

# OPTIMIZE

**MERCURY BUSINESS AVAILABILITY CENTER™**

Reference Information

**MERCURY™**

BUSINESS TECHNOLOGY OPTIMIZATION



# **Mercury Business Availability Center**

Reference Information

Version 6.5

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Mercury Business Availability Center, Version 6.5  
Reference Information

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## Table of Contents

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# Welcome to Reference Information

This guide provides general reference information as well as details on working with Mercury Business Availability Center log files.

## How This Guide Is Organized

The guide contains the following chapters:

### **Chapter 1**    **General Reference Information**

Describes various reference topics relevant to the Mercury Business Availability Center system.

### **Chapter 2**    **Mercury Business Availability Center Logs**

Describes the log files generated by Mercury Business Availability Center that might be useful to administrators troubleshooting the Mercury Business Availability Center system.

### **Chapter 3**    **Samples**

Describes the samples you can use to create custom reports or integrate with third-party applications that require data from the Mercury Business Availability Center system.

## Who Should Read This Guide

This guide is intended for the following users of Mercury Business Availability Center:

- ▶ Mercury Business Availability Center administrators
- ▶ Mercury Business Availability Center platform administrators
- ▶ Mercury Business Availability Center application administrators
- ▶ Mercury Business Availability Center data collector administrators
- ▶ Mercury Business Availability Center database administrators
- ▶ Script developers

Readers of this guide should be knowledgeable about enterprise system administration and Mercury Business Availability Center.

## Getting More Information

For information on using and updating the Mercury Business Availability Center, reference information on additional documentation resources, typographical conventions used in the Documentation Library, and quick reference information on deploying, administering, and using Mercury Business Availability Center, refer to *Getting Started with Mercury Business Availability Center*.



# 1

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## General Reference Information

This chapter describes general reference information for Mercury Business Availability Center.

<b>This chapter describes:</b>	<b>On page:</b>
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## Allowed Names in Mercury Business Availability Center

When naming entities in Mercury Business Availability Center, follow the conventions described below:

- ▶ Due to certain Web browser limitations, the names of server machines running the Mercury Business Availability Center servers should only consist of alpha-numeric characters (a-z, A-Z, 0-9), hyphens (-), and periods (.). For example, if the names of the machines running the servers contain underscores, it may not be possible to log into the Mercury Business Availability Center Web site when using Microsoft Internet Explorer 6.0 or later. (To access the Mercury Business Availability Center Web site in this case, use the machine's IP address instead of the machine name containing the underscore.)
- ▶ The Mercury Business Availability Center program directory, named MercuryAM by default, cannot contain non-English characters.
- ▶ Names must begin with a letter.
- ▶ Name length should not exceed 50 characters (except for transaction names, which can be up to 1024 characters; and user login, which cannot exceed 20 characters).
- ▶ Entity names Mercury Business Availability Center for CMDB-based applications follow the conventions described below:
  - ▶ **Class attributes values.** All primitive types are supported: long, double, float, string, and so forth.
  - ▶ **Class attributes values-type string.** All special characters are supported. The maximum length is 50 characters (4000 bytes).
  - ▶ **Class names and attributes names.** The following are permitted: a-z, A-Z, and underscore (\_). The length limited to 30 characters.
  - ▶ **Class attribute length.** The total length of all the attributes in one class cannot exceed 8K due to SQL Server limitation.

- Allowable characters are a-z, A-Z, 0-9, and the following special characters:

Entity	Special Characters Allowed
<b>CMDB-Based Components</b>	
IT Universe	All
View Manager	All
Discovery Manager	All; For IP addresses only digits and *
Source Manager	All
CI Type Manager	All characters except: " \ / [ ] :   < > + = ; , ? *
Dashboard	All
Service Level Management	All
CMDB alerts	All
<b>Platform Administration</b>	
Management database name	_ @ \$ #
Management user schema (Oracle)	None
Management user schema password (Oracle)	None
User name	All characters except: " \ / [ ] :   < > + = ; , ? *
User login	All characters except: " \ / [ ] :   < > + = ; , ? *
User password	All characters
User group name	All characters except: " \ / [ ] :   < > + = ; , ? *
Alert name	~ ! @ # \$ % ^ & * ( ) _ - + = [ ] { } \   / ? , " ' ; < > <space>
Recipient name	~ ! @ # \$ % ^ & * ( ) _ - + = [ ] { } \   / ? , " ' ; < > <space>
Message sender name in alerts	~ ! # \$ % ^ * _ - + = { } \   / ? . ' <space>

Entity	Special Characters Allowed
SMTP server name in alerts	_ . -
Scheduled report name	` ~ ! @ # \$ % ^ & * ( ) _ - + = [ ] { } \   / ? , " ' ; < > <space>
Downtime/Event Schedule name	All characters except: " < >
<b>Monitor Administration</b>	
Transaction name	` ~ ! @ # \$ % ^ & * ( ) _ - + { } ; <space>
Script name	! _ <space>
Profile name	~ ! @ # \$ % ^ & ( ) _ - { } .
Views	` ~ ! @ # \$ % ^ & * ( ) _ - + { } ; <space>
Categories	` ~ ! @ # \$ % ^ & * ( ) _ - + { } ; <space>
<b>Data Collectors</b>	
Business Process Monitor host name	` ~ ! @ # \$ % ^ & * ( ) _ - + = [ ] { } \   / ? , " ' ; < > <space>
Business Process Monitor host location	` ~ ! @ # \$ % ^ & * ( ) _ - + = [ ] { }   / ? . : ; <space>
SiteScope group name	_ . -
Real User Monitor entities, including Engine	` ~ ! @ # \$ % ^ & * ( ) _ - + { } ; <space>
<b>Applications</b>	
Custom report title	_ - + =   [ ] { } , . : ; <space>
Custom report menu name	_ - + =   [ ] { } , . : ; <space>
Custom report component title	_ - + =   [ ] { } , . : ; <space>
Trend report title	_ - + =   [ ] { } , . : ; <space>
Trend report menu name	_ - + =   [ ] { } , . : ; <space>
<b>Analytics</b>	

Entity	Special Characters Allowed
Report name	All characters except: < >. Replace < with &lt; and > with &gt;
Description (of a report)	All characters except: < >. Replace < with &lt; and > with &gt;
Column name	All characters except: < >. Replace < with &lt; and > with &gt;
Tab name	All characters except: < >. Replace < with &lt; and > with &gt;
Tooltip	All characters except: < >. Replace < with &lt; and > with &gt;
Template name (portal)	All characters except: < >. Replace < with &lt; and > with &gt;
Template description (portal)	All characters except: < >. Replace < with &lt; and > with &gt;
Portal name and description	All characters except: < >. Replace < with &lt; and > with &gt;

## Data Aggregation

Mercury Business Availability Center uses data aggregation to make data handling and management more efficient and to improve the speed and performance of report generation. Mercury Business Availability Center data aggregation tasks are performed on the Data Processing Server.

Mercury Business Availability Center aggregates various types of data that it collects for reports (for example, response time data collected by Business Process Monitor, infrastructure machine performance data collected by SiteScope, and user traffic data collected by Real User Monitor). Data aggregation involves combining individual measurements into manageable chunks. The result is improved speed and performance of report generation.

### Categories of Data

Mercury Business Availability Center groups data into three categories:

- ▶ **raw data.** The actual metrics collected by data collectors.
- ▶ **fine aggregation granularity.** Data grouped into hourly chunks.
- ▶ **coarse aggregation granularity.** Data grouped into daily chunks.

### How Data Is Aggregated

Mercury Business Availability Center aggregates data collected by Business Process Monitor, Client Monitor, and SiteScope data collectors (not including SiteScope Integration Monitors using the event data template).

- ▶ Hourly aggregation is performed every hour. The default schedule is as follows:

Hourly aggregation for Business Process Monitor, SiteScope, and Client Monitor data is done every hour for the time period that began 2 hours earlier (for example, at 12:00 PM Mercury Business Availability Center aggregates the data collected between 10:00 AM and 11:00 AM).

- ▶ Daily aggregation is performed once a day after the hourly aggregation. The default schedule is that aggregation begins at 1:00 AM for the previous day (for example, at 1:00 AM Mercury Business Availability Center aggregates the data collected between 12 am, 25 hours ago and 12 am, 1 hour ago). When configuring profile properties, you can specify the time zone that Mercury Business Availability Center uses to determine when to perform daily aggregation in **GMT Offset**. For more details, see “Times and Time Zones Used in Mercury Business Availability Center” on page 11.

You can define a different delay for when the aggregation begins in the Offline Aggregator context of the Infrastructure Settings page (**Admin > Platform > Setup and Maintenance > Infrastructure Settings > Foundation > Offline Aggregator**). You can specify a separate delay for Business Process Monitor, custom, and SiteScope data. The delay you specify is for both the hourly and daily aggregations. It is recommended that only advanced users change the defaults set in Infrastructure Settings and after first consulting Mercury Customer Support or your Mercury Services representative. For details on using the Infrastructure Settings page, see “Infrastructure Settings” in *Platform Administration*.

## How Reports Use Aggregated Data

Whether Mercury Business Availability Center displays a report using raw data, daily aggregated data, or hourly aggregated data depends on several factors:

- ▶ If the requested data in the report is for the past 30 hours, Mercury Business Availability Center uses raw data for Business Process Monitor and Client Monitor data.
- ▶ For reports that use custom data—trend reports, Real User Monitor reports, Service Level Management reports containing custom data, and Diagnostics reports (if installed)—for the requested time range and granularity, Mercury Business Availability Center chooses the optimal combination of data categories so that the least amount of rows must be retrieved from the database.

For example, for a time range Jan. 1 10:40 AM - Jan. 3 10:40 AM and granularity of 1 day, Mercury Business Availability Center:

- ▶ for Jan. 1 10:40 AM - Jan. 1 11:00 AM – raw data is used
  - ▶ for Jan. 1 11:00 AM - Jan. 1 11:59 PM – hourly aggregated data is used
  - ▶ for Jan. 2 12:00 AM - Jan. 2 11:59 PM – daily aggregated data is used
  - ▶ for Jan. 3 12:00 AM - Jan. 3 10:00 AM – hourly aggregated data is used
  - ▶ for Jan. 3 10:00 AM - Jan. 3 10:40 AM – raw data is used
- ▶ If the requested data in the report does not use custom data and the report range is not 30 hours, Mercury Business Availability Center uses an aggregation threshold—by default, 93% of the maximum—to determine whether to use daily aggregated data, hourly aggregated data, or raw data. When a report is generated for a specific time range, Mercury Business Availability Center calculates the amount of each type of data that exists over that time range and considers only the data types that are above the aggregation threshold.

For example, Mercury Business Availability Center might determine that, for the requested time range “Past Week,” raw data exists for 100% of the time range, hourly aggregated data exists for 96% of the time range, and daily aggregated data exists for 86% of the time range. In this case, Mercury Business Availability Center only considers raw data and hourly aggregated data as possible options since both exceed the aggregation threshold of 93%.

When more than one option exists, Mercury Business Availability Center gives priority to the data with the highest granularity (that is, daily is chosen over hourly or raw, hourly is chosen over raw). Thus, in the above example, Mercury Business Availability Center would display the report using hourly aggregated data.

- ▶ If the time granularity for the report (or report time range in reports that are not over time) is set to less than a day, regardless of the chosen time range, Mercury Business Availability Center never uses daily aggregated data.
- ▶ If the time granularity for the report (or report time range in reports that are not over time) is set to less than an hour, regardless of the chosen time range, Mercury Business Availability Center always uses raw data.



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**Note:** (not relevant for Mercury Managed Services customers) If you select a report time range that includes the past day (for example Past Month), and for which Mercury Business Availability Center chooses daily aggregated data, the data for the past day may be missing, as it may not yet have been aggregated into its one day chunk. In such cases, you can “force” Mercury Business Availability Center to use one hour chunks, instead of one day chunks, by increasing the aggregation threshold from its default setting of 93% to 98%. To do so, open the file <Centers Server root directory>\AppServer\DataEngine\conf\TAS\_consts.properties in a text editor, and search for the line **defConf.aggrReasonableDiff=7**. Modify the value from 7 to 2, save the file, and restart Mercury Business Availability Center on the Centers Server machine. (If you have multiple Centers Servers, repeat this procedure on all the servers.) Keep in mind that, once you make this change, it will apply for all generated reports.

---

The **Aggregation Policy** setting defines the aggregated data usage policy for reports that use custom data. By default, reports use all available data, raw and aggregated. In certain circumstances, however, it may be necessary to modify this setting. For example, if the aggregation engine is not working (aggregator process on the Data Processing Server is down), you can modify the setting so that only raw data is used.

The setting can be configured in the Infrastructure Settings Manager, **Foundations > Generic Data Engine** context, **Generic Data Engine - Aggregation** table to modify the way aggregated data is used in reports.

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**Note:** In general, **Aggregation Policy** setting should not be modified without first consulting Mercury Customer Support. It is not relevant for Mercury Managed Services customers.

