confirm whether reports based on the previous group structure should be retained to provide access to historic data.

■ **Dimensions available within the Data Browser**

For operational reasons, various dimensions have been removed from the monthly and yearly period views, and are now only available within the daily and hourly views. For further information, see Appendix W of the *Oracle Real User Experience Insight User's Guide*. If you have reports based on these dimensions, you may notice that their generation takes longer than previously. This is due to the report data now being retrieved from multiple period views. If necessary, you should consider redesigning your reports.

5 Bugs Fixed

The following bugs have been fixed in this release:

5.1 Bugs Fixed for RUEI Release 12.1.0.1

KPIs

- Oracle database errors reported when creating KPIs based on the "Flows started per min" metric (13716950).
- KPI correlation graph not relative to KPI overview graphs (13713184).
- KPI metric "Error page views(%)" does not take server aborts into account (13423637).
- Maximum solution time incorrectly reported in KPI overview reports(13077759).

Collectors

- CPU usage reaches 100% after upgrading to release 11.1 (12851004).
- The `UnknownCertificates` directory grows uncontrollably large (13547545).

Reports

- Defined report column missing from export (13563534).
- Export report data facility does not recognize parameters (13257128).

Data Browser

- The comparison facility does not show data past the current time when comparing data for an unfinished period with a complete period (13441597).
- Bar line charts are rendered incorrectly (13039895).
- Clickout to JVMMD does not preserve context (13778332).
- Client location dimension shows IP address instead of user location (14133572).

Installation/Guide

- KPI values handled incorrectly (13861507).
- Core dump after upgrading to RUEI 11.1 (13252381).

Dashboards

- User flow widget shows "n/a" (13840260).

Suites

- Oracle Forms socket traffic cannot be configured with HTTP traffic (12980998).
- Graphical JD Edwards data not rendered correctly (13841727).
- PeopleSoft page-load times reported lower than expected (13818911).
- Siebel data condensed (13363074).

OAM/SSO Support

- OAM AccessGate log file reports RUEI blank tokens (13013364).
- SSO user ID not preserved during a domain-wide session (13783885).

Session Diagnostics/Full Session Replay

- No all relevant data included in session export (12710186).
- Character set not correctly rendered in Full Session Replay (14000226).
- Session-based custom dimensions incorrectly reported (13692915).
- Error message "array_key_exists()" reported in Session Diagnostics (13510454).
- Session export does not function when a Processing Engine is configured (13366755).
- Prompting for `replay.php` in Full Session Replay facility (13413064).

Configuration

- Delete replay files option not available when replay is disabled (12926150).

- Copy Collector profile does not fully copy to new profile (13562883).
- Oldest and newest replay timestamps incorrectly reported (13547333).
- Remote Collector descriptions not shown anywhere (13423765).
- Adding a new condition to a page definition results in "Cannot find requested item" being reported (13420427).
- Internal server error when accessing KPI configuration details (13406115).
- The Collector data retention policy is empty when multiple Collectors are configured (13366852).
- Page identification incorrect with a manual page-naming scheme (13986385).
- Framework exceptions cannot be uploaded unless an application or suite has already been configured (13808187).
- Collector status remains reported as "Loading dynamic settings" (13108019).

User Flows

- User flow start and end time reported as equal (14127715).
- User flow dashboard reports no data available when in fact it is (14127803).
- Funnel graph not available (14120260).
- UI items not available after upgrading to 12.1.0.1 (14119920).

Miscellaneous

- Non-HTTP Referer header truncated (13955649).
- Available disk and database space reported as unknown (13402281).
- Data processing restart not possible after ORA-01654 error (13067021).
- User interface (PHP) does not load (13768747).
- "No server response" repeatedly reported (13397234).
- Event log reports "Internal error: REPLAY: cannot open LTS wg/REPLAY" (13372588).
- Event log reports "Internal error (cube wg_kpi_yr_2011: no merge: 1210.00 MB where merge limit is 900.00 MB)" (13366827).
- Network time reported as 156206427 ms (43 hours) (13033719).

5.2 Bugs Fixed for RUEI Release 12.1.0.1.1

Collector

- Collector crashes during referer argument masking (14207914).
- Content dump ID contains the wrong thread ID component (14244630).
- `get_file_list` skips valid STS files (14200964).

Processing

- Changing default retention for daily cubes (14204584).
- Partitioning on year cubes causes them to condense continuously (14267094).

- RUEI - errors from RUEI processor (14267471).
- RUEI restore fails on `txn_step_clauses` (14207754).
- The "time-in-flow-" counters report higher are expected values (14267574).

Suites

- Configuration uploaded but not functional (14259652).

Templates

- Incorrect project due to incorrect handling of deleted column (14261659).
- Wrong unit definition for ended flow active/duration time KPI (14266940).
- Upgrade message cannot find presentation (14152596).
- User flow completion > duration per user flow does not appear to display the data (14147943).

User Interface

- `sesdiag` shows no data for session from completed flow (14266870).
- Internal server error, Apache error call to `getdimensions()` failed after upgrade (14230727).
- Upgrade does not convert funnel graphs (14172930).
- Application-specific dashboards widgets for user flows can only have 5-minute or 1-hour period (14266876).

6 Product Documentation

The latest version of the product documentation is available via the link below:

<http://www.oracle.com/technetwork/documentation/realuserei.html>

7 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

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<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

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