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## Effect of Outlier Setting on Data Aggregation

When aggregating data, if the **Ignore outlier data in reports** setting is cleared in a profile's properties, in the Transaction Threshold Settings section in Monitor Administration, Mercury Business Availability Center excludes transaction instances whose response time exceeds the outlier value, also set in the Transaction Threshold Settings section. If the **Ignore outlier data in reports** setting is selected, Mercury Business Availability Center ignores outlier transactions, and therefore the data is not considered. Note that the default outlier value for all transactions is 45 seconds. For details on configuring outlier values, see "To configure Transaction Threshold settings:" in *End User Management Data Collector Configuration*.

## Data Aggregation Limitations

The following limitations apply, as a result of data aggregation:

- ▶ When viewing aggregated data, you may not always be able to see results when drilling down to individual transaction instances.
- ▶ When viewing aggregated data for non-rounded time periods, there might be inaccuracies for the time period close to the starting and ending times of the report. For example, if you generate a report on a Thursday based on data collected between 9:45 AM the previous Monday and 9:45 AM the previous Tuesday, the time period between 9:45 AM and 10:00 AM Monday will not contain any data, even if data was originally collected.
- ▶ Mercury Business Availability Center is unable to display both aggregated and raw data simultaneously in the Multi-Profile report.
- ▶ When viewing SiteScope data that is aggregated hourly, keep in mind that if the aggregator did not finish aggregating the necessary data, the latest hour may not include all the data. This may happen only on rare occasions when there is a large amount of data needing hourly aggregation.

## Data Aggregation and Service Level Management

Service Level Management aggregates data differently. For details, see "Aggregated Data" in *Using Service Level Management*.

## Times and Time Zones Used in Mercury Business Availability Center

Mercury Business Availability Center deals with times and time zones differently, depending on the context.

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**Note:** All Mercury Business Availability Center servers, as well as the database servers, must be installed in the same time zone, with the same daylight savings time configuration, and be set to the same time.

---

### Data Collection

Mercury Business Availability Center data collectors collect performance data and transmit it to the Core Server, which submits the data to profile databases using the loader mechanism. Data is inserted into the database along with a timestamp. Mercury Business Availability Center components synchronize their time clocks with that of the database server machine hosting the Mercury Business Availability Center management database. Thus, the timestamp attached to each measurement inserted into the database is that of the database server clock at the time the measurement was collected.

### Business Process Monitor Scheduling

When running profiles and WebTrace, the Business Process Monitors use the schedule you set when specifying profile settings. When configuring schedule properties, the Business Process Monitor can base its scheduling on:

- ▶ **the data collector machine's time clock.** Mercury Business Availability Center uses the host machine's time zone (displayed in parentheses), which is registered in the management database when the Business Process Monitor is installed on the host machine.

- ▶ **a specific time zone relative to GMT.** Mercury Business Availability Center uses the time zone you specify. Choosing Offset from GMT enables you to synchronize transaction run times among hosts in different time zones. Note that this setting is not available for all-day scheduling schemes.

## **Data Aggregation**

The aggregators on the Core Server aggregate the raw data in the profile databases on an hourly and daily basis.

For the standard data aggregator, you set the time zone, relative to GMT, for daily data aggregation when defining a profile's properties. For the custom data aggregator, you set the time zone for data aggregation when configuring the default profile database. For more information on the different aggregators used by Mercury Business Availability Center, see "Data Aggregation" on page 6.

For example, if you want Mercury Business Availability Center to perform daily aggregation on data collected by a particular profile based on Pacific Time, you type **-8**, since Pacific Time is GMT-8 hours. Note that this setting cannot be edited once it is set.

## **Alerts and Alert Recipients**

Mercury Business Availability Center sends alerts from the Core Server. The Core Server synchronizes its time clock with that of the database server machine hosting the management database. Thus, the time associated with an alert or subalert is that of the database server clock at the time the alert or subalert occurred.

Mercury Business Availability Center sends alerts to recipients based on the time range and GMT offset factor that you set when configuring recipient properties in the Platform Administration. For example, if you configure a recipient to receive pager alerts from 9:00 AM - 9:00 PM, and choose a GMT offset of -5 hours, the recipient will only receive alerts via pager from 9:00 AM - 9:00 PM Eastern Time.

## Scheduled Reports

Mercury Business Availability Center sends scheduled reports from the Centers Server machine. Mercury Business Availability Center sends scheduled reports based on the report generation time and GMT offset factor that you set when configuring scheduled reports in the Platform Administration.

For example, if you configure a scheduled report to be sent at 9:00 AM, and choose to offset report generation time from GMT by -8 hours, Mercury Business Availability Center will send the report at 9:00 AM Pacific Time.

## Service Level Agreements

Service Level Management enables you to specify the time zone of each SLA. Service Level Management calculates reports according to this time zone, so that data is linked to the appropriate time interval. However, Service Level Management displays dates and times according to the time zone settings of the machine on which it is installed.

## Date Formats on Client Machines

Mercury Business Availability Center displays dates according to the machine's locale (Mercury Business Availability Center supports 17 locale definitions). Note that Mercury Business Availability Center does not retrieve the date formats from the machine's date definitions.

## Report Times

In some Mercury Business Availability Center reports (for example, Average Response Times over Time and Transaction Breakdown over Time), the selected time range is displayed along the x-axis. Mercury Business Availability Center breaks down the time range according to segments, which differ depending on the time range. For example, for the **Day** time range, Mercury Business Availability Center uses one-hour segments.

Mercury Business Availability Center calculates each time segment differently, depending on the selected time range. Each time segment is exactly the same amount of time with the exception of the first and last time segment of the time range, which are rounded to the start and end time of the report.

The table below describes the time segments that appear along the x-axis for each available time range. For illustration purposes, the information in the table is based on the starting date and time 13/9/01 12:03 PM, where the date format is **month/day/year** and the time format is **hours:minutes:seconds**.

Time Range	Segment	First Time Segment	Example of Middle Time Segment	Last Time Segment
Hour	5 minutes	9/13/01 12:03:00 PM to 9/13/01 12:04:59 PM	9/13/01 12:05:00 PM to 9/13/01 12:09:59 PM	9/13/01 1:00:00 PM to 9/13/01 1:02:59 PM
Day	1 hour	9/13/01 12:03:00 PM to 9/13/01 12:59:59 PM	9/13/01 1:00:00 PM to 9/13/01 1:59:59 PM	9/14/01 12:00:00 PM to 9/14/01 12:02:59 PM
Week	1 day	9/13/01 12:03:00 PM to 9/13/01 11:59:59 PM	9/14/01 12:00:00 AM to 9/14/01 11:59:59 PM	9/20/01 12:00:00 AM to 9/20/01 12:02:59 PM
Month	1 day	9/13/01 12:03:00 PM to 9/13/01 11:59:59 PM	9/14/01 12:00:00 AM to 9/14/01 11:59:59 PM	10/13/01 12:00:00 AM to 10/13/01 12:02:59 PM

Time Range	Segment	First Time Segment	Example of Middle Time Segment	Last Time Segment
Quarter*	1 week	9/13/01 12:03:00 PM to 9/16/01 11:59:59 PM	9/17/01 12:00:00 AM to 9/23/01 11:59:59 PM	12/10/01 12:00:00 AM to 12/13/01 12:02:59 PM
Year	1 month	9/13/01 12:03:00 PM to 9/30/01 11:59:59 PM	10/1/01 12:00:00 AM to 10/31/01 11:59:59 PM	9/1/02 12:00:00 AM to 9/13/02 12:02:59 PM

\* For the **Quarter** time range, the week starts on Monday, and the first step is from the start time until the beginning of the following week.

## Determining the Specific Servers Installed on a Mercury Business Availability Center Machine

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**Note to Mercury Managed Services customers:** Mercury Operations administers these pages and the interface is hidden from your view.

---

If you installed Mercury Business Availability Center servers in a distributed architecture, you may want to check the specific servers that are installed on a particular machine. You can do so by examining the **[INSTALLED\_SERVERS]** section of the **TopazSetup.ini** file, located in the **<Mercury Business Availability Center server root directory>\conf** directory.

If any of the below lines appears, that server is installed on the machine:

```
Core_Server=1  
Centers_Server=1  
Data_Processing_Server=1
```



## GMT Time Zones

The following list describes GMT time zones for locations throughout the world.

(GMT -11) Pacific/Niue	(GMT -11) Pacific/Apia
(GMT -11) MIT	(GMT -11) Pacific/Pago_Pago
(GMT -10) Pacific/Tahiti	(GMT -10) Pacific/Fakaofu
(GMT -10) Pacific/Honolulu	(GMT -10) HST
(GMT -10) America/Adak	(GMT -10) Pacific/Rarotonga
(GMT -9) Pacific/Marquesas	(GMT -9) Pacific/Gambier
(GMT -9) America/Anchorage	(GMT -9) AST
(GMT -8) Pacific/Pitcairn	(GMT -8) America/Vancouver
(GMT -8) America/Tijuana	(GMT -8) America/Los_Angeles
(GMT -8) PST	(GMT -7) America/Dawson_Creek
(GMT -7) America/Phoenix	(GMT -7) PNT
(GMT -7) America/Edmonton	(GMT -7) America/Mazatlan
(GMT -7) America/Denver	(GMT -7) MST
(GMT -6) America/Belize	(GMT -6) America/Regina
(GMT -6) Pacific/Galapagos	(GMT -6) America/Guatemala
(GMT -6) America/Tegucigalpa	(GMT -6) America/El_Salvador
(GMT -6) America/Costa_Rica	(GMT -6) America/Winnipeg
(GMT -6) Pacific/Easter	(GMT -6) America/Mexico_City
(GMT -6) America/Chicago	(GMT -6) CST
(GMT -5) America/Porto_Acre	(GMT -5) America/Bogota
(GMT -5) America/Guayaquil	(GMT -5) America/Jamaica
(GMT -5) America/Cayman	(GMT -5) America/Managua
(GMT -5) America/Panama	(GMT -5) America/Lima
(GMT -5) America/Indianapolis	(GMT -5) IET
(GMT -5) America/Nassau	(GMT -5) America/Montreal
(GMT -5) America/Havana	(GMT -5) America/Port-au-Prince
(GMT -5) America/Grand_Turk	(GMT -5) America/New_York
(GMT -5) EST	(GMT -4) America/Antigua
(GMT -4) America/Anguilla	(GMT -4) America/Curacao
(GMT -4) America/Aruba	(GMT -4) America/Barbados
(GMT -4) America/La_Paz	(GMT -4) America/Manaus
(GMT -4) America/Dominica	(GMT -4) America/Santo_Domingo

(GMT -4) America/Grenada  
(GMT -4) America/Guyana  
(GMT -4) America/St\_Lucia  
(GMT -4) America/Montserrat  
(GMT -4) PRT  
(GMT -4) America/St\_Vincent  
(GMT -4) America/St\_Thomas  
(GMT -4) Antarctica/Palmer  
(GMT -4) America/Cuiaba  
(GMT -4) Atlantic/Stanley  
(GMT -4) America/Asuncion  
(GMT -3) America/St\_Johns  
(GMT -3) America/Fortaleza  
(GMT -3) America/Paramaribo  
(GMT -3) America/Buenos\_Aires  
(GMT -3) America/Godthab  
(GMT -3) America/Sao\_Paulo  
(GMT -2) America/Noronha  
(GMT -1) Atlantic/Jan\_Mayen  
(GMT -1) America/Scoresbysund  
(GMT +0) Africa/Ouagadougou  
(GMT +0) Africa/Accra  
(GMT +0) Africa/Conakry  
(GMT +0) Atlantic/Reykjavik  
(GMT +0) Africa/Casablanca  
(GMT +0) Africa/Nouakchott  
(GMT +0) Africa/Freetown  
(GMT +0) Africa/Sao\_Tome  
(GMT +0) GMT  
(GMT +0) Atlantic/Faeroe  
(GMT +0) Europe/Dublin  
(GMT +0) Europe/London  
(GMT +1) Africa/Porto-Novo  
(GMT +1) Africa/Kinshasa  
(GMT +1) Africa/Libreville  
(GMT +1) Africa/Niamey  
(GMT -4) America/Guadeloupe  
(GMT -4) America/St\_Kitts  
(GMT -4) America/Martinique  
(GMT -4) America/Puerto\_Rico  
(GMT -4) America/Port\_of\_Spain  
(GMT -4) America/Tortola  
(GMT -4) America/Caracas  
(GMT -4) Atlantic/Bermuda  
(GMT -4) America/Halifax  
(GMT -4) America/Thule  
(GMT -4) America/Santiago  
(GMT -3) CNT  
(GMT -3) America/Cayenne  
(GMT -3) America/Montevideo  
(GMT -3) AGT  
(GMT -3) America/Miquelon  
(GMT -3) BET  
(GMT -2) Atlantic/South\_Georgia  
(GMT -1) Atlantic/Cape\_Verde  
(GMT -1) Atlantic/Azores  
(GMT +0) Africa/Abidjan  
(GMT +0) Africa/Banjul  
(GMT +0) Africa/Bissau  
(GMT +0) Africa/Monrovia  
(GMT +0) Africa/Timbuktu  
(GMT +0) Atlantic/St\_Helena  
(GMT +0) Africa/Dakar  
(GMT +0) Africa/Lome  
(GMT +0) UTC  
(GMT +0) Atlantic/Canary  
(GMT +0) Europe/Lisbon  
(GMT +1) Africa/Luanda  
(GMT +1) Africa/Bangui  
(GMT +1) Africa/Douala  
(GMT +1) Africa/Malabo  
(GMT +1) Africa/Lagos

(GMT +1) Africa/Ndjamena	(GMT +1) Africa/Tunis
(GMT +1) Africa/Algiers	(GMT +1) Europe/Andorra
(GMT +1) Europe/Tirane	(GMT +1) Europe/Vienna
(GMT +1) Europe/Brussels	(GMT +1) Europe/Zurich
(GMT +1) Europe/Prague	(GMT +1) Europe/Berlin
(GMT +1) Europe/Copenhagen	(GMT +1) Europe/Madrid
(GMT +1) Europe/Gibraltar	(GMT +1) Europe/Budapest
(GMT +1) Europe/Rome	(GMT +1) Europe/Vaduz
(GMT +1) Europe/Luxembourg	(GMT +2) Africa/Tripoli
(GMT +1) Europe/Monaco	(GMT +1) Europe/Malta
(GMT +1) Africa/Windhoek	(GMT +1) Europe/Amsterdam
(GMT +1) Europe/Oslo	(GMT +1) Europe/Warsaw
(GMT +1) Europe/Stockholm	(GMT +1) Europe/Belgrade
(GMT +1) Europe/Paris	(GMT +1) ECT
(GMT +2) Africa/Bujumbura	(GMT +2) Africa/Gaborone
(GMT +2) Africa/Lubumbashi	(GMT +2) Africa/Maseru
(GMT +2) Africa/Blantyre	(GMT +2) Africa/Maputo
(GMT +2) Africa/Kigali	(GMT +2) Africa/Khartoum
(GMT +2) Africa/Mbabane	(GMT +2) Africa/Lusaka
(GMT +2) Africa/Harare	(GMT +2) CAT
(GMT +2) Africa/Johannesburg	(GMT +2) Europe/Sofia
(GMT +2) Europe/Minsk	(GMT +2) Asia/Nicosia
(GMT +2) Europe/Tallinn	(GMT +2) Africa/Cairo
(GMT +2) ART	(GMT +2) Europe/Helsinki
(GMT +2) Europe/Athens	(GMT +2) Asia/Jerusalem
(GMT +2) Asia/Amman	(GMT +2) Asia/Beirut
(GMT +1) Europe/Vilnius	(GMT +2) Europe/Riga
(GMT +2) Europe/Chisinau	(GMT +2) Europe/Bucharest
(GMT +2) Europe/Kaliningrad	(GMT +2) Asia/Damascus
(GMT +2) Europe/Kiev	(GMT +2) Europe/Istanbul
(GMT +2) EET	(GMT +3) Asia/Bahrain
(GMT +3) Africa/Djibouti	(GMT +3) Africa/Asmera
(GMT +3) Africa/Addis_Ababa	(GMT +3) EAT
(GMT +3) Africa/Nairobi	(GMT +3) Indian/Comoro
(GMT +3) Asia/Kuwait	(GMT +3) Indian/Antananarivo
(GMT +3) Asia/Qatar	(GMT +3) Africa/Mogadishu

(GMT +3) Africa/Dar_es_Salaam	(GMT +3) Africa/Kampala
(GMT +3) Asia/Aden	(GMT +3) Indian/Mayotte
(GMT +3) Asia/Riyadh	(GMT +3) Asia/Baghdad
(GMT +2) Europe/Simferopol	(GMT +3) Europe/Moscow
(GMT +3) Asia/Tehran	(GMT +3) MET
(GMT +4) Asia/Dubai	(GMT +4) Indian/Mauritius
(GMT +4) Asia/Muscat	(GMT +4) Indian/Reunion
(GMT +4) Indian/Mahe	(GMT +4) Asia/Yerevan
(GMT +4) NET	(GMT +4) Asia/Baku
(GMT +4) Asia/Aqtau	(GMT +4) Europe/Samara
(GMT +4) Asia/Kabul	(GMT +5) Indian/Kerguelen
(GMT +4) Asia/Tbilisi	(GMT +5) Indian/Chagos
(GMT +5) Indian/Maldives	(GMT +5) Asia/Dushanbe
(GMT +5) Asia/Ashkhabad	(GMT +5) Asia/Tashkent
(GMT +5) Asia/Karachi	(GMT +5) PLT
(GMT +5) Asia/Bishkek	(GMT +5) Asia/Aqtobe
(GMT +5) Asia/Yekaterinburg	(GMT +5) Asia/Calcutta
(GMT +5) IST	(GMT +5) Asia/Katmandu
(GMT +6) Antarctica/Mawson	(GMT +6) Asia/Thimbu
(GMT +6) Asia/Colombo	(GMT +6) Asia/Dacca
(GMT +6) BST	(GMT +6) Asia/Almaty
(GMT +6) Asia/Novosibirsk	(GMT +6) Indian/Cocos
(GMT +6) Asia/Rangoon	(GMT +7) Indian/Christmas
(GMT +7) Asia/Jakarta	(GMT +7) Asia/Phnom_Penh
(GMT +7) Asia/Vientiane	(GMT +7) Asia/Saigon
(GMT +7) VST	(GMT +7) Asia/Bangkok
(GMT +7) Asia/Krasnoyarsk	(GMT +8) Antarctica/Casey
(GMT +8) Australia/Perth	(GMT +8) Asia/Brunei
(GMT +8) Asia/Hong_Kong	(GMT +8) Asia/Ujung_Pandang
(GMT +8) Asia/Macao	(GMT +8) Asia/Kuala_Lumpur
(GMT +8) Asia/Manila	(GMT +8) Asia/Singapore
(GMT +8) Asia/Taipei	(GMT +8) Asia/Shanghai
(GMT +8) CTT	(GMT +8) Asia/Ulan_Bator
(GMT +8) Asia/Irkutsk	(GMT +9) Asia/Jayapura
(GMT +9) Asia/Pyongyang	(GMT +9) Asia/Seoul
(GMT +9) Pacific/Palau	(GMT +9) Asia/Tokyo

- (GMT +9) JST
- (GMT +9) Australia/Darwin
- (GMT +9) Australia/Adelaide
- (GMT +10) Australia/Hobart
  
- (GMT +10) Pacific/Truk
- (GMT +10) Pacific/Saipan
- (GMT +10) Australia/Brisbane
- (GMT +10) Australia/Sydney
- (GMT +10) Australia/Lord\_Howe
- (GMT +11) Pacific/Efate
- (GMT +11) SST
- (GMT +11) Asia/Magadan
- (GMT +12) Pacific/Kosrae
- (GMT +12) Pacific/Majuro
- (GMT +12) Pacific/Funafuti
- (GMT +12) Pacific/Wallis
- (GMT +12) Antarctica/McMurdo
- (GMT +12) Pacific/Auckland
- (GMT +12) Pacific/Chatham
- (GMT +13) Pacific/Tongatapu
- (GMT +14) Pacific/Kiritimati
  
- (GMT +9) Asia/Yakutsk
- (GMT +9) ACT
- (GMT +9) Australia/Broken\_Hill
- (GMT +10) Antarctica/DumontDURville
- (GMT +10) Pacific/Guam
- (GMT +10) Pacific/Port\_Moresby
- (GMT +10) Asia/Vladivostok
- (GMT +10) AET
- (GMT +11) Pacific/Ponape
- (GMT +11) Pacific/Guadalcanal
- (GMT +11) Pacific/Noumea
- (GMT +11) Pacific/Norfolk
- (GMT +12) Pacific/Tarawa
- (GMT +12) Pacific/Nauru
- (GMT +12) Pacific/Wake
- (GMT +12) Pacific/Fiji
- (GMT +12) Asia/Kamchatka
- (GMT +12) NST
- (GMT +13) Pacific/Enderbury
- (GMT +13) Asia/Anadyr



# 2

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## Mercury Business Availability Center Logs

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**Note to Mercury Managed Services customers:** Mercury Operations administers this functionality and the interface is hidden from your view.

---

This chapter describes how Mercury Business Availability Center manages log files.

<b>This chapter describes:</b>	<b>On page:</b>
About Mercury Business Availability Center Logs	23
Log File Locations	24
Log Severity Levels	25
Log File Settings	27
Real User Monitor Logs	28
JBoss and Tomcat Logs	31

### About Mercury Business Availability Center Logs

Mercury Business Availability Center records the procedures and actions performed by the various components in log files. The log files are usually designed to serve Mercury Customer Support when Mercury Business Availability Center does not perform as expected.

The default severity threshold level for log files is set at **Info**. For a definition of log levels, see “Log Severity Levels” on page 25.

You can view log files with any text editor.

---

**Note:** Mercury Services offers best practice consulting on this subject. For information on how to obtain this service, contact your Mercury representative.

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## Log File Locations

Most log files are located in the **<Mercury Business Availability Center root directory>\log** directory and in subdirectories organized by component.

Log file properties are defined in files in the following folder: **<Mercury Business Availability Center root directory>\conf\core\Tools\log4j\EJB**.

The main Mercury Business Availability Center file is named **topaz.properties**.

### Log File Locations in a Distributed Deployment

In typical or compact installations, all Mercury Business Availability Center servers and their logs reside on the same machine. In the case of a distributed deployment of the servers among several machines, logs for a particular server are usually saved on the computer on which the server is installed. However, if it is necessary for you to inspect logs, you should do so on all machines.

When comparing logs on client machines to those on the Mercury Business Availability Center server machines, keep in mind that the date and time recorded in a log are taken from the machine on which the log was produced. It follows that if there is a time difference between the server and client machines, the same event is recorded by each with a different time stamp.



## Log File Location for Client Monitor

The log files for Client Monitor on a client machine are located in the following folder: <Client Monitor root directory>\workspace\log.

An example of the location might be C:\Program Files\Mercury Interactive\ClientMonitor\workspace\log.

## Log Severity Levels

Each log is set so that the information it records corresponds to a certain severity threshold. Because the various logs are used to keep track of different information, each is pre-set to an appropriate default level. For details on changing the log level, see “Changing Log Levels” on page 26.

Typical log levels are listed below from narrowest to widest scope:

- ▶ **Error.** The log records only events that adversely affect the immediate functioning of Mercury Business Availability Center. When a malfunction occurs, you can check if Error messages were logged and inspect their content to trace the source of the failure.
- ▶ **Warning.** The log’s scope includes, in addition to Error-level events, problems for which Mercury Business Availability Center is currently able to compensate and incidents that should be noted to prevent possible future malfunctions.
- ▶ **Info.** The log records all activity. Most of the information is normally routine and of little use and the log file quickly fills up.
- ▶ **Debug1–Debug5.** These levels are used by Mercury Customer Support when troubleshooting problems. Each debug level adds more information. Debug5 contains the most detailed information.

---

**Note:** The names of the different log levels may vary slightly on different servers and for different procedures. For example, **Info** may be referred to as **Always logged** or **Flow**.

---

## Changing Log Levels

If requested by Mercury Customer Support, you may have to change the severity threshold level in a log, for example, to a debug level.

**To change the severity threshold level:**

- 1 Open the log properties file in a text editor. Log file properties are defined in files in the following folder: **<Mercury Business Availability Center root directory>\conf\core\Tools\log4j\EJB.**
- 2 Locate the **loglevel** parameter. For example,

```
loglevel=ERROR
```

- 3 Change the level to the required level. For example,

```
loglevel=DEBUG5
```

For a description of the log levels, see “Log Severity Levels” on page 25.

- 4 Save the file.

## Changing the Client Monitor Recorder Applet Log Level

Because Client Monitor uses a Java applet to display the Recorder, you change the default log level in the JSP file.

**To change the Client Monitor Recorder applet log level:**

- 1 Open the file:  
**<Mercury Business Availability Center root directory>\EJBContainer  
\server\mercury\tmp\deploy\tmp<number>  
TopazAdminCenter.earcontents \TopazAdminCenter.war  
\app\clientmonitor\ClientMonitorRecorderApplet.jsp.**

- 2 Locate the Object HTML tag and add the following parameter:

```
<PARAM NAME = "LOG_LEVEL" VALUE = "xxx">
```

where **xxx** can be one of the following: SEVERE (highest value), WARNING, INFO, CONFIG, FINE, FINER, or FINEST (lowest value).

- 3 Save the file.

If this line does not appear in the file, the default log level is INFO.

## Log File Settings

The Infrastructure Settings Manager includes the following log settings and their descriptions:

- **Third-party components.** Components include Bristol, Java Runtime Environment, and JBoss.

Select **Admin > Platform > Setup and Maintenance > Infrastructure Settings > Foundations > Third-Party Components.**

- **Mercury Business Availability Center interface.** The interface includes email addresses for error notification, display parameters, logging, access to Web-based documentation library, message timeout, and login authentication method.

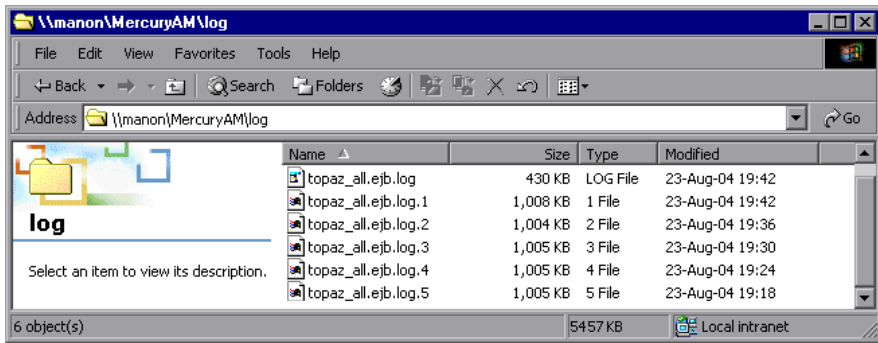
Select **Admin > Platform > Setup and Maintenance > Infrastructure Settings > Foundations > Business Availability Center Interface.**

## Log File Size and Automatic Archiving

A size limit is set for each type of log file. When a file reaches this limit, it is renamed and becomes an archived log. A new active log file is then created.

For many logs, the number of archived log files saved can be configured. When a file reaches its size limit, it is renamed with the numbered extension **1**. If there is currently an archived log with the extension **1**, it is renamed with the extension **2**, **log.2** becomes **log.3**, and so forth, until the oldest archived log file (with the number corresponding to the maximum number of files to be saved) is permanently deleted.

The following image shows an example of a log file, `topaz_all.ejb.log`, and its archived copies.



The maximum file size and the number of archived log files are defined in the log properties file **<Mercury Business Availability Center root directory>\conf\core\Tools\log4j\EJB**. An example is:

```
def.file.max.size=2000KB
def.files.backup.count=10
```

## Real User Monitor Logs

Real User Monitor logs store messages from Real User Monitor modules and are used to troubleshoot problems, and to provide information about the system's operations. There are three types of logs: engine logs, JBoss logs, and core logs. The log files are located in the **<Real User Monitor Engine root>\log** directory.

You change log levels, and the default log size and archiving parameters, in the same way as in Mercury Business Availability Center. For details, see "Changing Log Levels" on page 26, and "Log File Size and Automatic Archiving" on page 27.

This section contains the following topics:

- ▶ Engine Logs
- ▶ JBoss and Tomcat Logs
- ▶ Core Logs

The structure of the logs is as follows:

## Engine Logs

Engine logs contain log messages from the different processes. There are two types of engine log files:

- ▶ **rumengine log files.** Log files for modules within the Real User Monitor engine.
- ▶ **repository log files.** Log files for modules connecting the Real User Monitor engine and its MySQL database.

There is a log for each module and the Real User Monitor engine saves up to 20 files for each log by default. When a file reaches a maximum, default size of 3 MB, a new log file is created automatically. Each time the Real User Monitor engine is restarted, it creates a new set of logs. The name of the log file consists of the log type (rumengine or repository), the module name, log and the log file number.

For example, a rumengine type module called **clustermanager** would produce the following log files:

```
rumengine.clustermanager.log  
rumengine.clustermanager.log.1  
rumengine.clustermanager.log.2
```

and so forth.

The structure of a message in the log file is as follows: <timestamp> <invoking thread> <java class name and line number> <message log level> <message content>. For example:

```
2005-08-03 14:20:32,953 [main] (NodesVerifierManager.java:185) INFO -  
Found primary installation on current machine  
2005-08-03 14:20:33,125 [main] (NodeVerifierServer.java:103) INFO - Got  
host name=paddington from repository. Hostname ID=1
```

You can change the default log file size and archiving cycle. For details, see “Log File Size and Automatic Archiving” on page 27.

You can change the error level that is reported to the log file for each module. The following error levels can be set for Real User Monitor log files:

- ▶ **Fatal.** The log only records very severe events that could cause the Real User Monitor to abort.
- ▶ **Error.** The log records severe events that adversely affect the immediate functioning of Real User Monitor, that might still allow the application to continue running.
- ▶ **Warn.** The log’s scope is widened to include events that include potentially harmful situations.
- ▶ **Info.** The log includes informational messages about the regular running of the system.
- ▶ **Debug.** This level is used by Mercury Customer Support when troubleshooting problems.

For details on changing the error level, see “Changing Log Levels” on page 26.

---

**Note:** Each severity level includes all the levels above it. For example, if the log is set to **Warn** level, it includes **Warn**, **Error** and **Fatal** events.

---

## JBoss and Tomcat Logs

JBoss and Tomcat log messages are written to the following files in the <Real User Monitor Engine root>\log directory:

- **jboss\_boot.log.** Logs startup activities including running the JBoss process, deployment, and startup status. If the Real User Monitor fails to start, any problems are written to this log. For example, if the free port check does not pass, a free port return code other than zero is returned.
- **jboss\_server.log.** Logs all JBoss activities including JBoss messages, deployment and startup status.
- **jboss\_tomcat.log.** Logs the Tomcat messages.

## Core Logs

Core log messages are written to log files in the <Real User Monitor Engine root>\log\core directory.

The core log files contain messages about the general status of the application server on which the Mercury Real User Monitor engine is installed, and its services.

## JBoss and Tomcat Logs

The following directories hold JBoss- and Tomcat-related files:

- <Mercury Business Availability Center server root directory>\AppServer\resources. This directory holds the application properties files.
- <Mercury Business Availability Center server root directory>\AppServer\webapps\site.war\DataBases. This directory holds the Mercury Business Availability Center database scripts.
- <Mercury Business Availability Center server root directory>\EJBContainer\server\default\work. This directory holds the Tomcat work directory.

- ▶ **<Mercury Business Availability Center root directory>\log.** This directory holds the JBoss and Tomcat log messages in the following files:
  - ▶ **jboss\_boot.log.** Logs startup activities including running the JBoss process, deployment, and startup status. If Mercury Business Availability Center fails to start, any problems are written to this log. For example, if the free port check does not pass, a free port return code other than zero is returned.
  - ▶ **jboss\_server.log.** Logs all JBoss activities including JBoss messages, deployment and startup status.
  - ▶ **jboss\_tomcat.log.** Logs the Tomcat messages.

---

**Note:** You can view the JBoss Management Console at <http://<Mercury Business Availability Center server>:8080/web-console/index.html>.

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# 3

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## Samples

This chapter describes the data samples, and their fields, that are available in various contexts in Mercury Business Availability Center (including Custom Reports, Measurement Filters, and OpenAPI Query Builder). These samples can also be used to create queries to extract data from the Mercury Business Availability Center profile database using the Mercury Business Availability Center API.

<b>This chapter describes:</b>	<b>On page:</b>
Special Fields	34
Data Samples for Dashboard	35
Data Samples for SiteScope	39
Data Samples for Business Process Monitor and Client Monitor	48
Data Samples for Real User Monitor	71
Data Samples for Alerts	120
Data Sample for Deep Transaction Tracing	126

## Special Fields

### IP Addresses

In some samples, IP addresses are returned as 32 bits representing an array of four bytes. Each byte represents a segment of the IP address. To get the standard text representation of an IP address, convert the returned value to binary and pad left with zero's to a length of 32. Convert each eight bits separately into decimal representation and concatenate the text representation of the resulting numbers together with decimal points between the numbers.

For example,

The query returns: 167772247

The binary representation is: 101000000000000000001010111

Pad to length of 32: 00001010000000000000000001010111

Split into bytes: 00001010.00000000.00000000.01010111

Convert each byte to decimal and present with the standard IP format: 10.0.0.87

### Time Stamps

Time in queries and return data is a double data type representing seconds since January 1, 1970. See also “Date-Time Values” in *Integrating with Third-Party Applications*.

## Data Samples for Dashboard

This section describes the samples and sample fields for Dashboard data (that is, data processed by the Business Logic Engine). These samples use the Universal Data Exchange (UDX) framework, and are thus available for filtering in the Measurement Filters page (for details, see “Working with Measurement Filters” in *Platform Administration*).

---

**Limitation:** There is currently no configuration item name field, and it is not possible to map CI names to their CMDB IDs (entity\_id field). As such the value of these samples is limited.

---

### Sample: KPI Statuses (bl\_kpi\_ot\_ke)

The KPI Statuses sample (bl\_kpi\_ot\_ke) contains data used when generating the KPIs Over Time report.

Field	Display Name (Sample)	Data Type	Units	Description
customer_name	Customer Name	STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client).
entity_id	CMDB Entity id	BINARY		Configuration ID of CI.

Field	Display Name (Sample)	Data Type	Units	Description
heartbeat	Heartbeat	INT	0 or 1	If 0, data sample representing status change has been sent from the source. If 1, no status change has been sent from the source in the last 24 hours.
kpi_id	Kpi instance cmdb id	BINARY		Configuration ID of KPI instance.
kpi_type	Kpi type	INT		The ID of the KPI, as displayed in the Repositories page ( <b>Admin &gt; Dashboard &gt; Repositories &gt; KPIs</b> ).
sampletype		STRING		The name of the sample.

Field	Display Name (Sample)	Data Type	Units	Description
status	Status	INT		The ID as defined in the <b>From</b> field in the Parameter Details window ( <b>Admin &gt; Dashboard &gt; Repositories &gt; KPIs &gt; clone/override KPI &gt; click the Edit Entity button &gt; Item Details &gt; click the parameter to display the Parameter Details window</b> )
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
TUID		STRING		Internal ID

**Sample: KPI Values (bl\_kpi\_ot\_kt)**

The KPI Values sample (bl\_kpi\_ot\_kt) contains data used when generating the KPI Over Time report.

Field	Display Name (Sample)	Data Type	Units	Description
customer_name	Customer Name	STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client).
entity_id	CMDB Entity id	BINARY		Configuration ID of CI.
kpi_id	Kpi instance cmdb id	BINARY		Configuration ID of KPI instance.
kpi_type	Kpi type	INT		The ID of the KPI, as displayed in the Repositories page ( <b>Admin &gt; Dashboard &gt; Repositories &gt; KPIs</b> ).
sampletype		STRING		The name of the sample.
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970.

Field	Display Name (Sample)	Data Type	Units	Description
TUID		STRING		Internal ID
Value	Value	DOUBLE	Depends on related rule	The result of the business rule calculation.

## Data Samples for SiteScope

This section describes the samples and sample fields for SiteScope data:

- “Sample: Event (event)” on page 39
- “Event Sample Examples” on page 42
- “Sample: SiteScope Measurement (ss\_t)” on page 43
- “Sample: SiteScope Measurement Aggregation (ss\_hr\_t)” on page 45

### Sample: Event (event)

The Event sample (event) includes data from integration monitors (external EMS data), SiteScope alerts, and SiteScope status changes. You can use these fields when configuring integration monitor templates. For details, see “Working with Configuration Files” in *Configuring SiteScope Monitors*. This sample uses the Universal Data Exchange (UDX) framework, and is thus available for filtering in the Measurement Filters page. For details, see “Working with Measurement Filters” in *Platform Administration*.

Field	Display Name	Description
acknowledged_by	Acknowledged By	Name of user that acknowledged this event
attr1		Extra data slot
attr2		Extra data slot
attr3		Extra data slot

Field	Display Name	Description
attr4		Extra data slot
attr5		Extra data slot for long strings
collector_host_ip	Collector Host IP	IP address of the machine running SiteScope
collector_host_name	Collector Host Name	Host name of the machine running SiteScope
customer_name	Customer Name	Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
data_source	Data Source	System that generated the event
description	Description	Textual description of event
event_id	Event ID	Unique identifier of this event
instance	Instance	Instance of subject that generated the event (e.g D:\ ). Lowest level of hierarchy describing the event source
logical_group	Logical Group	Logical grouping of this event
monitor_group	Monitor Group	Monitor group that reported this event
object	Object	Optional level in the hierarchy describing the event source
orig_severity_name	Original Severity Name	Severity in external EMS terminology



Field	Display Name	Description
owner	Owner	Name of user who owns this event
severity	Severity	One of the following severities: SEVERITY_UNKNOWN SEVERITY_INFORMATIONAL SEVERITY_WARNING SEVERITY_MINOR SEVERITY_MAJOR SEVERITY_CRITICAL
severity_name	Severity Name	
status	Status	Status of event in external EMS terminology
subject	Subject	Subject of event (e.g. CPU , SAP application, Hard Disk ), middle/high level hierarchy describing the event source. The hierarchy describing an event is in the following format:  monitor_group (optional) -> target_name --> object (optional) --> subject --> instance.  More levels can be added above monitor_group by using logical_group, and attr1 - 5.
target_ip	Target IP	IP of host or device that generated the event
target_name	Target Name	Name of device or host that generated the event

Field	Display Name	Description
time_stamp	Time Stamp	Time stamp in seconds since Jan 1 1970
value	Value	Use to transfer numerical values from the event

## Event Sample Examples

Infrastructure status change events (popular in EMS):

Timestamp	IP	Severity	Alert name
11/5/2004 10:20 AM	192.168.82.74	Critical	Server Unionville_1 is down

Ticketing system events:

Ticket ID	Severity	Region	Product	Open Date	Close Date
2321	1	Europe	Mercury Business Availability Center	11/5/2004 11:38 AM	13/5/2004 11:38 AM

Call center logs:

Call ID	Customer ID	Time stamp	Queue number	Response Time	Call Answered	Call Duration
43443	4344322	15/5/04 8:23 AM	4	32 Sec.	Yes	284 Sec.

**Miscellaneous events (server backup log):**

Time stamp	IP	Backup Start Time	Backup Duration	Errors
15/5/04 8:23 AM	192.168.82.74	15/5/04 8:23 AM	15/5/04 14:23 AM	0

**Sample: SiteScope Measurement (ss\_t)**

The SiteScope Measurement sample (ss\_t) is sent from the SiteScope server to Mercury Business Availability Center for each metric that is measured. For example, if a CPU monitor measures utilization, for each run of the monitor, a sample is sent returning the value for this metric. If a monitor is configured to measure more than one metric, each run of the monitor sends a separate sample for each measured value.

Field	Display Name (Sample)	Data Type/Units	Description
customer_name		STRING	Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
dTime		DOUBLE/milli-seconds	Time stamp of when the measurement was taken
dValue	Measurement Value	DOUBLE	Value of the measurement taken
iErrCode	Error Code	INT	
instance_id		INT	A unique id per instance that is set by the dispatcher
profile_name	Profile Name	STRING	Profile name
szCategoryName	Category Name	STRING	

Field	Display Name (Sample)	Data Type/Units	Description
szConnectionName	Connection Name	STRING	Name of the instance of the monitor that monitors the measurement
szErr	Error Message	STRING	Error message if the sample has an error
szMeasurementName	Measurement Name	STRING	Mercury Business Availability Center measurement name
szMonitorName	Monitor Name	STRING	Type of monitor that retrieved that measurement
szMonitorTitle	Monitor Title	STRING	Name given to the monitor upon creation
szSessionName		STRING	Mercury Business Availability Center session name to which the sample belongs
szTargetName	Target Name	STRING	Name of the host that the monitor monitors
u_iCategoryId		U_INT	
u_iConnectionId		U_INT	ID of the instance of the monitor that monitors the measurement
u_iHasProperty	Has Property	U_INT	
u_iMeasurementId		U_INT	Mercury Business Availability Center measurement ID

Field	Display Name (Sample)	Data Type/Units	Description
u_iMonitorId		U_INT	Mercury Business Availability Center ID of the monitor that retrieved the measurement
u_iQuality	Quality	U_INT	Quality of the measurement from 0 to 3 (3 is bad)
u_iSessionId		U_INT	Profile ID as stored in the SESSIONS table in the management database
u_iStatus	Status ID	U_INT	Status of the value. Value is valid = 0; error and the value is not valid = 1
u_iTargetId		U_INT	ID of the host that the monitor monitors

### Sample: SiteScope Measurement Aggregation (ss\_hr\_t)

The SiteScope Measurement Aggregation sample (ss\_hr\_t) contains the hourly aggregated data of the data in the SiteScope Measurement sample.

Field	Display Name	Data Type/Units	Description
customer_name	Customer Name	STRING	Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
dValue_max		DOUBLE	The maximum value of the measurements taken in the hour

Field	Display Name	Data Type/Units	Description
dValue_min		DOUBLE	The minimum value of the measurements taken in the hour
dValue_sum		DOUBLE	Sum of the value of the measurements taken for the hour
dValue_sumsqr		DOUBLE	The sum of the squares of the value of the measurements taken for the hour. Can be used to calculate standard deviations
instance_id		INT	A unique id per instance that is set by the dispatcher
profile_name	Profile Name	STRING	Profile name as stored in the SESSIONS table in the management database
szCategoryName	Category Name	STRING	
szConnectionName	Connection Name	STRING	Name of the instance of the monitor that monitors the measurement
szMeasurementName	Measurement Name	STRING	Mercury Business Availability Center measurement name
szMonitorName	Monitor Name	STRING	Monitor type as known by Mercury Business Availability Center

Field	Display Name	Data Type/Units	Description
szMonitorTitle	Monitor Title	STRING	Name given to the monitor upon creation
szTargetName	Target Name	STRING	Name of the host that the monitor monitors
time_stamp	Time Stamp	DOUBLE/seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
u_iCategoryId		U_INT	
u_iConnectionId		U_INT	ID of the instance of the monitor that monitors the measurement
u_iMeasurementId		U_INT	Mercury Business Availability Center measurement ID
u_iMonitorId		U_INT	Index of the monitor type
u_iQuality_good_sum		U_INT	Number of samples in the hour with a good status
u_iQuality_poor_sum		U_INT	Number of samples in the hour with a poor status
u_iQuality_warn_sum		U_INT	Number of samples in the hour with a warning status
u_iSessionId		U_INT	Profile ID as stored in the SESSIONS table in the management database

Field	Display Name	Data Type/Units	Description
u_iStatus_abnormal_count		U_INT	Number of samples with an abnormal value that passed in the hour.
u_iStatus_fail_count		U_INT	Number of samples with a non-valid value that passed in the hour.
u_iStatus_pass_count		U_INT	Number of samples with a valid value that passed successfully in the hour.
u_iTargetId		U_INT	ID of the host that the monitor monitors

## Data Samples for Business Process Monitor and Client Monitor

This section describes the samples and sample fields for Business Process Monitor and Client Monitor data:

- ▶ “Sample: Transactions (trans\_t)” on page 49
- ▶ “Sample: Transactions Aggregation (trans\_hr\_t)” on page 56
- ▶ “Sample: Webtrace (trc\_path\_t)” on page 68



### Sample: Transactions (trans\_t)

The Transactions sample (trans\_t) is used by the Business Process Monitor and Client Monitor to report transaction data for transactions in script monitors. It includes data on the transaction itself, as well as on the results of the specific run (duration, status, and so forth).

Field	Display Name	Data Type	Units	Description
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
dGreenThreshold	Green Threshold	DOUBLE	milliseconds	Defined OK threshold value
dRedThreshold	Red Threshold	DOUBLE	milliseconds	Defined Critical threshold value
dResponseTime	Response Time	DOUBLE	milliseconds	Response time (duration)
iBreakdownExists		INT		Indicates whether breakdown was reported for this transaction
iComponentError Count	Component Error Count	INT		Number of component errors
instance_id	Instance Id	STRING		A unique id per instance that is set by the dispatcher
profile_name	Profile Name	STRING		Profile name

Field	Display Name	Data Type	Units	Description
szHostName	Host Name	STRING		Data collector host name
szLocationName	Location Name	STRING		Data collector location name
szOrganizationName	Organization Name	STRING		Group name for the data collector in the profile
szScriptName	Script Name	STRING		Script name
szSessionName		STRING		Profile name (same as profile_name)
szStatusName	Status Name	STRING		Status of the transaction (passed/failed/timed out)
szTransactionDesc	Transaction Description	STRING		Transaction description
szTransactionName	Transaction Name	STRING		Transaction name
szUniqueIdentifier	Unique Id	STRING		A unique identifier for this transaction run from the specific data collector
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
trans_instance_id	Instance ID	INT		A unique id per transaction in an instance set by the dispatcher

Field	Display Name	Data Type	Units	Description
u_iHostId		U_INT		Data collector host ID
u_iLocationId		U_INT		Location ID
u_iOrganizationId		U_INT		Group ID for the data collector in the profile
u_iScriptId		U_INT		Script ID
u_iSessionId		U_INT		Profile ID as stored in the SESSIONS table in the management database
u_iSize	Download data size	U_INT	kilobytes	Total download size
u_iStatus		U_INT		Status ID of the transaction (passed/failed/timed out)
u_iSumConnectionTime	Summary Connection Time	U_INT	milliseconds	Sum of component connection times in the transaction breakdown. This data is not presented in the reports.

Field	Display Name	Data Type	Units	Description
u_iSumDnsTime	Summary DNS Time	U_INT	milliseconds	the sum of component DNS times in the transaction breakdown. This data is not presented in the reports.
u_iSumDownload Time	Summary Download Time	U_INT	milliseconds	Sum of component download times in the transaction breakdown. This data is not presented in the reports.
u_iSumFirstBufTime	Summary Network First Buffer Time	U_INT	milliseconds	Sum of component 'time to first buffer' times in the transaction breakdown. This data is not presented in the reports.
u_iSumNetTime	Summary Network Time	U_INT	milliseconds	Sum of component network times in the transaction breakdown. This data is not presented in the reports.

Field	Display Name	Data Type	Units	Description
u_iSumRetryTime	Summary Retry Time	U_INT	milliseconds	Sum of component retry times in the transaction breakdown. This data is not presented in the reports.
u_iSumServerTime	Summary Server Time	U_INT	milliseconds	Sum of component server times in the transaction breakdown. This data is not presented in the reports.
u_iSumSSLTime	Summary SSL Time	U_INT	milliseconds	Sum of component SSL times in the transaction breakdown. This data is not presented in the reports.
u_iTransactionId		U_INT		Transaction ID
u_iWConnectionTime	Weighted Connection Time	U_INT	milliseconds	Connection time in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.

Field	Display Name	Data Type	Units	Description
u_iWDnsTime	Weighted DNS Time	U_INT	milliseconds	DNS time in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.
u_iWDownloadTime	Weighted Download Time	U_INT	milliseconds	Download time in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.
u_iWFirstBufTime	Weighted Network First Buffer Time	U_INT	milliseconds	Time to first buffer in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.
u_iWNetTime	Weighted Network Time	U_INT	milliseconds	Network time in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.

Field	Display Name	Data Type	Units	Description
u_iWRetryTime	Weighted Retry Time	U_INT	milliseconds	Retry time in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.
u_iWServerTime	Weighted Server Time	U_INT	milliseconds	Server time in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.
u_iWSSLTime	Weighted SSL Time	U_INT	milliseconds	SSL time in the transaction breakdown, using a weighed aggregation algorithm. This is the data presented in the reports.

### Sample: Transactions Aggregation (trans\_hr\_t)

The Transactions Aggregation sample (trans\_hr\_t) contains the hourly aggregated data of the data in the Transactions sample. Although these calculations are done for only successful Transactions samples, this sample also includes count data on failed and timed out transactions.

Field	Display Name	Data Type	Unit	Description
dGreenThreshold	Green Threshold	DOUBLE	milliseconds	Defined OK threshold value
dRedThreshold	Red Threshold	DOUBLE	milliseconds	Defined Critical threshold value
dResponseTime_max		DOUBLE	milliseconds	The maximum response time for the sample during the hour
dResponseTime_min		DOUBLE	milliseconds	The minimum response time for the sample during the hour
dResponseTime_nbd_sum		DOUBLE	milliseconds	
dResponseTime_nbd_sumsqr		DOUBLE	milliseconds	
dResponseTime_obd_sum		DOUBLE	milliseconds	
dResponseTime_obd_sumsqr		DOUBLE	milliseconds	
dResponseTime_sum	Response Time	DOUBLE	milliseconds	The sum of the response times (duration) for the hour



Field	Display Name	Data Type	Unit	Description
dResponseTime_s umsqr		DOUBLE	milliseconds	The sum of the squares of the response times for the hour. Can be used to calculate standard deviations.
faile_count_cnt		Integer		Number of samples that failed during the hour
iComponentError Count_sum	Component Error Count	Integer		Number of component errors
page_cbd_count_ sum		Integer		
pass_count_cnt		Integer		Number of samples that passed successfully in the hour
pass_count_ndb_ cnt		Integer		
pass_count_obd_ cnt		Integer		Number of samples that passed successfully in the hour with a connection time that was not null
profile_name	Profile Name	STRING		Profile name
szLocationName	Location Name	STRING		Data collector location name

Field	Display Name	Data Type	Unit	Description
szOrganizationName	Organization Name	STRING		Group name for the data collector in the profile
szScriptName	Script Name	STRING		Script name
szTransactionDesc	Transaction Description	STRING		Transaction description
szTransactionName	Transaction Name	STRING		Transaction Name
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
timed_out_cnt		Integer		Number of samples that timed out during the hour
transaction_instance_id	Instance ID	INT		A unique id per transaction in an instance set by the dispatcher.
u_iLocationId		U_INT		Location ID
u_iOrganizationId		U_INT		Group ID for the data collector in the profile
u_iScriptId		U_INT		Script ID
u_iSessionId		U_INT		Profile ID as stored in the SESSIONS table in the management database
u_iSize_nbd_sum		U_INT	kilobytes	

Field	Display Name	Data Type	Unit	Description
u_iSize_obd_sum		U_INT	kilobytes	
u_iSize_sum	Download data size	U_INT	kilobytes	The sum of the total download size
u_iSize_sumsqr		U_INT	kilobytes	The sum of the squares of the total download size. Can be used to calculate standard deviations.
u_iSumConnectionTime_sum	Summary Connection Time	U_INT	milliseconds	The hourly sum of component connection times in the transaction breakdown.
u_iSumConnectionTime_sumsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component connection times in the transaction breakdown. Can be used to calculate standard deviations.
u_iSumDnsTime_sum	Summary DNS Time	U_INT	milliseconds	The hourly sum of component DNS times in the transaction breakdown.

Field	Display Name	Data Type	Unit	Description
u_iSumDnsTime_sumsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component DNS times in the transaction breakdown. Can be used to calculate standard deviations.
u_iSumDownloadTime_sum	Summary Download Time	U_INT	milliseconds	The hourly sum of component download times in the transaction breakdown.
u_iSumDownloadTime_sumsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component download times in the transaction breakdown. Can be used to calculate standard deviations.
u_iSumNetTime_sum	Summary Network Time	U_INT	milliseconds	The hourly sum of component network times in the transaction breakdown.

Field	Display Name	Data Type	Unit	Description
u_iSumNetTime_s umsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component network times in the transaction breakdown. Can be used to calculate standard deviations.
u_iSumFirstBufTi me_sum	Summary Network First Buffer Time	U_INT	milliseconds	The hourly sum of component 'time to first buffer' times in the transaction breakdown.
u_iSumFirstBufTi me_sumsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component 'time to first buffer' times in the transaction breakdown. Can be used to calculate standard deviations.
u_iSumRetryTime _sum	Summary Retry Time	U_INT	milliseconds	The hourly sum of component retry times in the transaction breakdown.

Field	Display Name	Data Type	Unit	Description
u_iSumRetryTime _sumsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component retry times in the transaction breakdown. Can be used to calculate standard deviations.
u_iSumServerTime _sum	Summary Server Time	U_INT	milliseconds	The hourly sum of component server times in the transaction breakdown.
u_iSumServerTime _sumsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component server times in the transaction breakdown. Can be used to calculate standard deviations.
u_iSumSSLTime_ sum	Summary SSL Time	U_INT	milliseconds	The hourly sum of component SSL times in the transaction breakdown.

Field	Display Name	Data Type	Unit	Description
u_iSumSSLTime_s umsqr		U_INT	milliseconds	The sum of the squares of the hourly sum of component SSL times in the transaction breakdown. Can be used to calculate standard deviations.
u_iTransactionId		U_INT		Transaction ID
u_iWConnection Time_sum	Weighted Connection Time	U_INT	milliseconds	The sum of the connection times in the transaction breakdown for the hour, using a weighed aggregation algorithm.
u_iWConnection Time_sumsqr		U_INT	milliseconds	The sum of the squares of the connection times in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.

Field	Display Name	Data Type	Unit	Description
u_iWDnsTime_sum	Weighted DNS Time	U_INT	milliseconds	The sum of the DNS times in the transaction breakdown for the hour, using a weighed aggregation algorithm.
u_iWDnsTime_sumsq		U_INT	milliseconds	The sum of the squares of the DNS times in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.
u_iWDownloadTime_sum	Weighted Download Time	U_INT	milliseconds	The sum of the download times in the transaction breakdown for the hour, using a weighed aggregation algorithm.



Field	Display Name	Data Type	Unit	Description
u_iWDownloadTime_sumsqr		U_INT	milliseconds	The sum of the squares of the download times in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.
u_iWFirstBufTime_sum	Weighted Network First Buffer Time	U_INT	milliseconds	The sum of the times to first buffer in the transaction breakdown for the hour, using a weighed aggregation algorithm.
u_iWFirstBufTime_sumsqr		U_INT	milliseconds	The sum of the squares of the times to first buffer in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.

Field	Display Name	Data Type	Unit	Description
u_iWNetTime_sum	Weighted Network Time	U_INT	milliseconds	The sum of the network times in the transaction breakdown for the hour, using a weighed aggregation algorithm.
u_iWNetTime_sumsq		U_INT	milliseconds	The sum of the squares of the network times in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.
u_iWRetryTime_sum	Weighted Retry Time	U_INT	milliseconds	The sum of the retry times in the transaction breakdown for the hour, using a weighed aggregation algorithm.

Field	Display Name	Data Type	Unit	Description
u_iWRetryTime_s umsqr		U_INT	milliseconds	The sum of the squares of the retry times in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.
u_iWServerTime_ sum	Weighted Server Time	U_INT	milliseconds	The sum of the server times in the transaction breakdown for the hour, using a weighed aggregation algorithm.
u_iWServerTime_ sumsqr		U_INT	milliseconds	The sum of the squares of the server times in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.

Field	Display Name	Data Type	Unit	Description
u_iWSSLTime_sum	Weighted SSL Time	U_INT	milliseconds	The sum of the SSL times in the transaction breakdown for the hour, using a weighed aggregation algorithm.
u_iWSSLTime_sumsq		U_INT	milliseconds	The sum of the squares of the SSL times in the transaction breakdown for the hour, using a weighed aggregation algorithm. Can be used to calculate standard deviations.

### Sample: Webtrace (trc\_path\_t)

The Webtrace sample (trc\_path\_t) is used by the Business Process Monitor and Client Monitor to report WebTrace data (Business Process Monitor) and traceroute data (Client Monitor).

Field	Display Name	Data Type	Units	Description
iDnsTime	DNS Time	INT		Not in use
iHostId		INT		ID of host machine from which WebTrace runs

Field	Display Name	Data Type	Units	Description
iIsReachable	Is Reachable	INT	True/False	Indication of whether destination is reachable
iLocationId		INT		ID of location of host machine from which WebTrace runs
iRetries	Retries	INT		The number of times a data packet tries, but fails, to reach its destination due to timeout, network difficulty, and so forth
iRoundTrip	Round Trip	INT	milliseconds	The average time it takes for a packet of data to be sent from the host machine to the destination Web site
iSessionId		INT		ID of profile in which WebTrace is defined
profile_name	Profile Name	STRING		Name of profile in which WebTrace is defined

Field	Display Name	Data Type	Units	Description
szDstIp	Destination IP	STRING		Destination server IP defined in the profile (in the profile you declare an IP or a destination name; WebTrace resolves the other by itself)
szDstName	Destination Name	STRING		Destination server name defined in the profile (in the profile you declare an IP or a destination name; WebTrace resolves the other by itself)
szHostName	Host Name	STRING		Name of host machine from which WebTrace runs
szLocationName	Location Name	STRING		Location name of host machine from which WebTrace runs
szSrcIp	Source IP	STRING		IP of host machine from which WebTrace runs
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
trc_instance_id		INT		Internal ID

## Data Samples for Real User Monitor

This section describes the samples and sample fields for Real User Monitor data. These samples use the Universal Data Exchange (UDX) framework, and are thus available for filtering in the Measurement Filters page (for details, see “Working with Measurement Filters” in *Platform Administration*).

### Sample: RUM Active End Users (`rum_active_eu_t`)

The RUM Active End Users sample (`rum_active_eu_t`) contains data about the end-users that were detected as having performed the most hits in the last interval. This interval is defined in Monitor Administration.

Field	Display Name	Data Type	Units	Description
<code>customer_name</code>		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
<code>engine_id</code>		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
<code>engine_name</code>	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_end_ip	End User End IP	INT		End IP address for end-user range as configured in Monitor Administration
eu_id		INT		Mercury Business Availability Center internal end-user ID number
eu_loc	End User Location	STRING		End-user location as configured in Monitor Administration
eu_name	End User Domain And Subnet Range	STRING		End-user name as configured in Monitor Administration
eu_start_ip	End User Start IP	INT		Start IP address for end-user range as configured in Monitor Administration
new_tot_page_hits	New Total Page Hits	INT	number of hits	Total number of pages hit by end-user



Field	Display Name	Data Type	Units	Description
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
sampletype		STRING		Currently not used
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_conn_hits	Total Connection Hits	INT		Currently not used
tot_http_bytes	Total http bytes	DOUBLE	bytes	Total number of bytes sent and received by the end-user for http
tot_https_bytes	Total https bytes	DOUBLE	bytes	Total number of bytes sent and received by the end-user for https
tot_latency	Latency	DOUBLE	milliseconds	total latency of all packets sent by end-user

Field	Display Name	Data Type	Units	Description
tot_page_hits	Total Page Hits	INT	number of hits	Total number of pages hit by the end-user
TUID		STRING		Internal ID from the profile database

### Sample: RUM Broken Links (rum\_bro\_links\_t)

The RUM Broken Links sample (rum\_bro\_links\_t) contains data about a component that was missing. Only components that were accessed from within a site defined in Monitor Administration are reported.

Field	Display Name	Data Type	Units	Description
availability	Availability	INT	0 or 1	Always 0 (not available)
comp_url	Component URL	STRING		URL of component on page
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number

Field	Display Name	Data Type	Units	Description
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
ref_url	Referer URL	STRING		URL of page that requested component
sampletype		STRING		Currently not used
server_ip		INT		IP address of component server
server_name	Server name	STRING		Name of component server
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970

Field	Display Name	Data Type	Units	Description
tot_comp_hits	Total Component Hits	INT	number of hits	Total number of components hit
TUID		STRING		Internal ID from the profile database

**Sample: RUM End Users (rum\_eu\_t)**

The RUM End Users sample (rum\_eu\_t) contains aggregated data describing a specific end-user.

Field	Display Name	Data Type	Units	Description
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_end_ip	End User End IP	INT		End IP address for end-user range as configured in Monitor Administration
eu_id		INT		Mercury Business Availability Center internal end-user ID number
eu_loc	End User Location	STRING		End-user location as configured in Monitor Administration
eu_loc_city	End User Location City	STRING		End-user city as configured in Monitor Administration
eu_loc_country	End User Location Country	STRING		End-user country as configured in Monitor Administration
eu_loc_state	End User Location State	STRING		End-user state as configured in Monitor Administration
eu_name	End User Domain And Subnet Range	STRING		End-user name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_start_ip	End User Start IP	INT		Start IP address for end-user range as configured in Monitor Administration
new_tot_page_hits	New Total Page Hits	INT	number of hits	Total number of pages hit by end-user
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
reporter		INT		Currently not used
sampletype		STRING		Currently not used
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_conn_b_lth	Connections Below Latency Warning Threshold	INT		Currently not used

Field	Display Name	Data Type	Units	Description
tot_conn_o_lth	Total Connections over latency threshold	INT		Currently not used
tot_http_bin	Total http bytes in	DOUBLE	bytes	Total size of all end-user http requests
tot_http_bout	Total http bytes out	DOUBLE	bytes	Total size of all end-user http replies
tot_https_bin	Total https bytes in	DOUBLE	bytes	Total size of all end-user https requests
tot_https_bout	Total https bytes out	DOUBLE	bytes	Total size of all end-user https replies
tot_latency	Latency	DOUBLE	milliseconds	Total latency of all packets sent by end-user
tot_latency_b_lth	Latency Below Latency Warning Threshold	DOUBLE	milliseconds	Total latency time that was less than the threshold configured in Monitor Administration
tot_latency_color		DOUBLE	number representing color	Color of end-user status in Dashboard

Field	Display Name	Data Type	Units	Description
tot_latency_o_lth	Latency Over Latency Threshold	DOUBLE	milliseconds	Total latency time that was more than the threshold configured in Monitor Administration
tot_page_b_lth	Number Of Pages Hits Below Latency Threshold	INT	number of hits	Number of pages hit that had a latency less than the threshold configured in Monitor Administration
tot_page_hits	Total Page Hits	INT	number of hits	Total number of pages hit by the end-user
tot_page_o_lth	Number Of Page Hits Over Latency Threshold	INT	number of hits	Number of pages hit that had a latency more than the threshold configured in Monitor Administration
total_conn	Total Connection Hits	INT		Currently not used
TUID		STRING		Internal ID from the profile database



**Sample: RUM Events (rum\_event\_t)**

The RUM Events sample (rum\_event\_t) contains data about a defined event that was detected. The different event types are configured in Monitor Administration.

Field	Display Name	Data Type	Units	Description
application_id	Application Id	INT		Mercury Business Availability Center internal application ID number
bb_guid	BB GUID	STRING		An internal, unique session ID from the Real User Monitor probe
customer_name	Customer Name	STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
engine_id	Engine Id	INT		Mercury Business Availability Center internal Real User Monitor engine ID number
eu_domain_name	End User Domain Name	STRING		End-user group name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_end_ip	End User End IP	INT		End IP address for end-user range as configured in Monitor Administration
eu_host_name	End User Host Name	STRING		Host machine name of the end-user
eu_id	End User Id	INT		Mercury Business Availability Center internal end-user ID number
eu_ip	End User IP	INT		IP address of end-user
eu_loc		STRING		End-user location as configured in Monitor Administration
eu_loc_city	End User Location City	STRING		End-user city as configured in Monitor Administration
eu_loc_country	End User Location Country	STRING		End-user country as configured in Monitor Administration
eu_loc_state	End User Location State	STRING		End-user state as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_name	End User Domain And Subnet Range	STRING		End-user name as configured in Monitor Administration
eu_start_ip	End User Start IP	INT		Start IP address for end-user range as configured in Monitor Administration
eu_subnet_name	End User Subnet Name	STRING		Currently not used
eu_user_name	End User Login Name	STRING		Login name of end-user
event_category	Event Category	INT		Category of event configured in Monitor Administration (for example, informational, error, http, performance)
event_data	Event Extra Data	STRING	alpha-numeric	Actual values returned from event
event_id	Event Id	INT		Mercury Business Availability Center internal event ID number

Field	Display Name	Data Type	Units	Description
event_name	Event Name	STRING		Name of event as configured in Monitor Administration
event_type	Event Type	INT	number (of event type)	Event type as configured in Monitor Administration
page_id	Page Id	INT		Mercury Business Availability Center internal page id of the page configured in Monitor Administration, on which the event occurred (-1 used for pages that have not been configured)
page_url	Page URL	STRING		URL of the page configured in Monitor Administration, on which the event occurred
profile_id	Profile Id	INT		Mercury Business Availability Center internal profile ID number (default 1)

Field	Display Name	Data Type	Units	Description
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
sampletype		STRING		Currently not used
server_ip	Server IP	INT		IP address of component server
session_comp_seq	Component Sequence Number in Session	INT	number	Last component sequence number on the page on which the event occurred
time_stamp	End Time	DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
TUID		STRING		Internal ID from the profile database

**Sample: RUM Pages (rum\_page\_t)**

The RUM Pages sample (rum\_page\_t) contains data about a monitored page. The sample contains performance, availability, and general measurements regarding the page. Only pages that match one of the page definitions in Monitor Administration are reported to Mercury Business Availability Center.

Field	Display Name	Data Type	Units	Description
application_id		INT		Mercury Business Availability Center internal application ID number
availability	Availability	INT	number of pages	number of available pages (of the monitored page) during the time frame
bb_guid	BB GUID	STRING		An internal, unique session ID from the Real User Monitor probe
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)

Field	Display Name	Data Type	Units	Description
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration
eu_end_ip	End User End IP	INT		End IP address for end-user range as configured in Monitor Administration
eu_id		INT		Mercury Business Availability Center internal end-user ID number
eu_ip	End User IP	INT		IP address of end-user
eu_loc	End User Location	STRING		End-user location as configured in Monitor Administration
eu_loc_city	End User Location City	STRING		End-user city as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_loc_country	End User Location Country	STRING		End-user country as configured in Monitor Administration
eu_loc_state	End User Location State	STRING		End-user state as configured in Monitor Administration
eu_name	End User Domain And Subnet Range	STRING		End-user name as configured in Monitor Administration
eu_start_ip	End User Start IP	INT		Start IP address for end-user range as configured in Monitor Administration
eu_subnet_name	End User Domain And Subnet Range	STRING		Currently not used
http_err_bad_c	HTTP Error Bad Request Category	INT		Currently not used
http_err_nfound_c	HTTP Error Request Not Found Category	INT		Currently not used
http_err_ref_c	HTTP Error Request Refused Category	INT		Currently not used



Field	Display Name	Data Type	Units	Description
http_err_serr_c	HTTP Error Server Errors Category	INT		Currently not used
main_http_err	HTTP Response Code	INT	number	http response code for the requested page
page_id		INT		Mercury Business Availability Center internal page id of the page configured in Monitor Administration
page_name	Page Name	STRING		Name of page as configured in Monitor Administration
page_url	Page URL	STRING		URL of the page configured in Monitor Administration
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name

Field	Display Name	Data Type	Units	Description
reporter		INT		Currently not used
sampletype		STRING		Currently not used
server_ip	Server IP	INT		IP address of server
server_name	Server Name	STRING		Name of server
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_avail_color		DOUBLE	number representing color	Color representing status of page in Dashboard
tot_client_time	Client Time	DOUBLE	milliseconds	Amount of time of total processing time between components
tot_components	Number of Page Components	INT	number	Total number of components on the page
tot_dl_b_dth	Download Time Below Download Warning Threshold	DOUBLE	milliseconds	Amount of download time less than the download warning threshold configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
tot_dl_o_dth	Download Time Over Download Threshold	DOUBLE	milliseconds	Amount of download time more than the download warning threshold configured in Monitor Administration
tot_dl_time	Download Time	DOUBLE	milliseconds	Total download time of page
tot_event_app_error	Application Errors Events	INT	number of error events	Total number of application error events on page
tot_event_http_error	HTTP Errors Events	INT	number of http errors	Total number of http errors on page
tot_event_info	Non Error Events	INT	number of info events	Total number of informational event on page
tot_hits_b_dth	Hits Below Download Warning Threshold	INT	number of hits	Total number of hits with a download time less than the threshold configured in Monitor Administration
tot_hits_b_sth	Hits Below Server Warning Threshold	INT	number of hits	Total number of hits with server time less than the threshold configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
tot_hits_o_dth	Hits Over Download Threshold	INT	number of hits	Total number of hits with a download time more than the threshold configured in Monitor Administration
tot_hits_o_sth	Hits Over Server Threshold	INT	number of hits	Total number of hits with server time more than the threshold configured in Monitor Administration
tot_net_time	Network Time	DOUBLE	milliseconds	Total network time
tot_page_color		DOUBLE	number representing color	Color representing status of page in Dashboard
tot_page_size	Page Size	DOUBLE	bytes	Total page size
tot_server_b_sth	Server Time Below Server Warning Threshold	DOUBLE	milliseconds	Amount of server time less than the threshold configured in Monitor Administration
tot_server_color		DOUBLE	number representing color	Color representing status of server in Dashboard

Field	Display Name	Data Type	Units	Description
tot_server_o_sth	Server Time Over Server Threshold	DOUBLE	milliseconds	Amount of server time more than the threshold configured in Monitor Administration
tot_server_time	Server Time	DOUBLE	milliseconds	Total server time
tot_stopped	Number Of Stopped Pages	INT	number of pages	Total number of pages stopped before their download was completed
total_hits	Hits	INT	number of hits	Total number of hits on page
TUID		STRING		Internal ID from the profile database

### Sample: RUM Pages with Most Errors (rum\_most\_error\_page\_t)

The RUM Pages with Most Errors sample (rum\_most\_error\_page\_t) contains data about the pages that were detected as having the most HTTP and application errors occur on them in the last interval. The pages detected do not have to be defined in Monitor Administration.

Field	Display Name	Data Type	Units	Description
application_id	Application ID	INT		Mercury Business Availability Center internal application ID number for the page
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
page_id		INT		Mercury Business Availability Center internal page id of the page configured in Monitor Administration
page_hits		INT	number of hits	Total number of hits of the page
page_name	Page Name	STRING		The meaningful name assigned to the page, if configured.
page_url	Page URL	STRING		URL of the page on which most errors occurred
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970

Field	Display Name	Data Type	Units	Description
tot_app_errors	Application Errors	INT	number of application errors	Total number of application errors that occurred on the page
tot_errors	Total Errors	INT	total number of application and HTTP errors	Total number of application and HTTP errors that occurred on the page
tot_http_errors	HTTP Errors	INT	number of http errors	Total number of http errors that occurred on the page

### Sample: RUM Popular Pages (rum\_pop\_page\_t)

The RUM Popular Pages sample (rum\_pop\_page\_t) contains data about the pages that were detected as having the highest number of hits in the last interval. The interval is defined in Monitor Administration. The pages detected do not have to be defined in Monitor Administration.

Field	Display Name	Data Type	Units	Description
availability	Availability	INT		Currently not used
comp_url	Page URL	STRING		URL of component on page
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)



Field	Display Name	Data Type	Units	Description
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration
page_id		INT		Mercury Business Availability Center internal page id of the page configured in Monitor Administration
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
sampletype		STRING		Currently not used

Field	Display Name	Data Type	Units	Description
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_page_hits		INT	number of hits	Total number of hits of the page
TUID		STRING		Internal ID from the profile database

**Sample: RUM Servers (rum\_server\_t)**

The RUM Servers sample (rum\_server\_t) contains aggregated data about a server whose traffic the Real User Monitor is listening to.

Field	Display Name	Data Type	Units	Description
availability	Availability	INT	# of requests	Number of requests successfully handled by server, or with HTTP denial codes not in the range of 500-599
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)

Field	Display Name	Data Type	Units	Description
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
reporter		INT		Currently not used
sampletype		STRING		Currently not used
server_ip	Server IP	INT		IP address of component server
server_name	Server Name	STRING		Name of server

Field	Display Name	Data Type	Units	Description
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_avail_color		DOUBLE	number representing color	Color representing status of page in Dashboard
tot_comp_hits	Total Component Hits	INT	number of hits	Total number of components hits
tot_conn_hits	Total Connection Hits	INT		Currently not used
tot_http_bin	Total Http Bytes In	DOUBLE	bytes	Total size of all end-user http requests
tot_http_bout	Total Http Bytes Out	DOUBLE	bytes	Total size of all end-user http replies
tot_https_bin	Total Https Bytes In	DOUBLE	bytes	Total size of all end-user https requests
tot_https_bout	Total Https Bytes Out	DOUBLE	bytes	Total size of all end-user https replies
tot_ok_comp_hits	Total OK Component Hits	INT	number of hits	Total number of hits on components that were successfully downloaded
tot_page_hits	Total Page Hits	INT	number of hits	Total number of pages hit on the server

Field	Display Name	Data Type	Units	Description
total_hits Total	Component Hits	INT	number of hits	Total number of all component hits
TUID		STRING		Internal ID from the profile database

### Sample: RUM Sessions (rum\_session\_t)

The RUM Sessions sample (rum\_session\_t) contains information about a user session. This sample is sent only after the session has ended. The rum\_session\_t is always sent with the rum\_session\_id\_t sample.

Field	Display Name	Data Type	Units	Description
application_id	Application ID	INT		Mercury Business Availability Center internal application ID number
availability	Availability	INT	number of pages	number of all available pages in the session
bb_guid	BB GUID	STRING		An internal, unique session ID from the Real User Monitor probe
browser	Browser	STRING		Type of browser used for the session

Field	Display Name	Data Type	Units	Description
customer_name	Customer Name	STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
download_time	Download Time	DOUBLE	milliseconds	Total download time of all pages in the session
dwel_Time	Dwell Time	DOUBLE		Currently not used
engine_id	Engine ID	INT		Mercury Business Availability Center internal Real User Monitor engine ID number
eu_domain_name	End User Domain Name	STRING		End-user group name as configured in Monitor Administration
eu_end_ip	End User End IP	INT		End IP address for end-user range as configured in Monitor Administration
eu_host_name	End User Host Name	STRING		Host machine name of the end-user

Field	Display Name	Data Type	Units	Description
eu_id	End User Id	INT		Mercury Business Availability Center internal end-user ID number
eu_ip	End User IP	INT		IP address of end-user
eu_loc		STRING		End-user location as configured in Monitor Administration
eu_loc_city	End User Location City	STRING		End-user city as configured in Monitor Administration
eu_loc_country	End User Location Country	STRING		End-user country as configured in Monitor Administration
eu_loc_state	End User Location State	STRING		End-user state as configured in Monitor Administration
eu_name	End User Domain And Subnet Range	STRING		End-user name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_start_ip	End User Start IP	INT		Start IP address for end-user range as configured in Monitor Administration
eu_subnet_name	End User Subnet Name	STRING		Currently not used
eu_user_name	End User Login Name	STRING		Login name of end-user
http_version	Http Version	STRING		http version used for session
os	Operating System	STRING		Operating system used for session
profile_id	Profile ID	INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
sampletype		STRING		Currently not used
server_ip	Server IP	INT		IP address of component server



Field	Display Name	Data Type	Units	Description
session_size	Session Size	DOUBLE	bytes	Total size of all pages included in the session
start_time	Session Start Time	DOUBLE	seconds since Jan 1 1970	Time that the session started
time_stamp	Session End Time	DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_event_app_error	Application Errors	INT	number of events	Total number of application events that occurred in the session
tot_event_http_error	HTTP Errors	INT	number of events	Total number of http error events that occurred in the session
tot_event_info	Informational Events	INT	number of events	Total number of information events that occurred in the session
tot_event_performance	Performance Events	INT	number of events	Total number of performance events that occurred in the session
tot_latency	Latency	DOUBLE	milliseconds	total latency of all packets sent by end-user in session

Field	Display Name	Data Type	Units	Description
tot_pages	Pages Hits	INT	number of pages	Total number of pages in the session
TUID		STRING		Internal ID from the profile database

**Sample: RUM Slowest Components (rum\_slow\_comp\_t)**

The RUM Slowest Components sample (rum\_slow\_comp\_t) contains data about the pages that were detected as having the longest download time in the last interval. The interval is defined in Monitor Administration. The pages do not have to be defined in Monitor Administration.

Field	Display Name	Data Type	Units	Description
availability	Availability	INT	numeric value between 0 and 1	availability of page in requested time frame
comp_url	Page URL	STRING		URL of component on page
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)

Field	Display Name	Data Type	Units	Description
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration
page_id		INT		Mercury Business Availability Center internal page id of the page configured in Monitor Administration
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
sampletype		STRING		Currently not used

Field	Display Name	Data Type	Units	Description
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_comp_hits	Page Hits	INT	number of hits	Total number of components hit
tot_dl	Page Download Time	DOUBLE	milliseconds	Total page download time
tot_server_time	Page Server Time	DOUBLE	milliseconds	Total server time
TUID		STRING		Internal ID from the profile database

**Sample: RUM Slowest End Users (rum\_slow\_eu\_t)**

The RUM Slowest End Users sample (rum\_slow\_eu\_t) contains data about the slowest end-users that were detected in the last interval. The interval is defined in Monitor Administration. The slowest end-users are those that experienced the highest average network latency for the defined interval.

Field	Display Name	Data Type	Units	Description
availability	Availability	INT		Currently not used
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)

Field	Display Name	Data Type	Units	Description
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration
eu_end_ip	End User End IP	INT		End IP address for end-user range as configured in Monitor Administration
eu_id		INT		Mercury Business Availability Center internal end-user ID number
eu_loc	End User Location	STRING		End-user location as configured in Monitor Administration
eu_name	End User Domain And Subnet Range	STRING		End-user name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
eu_start_ip	End User Start IP	INT		Start IP address for end-user range as configured in Monitor Administration
new_tot_page_hits	New Total Page Hits	INT	number of hits	Total number of pages hit by end-user
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
sampletype		STRING		Currently not used
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
tot_conn_hits	Total Connection Hits	INT		Currently not used
tot_http_bytes	Total http bytes	DOUBLE	bytes	Total number of bytes sent and received by the end-user for http

Field	Display Name	Data Type	Units	Description
tot_https_bytes	Total https bytes	DOUBLE	bytes	Total number of bytes sent and received by the end-user for https
tot_latency	Latency	DOUBLE	milliseconds	total latency of all packets sent by end-user
tot_latency_color		DOUBLE	number representing color	Color of end-user status in Dashboard
tot_page_hits	Total Page Hits	INT	number of hits	Total number of pages hit by the end-user
TUID		STRING		Internal ID from the profile database

### Sample: RUM Transactions (rum\_trans\_t)

The RUM Transactions sample (rum\_trans\_t) contains data performance and availability measurements of end-user transactions that match one of the transaction definitions in Monitor Administration.

Field	Display Name	Data Type	Units	Description
application_id	Application ID	INT		Mercury Business Availability Center internal application ID number
availability	Availability	INT	value between 0 and 1	availability of pages included in the transaction

Field	Display Name	Data Type	Units	Description
bb_guid	BB GUID	STRING		An internal, unique session ID from the Real User Monitor probe
customer_name		STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
engine_id		INT		Mercury Business Availability Center internal Real User Monitor engine ID number
engine_name	Engine Name	STRING		Real User Monitor engine name as configured in Monitor Administration
eu_end_ip	End User End IP	INT		End IP address for end-user range as configured in Monitor Administration



Field	Display Name	Data Type	Units	Description
eu_id		INT		Mercury Business Availability Center internal end-user ID number
eu_ip	End User IP	INT		IP address of end-user
eu_loc	End User Location	STRING		End-user location as configured in Monitor Administration
eu_name	End User Domain And Subnet Range	STRING		End-user name as configured in Monitor Administration
eu_start_ip	End User Start IP	INT		Start IP address for end-user range as configured in Monitor Administration
last_http_error	Last HTTP Error	INT	http error code number	Error code number of last http error in transaction
last_trans_page	Last Transaction Page	STRING	page url	URL of last page in transaction

Field	Display Name	Data Type	Units	Description
last_trans_pid	Last Transaction Page ID	INT		Mercury Business Availability Center internal page ID number of the last page in transaction
profile_id		INT		Mercury Business Availability Center internal profile ID number (default 1)
profile_name	Profile Name	STRING		Mercury Business Availability Center internal profile name
reporter		INT		Currently not used
sampletype		STRING		Currently not used
server_ip	Server IP	INT		IP address of component server
server_name	First Page Server Name	STRING		Name of server of first page in transaction
time_stamp		DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970

Field	Display Name	Data Type	Units	Description
tot_avail_color		DOUBLE	number representing color	Color representing status of page in Dashboard
tot_client_time	Client Time	DOUBLE	milliseconds	Amount of time of total processing time between components
tot_completed	Number of Completed Transactions	INT	number of transactions	Always 1
tot_components	Number of Page Components	INT	number	Total number of components on transaction pages
tot_event_app_error	Application Errors Events	INT	number of error events	Total number of application error events in transaction
tot_event_http_error	HTTP Errors Events	INT	number of error events	Total number of http error events in transaction
tot_event_info	Non Error Events	INT	number of error events	Total number of information events in transaction
tot_event_performance	Performance Events	INT	number of error events	Total number of performance events in transaction

Field	Display Name	Data Type	Units	Description
tot_gdl_b_gth	Gross Download Time Below Gross Warning Threshold	DOUBLE	milliseconds	Total download time of transaction less than the threshold configured in Monitor Administration
tot_gdl_o_gth	Gross Download Time Over Gross Threshold	DOUBLE	milliseconds	Total download time of transaction more than the threshold configured in Monitor Administration
tot_gdl_time	Gross Download Time	DOUBLE	milliseconds	Total download time of transaction
tot_gross_color		DOUBLEe	number representing color	Color representing status of transaction in Dashboard
tot_hits_b_gth	Hits Below Gross Warning Threshold	INT	number of hits	Number of hits whose time was less than the gross threshold configured in Monitor Administration. Always 0 or 1

Field	Display Name	Data Type	Units	Description
tot_hits_b_nth	Hits Below Net Warning Threshold	INT	number of hits	Number of hits whose time was less than the net threshold configured in Monitor Administration. Always 0 or 1
tot_hits_b_sth	Hits Below Server Warning Threshold	INT	number of hits	Number of hits whose time was less than the server threshold configured in Monitor Administration
tot_hits_o_gth	Hits Over Gross Threshold	INT	number of hits	Number of hits whose time was more than the gross threshold configured in Monitor Administration. Always 0 or 1
tot_hits_o_nth	Hits Over Net Threshold	INT	number of hits	Number of hits whose time was more than the net threshold configured in Monitor Administration. Always 0 or 1

Field	Display Name	Data Type	Units	Description
tot_hits_o_sth	Hits Over Server Threshold	INT	number of hits	Number of hits whose time was more than the server threshold configured in Monitor Administration
tot_ndl_b_nth	Net Download Time Below Net Warning Threshold	DOUBLE	milliseconds	Total time of pages in the transaction whose time was less than the net threshold configured in Monitor Administration
tot_ndl_o_nth	Net Download Time Over Net Threshold	DOUBLE	milliseconds	Total time of pages in the transaction whose time was more than the net threshold configured in Monitor Administration
tot_ndl_time	Net Download Time	DOUBLE	milliseconds	Total net download time
tot_net_color		DOUBLE	number representing color	Color representing status of transaction in Dashboard
tot_net_time	Network Time	DOUBLE	milliseconds	Total network time

Field	Display Name	Data Type	Units	Description
tot_server_b_sth	Server Time Below Server Warning Threshold	DOUBLE	number of hits	Total number of hits whose time was below the threshold configured in Monitor Administration
tot_server_color		DOUBLE	number representing color	Color representing status of server in Dashboard
tot_server_o_sth	Server Time Over Server Threshold	DOUBLE	milliseconds	Total server time more than the threshold configured in Monitor Administration
tot_server_time	Server Time	DOUBLE	milliseconds	Total server time
tot_trans_size	Transaction Size	DOUBLE	bytes	Total size of transaction
total_hits	Transaction Hits	INT	number of hits	Total number of hits in transaction
trans_id		INT		Mercury Business Availability Center internal transaction ID
trans_name	Transaction Name	STRING	alpha-numeric	Transaction name as configured in Monitor Administration

Field	Display Name	Data Type	Units	Description
trans_pages_seq_ids		STRING	sequence numbers	String of the sequence numbers of the pages that comprise the transaction
TUID		STRING		Internal ID from the profile database

## Data Samples for Alerts

This section describes the samples and sample fields for alerts generated by the new alert engine (CI Status Alerts defined in Dashboard Administration) and the legacy alert engine (Business Process Monitor, Client Monitor, and Real User Monitor alerts defined in Platform Administration).

### Sample: Alert Log (alert\_log)

The Alert Log sample (alert\_log) contains data generated by CI Status Alerts defined in Dashboard Administration and used when generating the Configuration Item Status Alerts report.

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**Limitation:** There is currently no configuration item name field, and it is not possible to map CI names to their CMDB IDs (entity\_id field). As such the value of this sample is limited.

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This sample uses the Universal Data Exchange (UDX) framework, and is thus available for filtering in the Measurement Filters page (for details, see “Working with Measurement Filters” in *Platform Administration*).

Field	Display Name	Data Type	Units	Description
action	Action	STRING		The actions performed by the alert
alert_id	alert_id	INT		Alert instance ID
customer_name	Customer Name	STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
entity_id	CMDB Entity id	BINARY		Configuration ID of CI
kpi_name	KPI name	STRING		The name of the KPI
name	Alert Name	STRING		The name of the alert

Field	Display Name	Data Type	Units	Description
next_severity	Next Severity	INT		The severity status of the KPI after the change that caused the alert to be sent, expresses as the ID defined in the <b>From</b> field in the Parameter Details window ( <b>Admin &gt; Dashboard &gt; Repositories &gt; KPIs &gt; clone/override KPI &gt; click the Edit Entity button &gt; Item Details &gt; click the parameter to display the Parameter Details window</b> )
obj_name	Objective name	STRING		For future use

Field	Display Name	Data Type	Units	Description
prev_severity	Previous Severity	INT		The severity status of the KPI before the change that caused the alert to be sent, expresses as the ID defined in the <b>From</b> field in the Parameter Details window ( <b>Admin &gt; Dashboard &gt; Repositories &gt; KPIs &gt; clone/override KPI &gt; click the Edit Entity button &gt; Item Details &gt; click the parameter to display the Parameter Details window</b> )
sampletype		STRING		The name of the sample.
send_time	Send time	DOUBLE	seconds since Jan 1 1970	The date and time that the alert was sent, expressed in seconds since Jan 1 1970
time_stamp	Time Stamp	DOUBLE	seconds since Jan 1 1970	The date and time of the event that caused the status change, expressed in seconds since Jan 1 1970
TUID		STRING		Internal ID

**Sample: Alerts (alarm\_t)**

The Alerts sample (alarm\_t) contains data generated by Business Process Monitor, Client Monitor, and Real User Monitor alerts defined in Platform Administration.

Field	Display Name	Data Type	Units	Description
alarm_id	alarm Id	INT		ID of the alert (definition)
customer_name	Customer Name	STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
dEventTime Stamp	triggered time	DOUBLE	seconds	Time of the event that triggered the alert
iIsLoggedOnly	Is logged Only	INT		Determines whether the alert is logged only (1 is true or 0 is false)
iIsPositive	Is Positive	INT		Determines whether the alert is a follow-up (1 is true or 0 is false)
iNmmtEventType Id	Nmmt Event Type Id	INT		Obsolete
iNmmtId	NMMT Id	INT		Obsolete

Field	Display Name	Data Type	Units	Description
iSessionId	Profile ID	INT		Profile ID as stored in the SESSIONS table in the management database
iSeverityId	Severity ID	INT		Severity of the alert
profile_name	Profile Name	STRING		Profile name
szActionDesc	Action Description	STRING		Action that is taken as a result of the alert
szAlarmDesc	Alarm Description	STRING		Description of the alert
szAlarmName	Alarm Name	STRING		Alert name
szNmmtEventType	Nmmt Event Type	STRING		Obsolete
szNmmtName	NMMT Name	STRING		Obsolete
time_stamp	Time Stamp	DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970

## Data Sample for Deep Transaction Tracing

The Deep Transaction Tracing sample (bristol\_t3) contains data integrated into Mercury Business Availability Center from Bristol Technology monitoring software. This sample uses the Universal Data Exchange (UDX) framework, and is thus available for filtering in the Measurement Filters page. For details, see “Working with Measurement Filters” in *Platform Administration*.

Field	Display Name	Data Type	Units	Description
bpmTransactionField	Transaction Field	STRING		The transaction name as it appears in the Business Process Monitor script
customer_name	Customer Name	STRING		Customer name to which the sample belongs (for Mercury Managed Services, otherwise Default client)
EndTime	End Time	STRING		The transaction end time
IsBPMScripted	BPM Generated Transaction	INT	0 or 1	If true (1), transaction initiated from a Business Process Monitor; if false (0), transaction originated from a real user.

Field	Display Name	Data Type	Units	Description
IsBPMScripted RealEquivalent	Is Real Correlated BPM Transaction	INT	0 or 1	If true (1), the sample is for real transactions, and the Business Process Monitor is also generating the same type of transaction synthetically.
profile_id	BPM Profile ID	INT		The correlated Business Process Monitor profile ID
profile_name	Profile Name	STRING		Business Process Monitor profile name
ReportingInterval	Reporting Interval	INT	seconds	The interval between samples originating from Bristol software (all transaction hits are aggregated and one aggregated data sample is sent in each interval)
sampletype		STRING		The name of the sample.
StartTime	Start Time	STRING		The transaction start time
time_stamp	Time Stamp	DOUBLE	seconds since Jan 1 1970	Time stamp in seconds since Jan 1 1970
TUID		STRING		Internal ID

Field	Display Name	Data Type	Units	Description
TxAvgResponse Time	Transaction Avg ResponseTime	DOUBLE	milli-seconds	The average response time of transactions in the Reporting Interval
TxClass	Transaction Class	STRING		The transaction name as it is called in Bristol software (should be the same name as Business Process Monitor transaction name)
TxCount	Transaction Count	INT		Total number of transactions in the Reporting Interval
TxFailedCount	Transaction Failed Count	INT		Number of failed transactions
TxFailedValue	Transaction Failed Value	DOUBLE		Total value of the failed transaction
TxId	BPM Transaction ID	INT		The correlated Business Process Monitor transaction ID
TxLateCount	Transaction Late Count	INT		Number of transactions that are above some response threshold (defined in Bristol software)



Field	Display Name	Data Type	Units	Description
TxLateValue	Transaction Late Value	DOUBLE		Total value of transaction that are late
TxMaxResponse Time	Transaction Max ResponseTime	DOUBLE	milli-seconds	The maximum response time of transactions in the Reporting Interval
TxMinResponse Time	Transaction Min ResponseTime	DOUBLE	milli-seconds	The minimum response time of transactions in the Reporting Interval
TxResponse Threshold	Transaction Response Threshold	DOUBLE	milli-seconds	The response time threshold
TxValue	Transaction Value	DOUBLE		Total value of the specific fields read from the data (Bristol software can read real transaction values, for example, the number of dollars transferred in a transaction)



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