



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

Genesys Customer Experience Insights User's Guide

Managing performance

Contents

- 1 Managing performance
 - 1.1 Optimizing report filtering
 - 1.2 Optimal time to run reports
 - 1.3 Accessing log information

Managing performance

This page describes steps you can take to improve the performance of Genesys Customer Experience Insights (Genesys CX Insights).

Optimizing report filtering

Filtering in Genesys CX Insights reports has been optimized to improve report performance. Two types of filters are used, depending on different data sampling approaches:

- **Optimized filters** — In order to optimize performance in most scenarios, a special report is used as a filter. The results of the special filter report are loaded into memory, and used as a filter for the main report. Most reports use these date and time filters (see [Reports that use the standard filter](#) for a list of the ones that do not).
- **Standard filters** — These filters are part of the SQL expression, and fall into the WHERE operator in the main SQL expression for receiving the report dataset.

The **optimized** filter reports are stored in a folder — **CX Insights\Public Objects\Reports\CX Insights\Service** — that is visible only to reports Developers:

- Pre-set and Date
- Pre-set and Date Range
- Pre-set and Day and Time Range

The **standard** filters are stored in the **CX Insights\GCXI\Time** folder, and include:

- Pre-set and Date
- Pre-set and Date Range
- Pre-set and Day and Time Range

Reports that use the standard filter

The following reports use the standard date and time report filter:

- CX Insights\Details\Transfer Detail Report
- CX Insights\Details\Interaction Handling Attempt Report
- CX Insights\Predictive Routing\Predictive Routing Detail Report
- CX Insights\Callback\Callback Details Report
- CX Insights\Co-browse\Co-browse Summary Report
- CX Insights\Agent\Agent Group Business Attribute Report

- CX Insights\Agent\Agent Group Interaction Handling Report
- CX Insights\Agent\Agent Group Membership Details Report
- CX Insights\Agent\Agent Interaction Hierarchy Report
- CX Insights\Agent\Agent Utilization Report
- CX Insights for iWD\all reports

All other reports use the optimized date time filters.

Procedure: Resolving timeout problems

Purpose: The performance of SQL-based reports can vary depending on the data in your database, so in some circumstances, reports that use the optimized filters can run more slowly than expected, and, in some cases, timeouts can occur. To resolve this issue, Genesys recommends changing the affected report to use the standard date and time filters. Use the steps in this procedure to remove the special optimized filter from a report, and replace it with a standard filter.

Steps

- Log in to MicroStrategy Web using an account with Developer or Administrative rights.
- Open the report.
- Run the report, and click "Design" to open Design mode.
- In the Report Filter panel, click the **X** next to the optimized filter you want to remove (for example **Pre-set and Date**).
- At the bottom-left corner of the screen, click **ALL OBJECTS**.
- Open the **GCXI/Time** folder, find the standard filter object with the same name as the one you removed (for example, **Pre-set and Date**), and drag it into the Report Filter panel to replace the one you removed.
- Using the **Shift Up** arrow next to the newly added filter, move it to the top of the list (into the same position as the one you removed).
- Save and close the report.

Optimal time to run reports

The Genesys CX Insights historical reports provide a snapshot of contact center and enterprise activity as of the most recent transformation and aggregation in the Info Mart database. For completed interactions in completed reporting intervals that occurred prior to the last transformation and aggregation runs, the reports provide consistent results each time the reports are run. However,

results can differ for interactions that are still active, or for intervals that are incomplete. For example, running a month-type report mid-month yields results that differ from those that are obtained by running the same monthly report at the end of the month.

Important

As with other Genesys applications, Genesys CX Insights requires that your system GMT (Greenwich Mean Time) setting be accurate and synchronized among the servers in your environment.

The headers of each report display the report date (which is the date and time when the report was run) rather than the date and time when the most recent transformation job was run. In fact, the date and time when the most recent transformation job was run are not reflected in the report, even though it is that date and time at which contact center activity is reflected by the report data.

For the smaller aggregation levels, the variances in report results are more pronounced, given the configuration within the Genesys Info Mart application of the data chunk size that is to be transformed. Genesys Info Mart is an historical-reporting application, therefore you must give care to the interpretation of report results when you use Genesys CX Insights as a near real-time tool to obtain daily reports (for example, when the day has not yet completed or has only recently completed).

Many factors contribute to latency in data availability between the date and time of the most recent transformation and aggregation run, and the date and time when the report is run, including the following:

- Scheduling of ETL jobs and job performance.
- Interaction volume, and the number of segments per interaction.
- Number of configured key-value pairs.
- Hardware and RDBMS that are used in your environment.
- Performance of ICON's merge procedure.

Read more about these factors in the [Genesys Info Mart](#) documentation, and in the [Genesys Hardware Sizing Guide](#).

Accessing log information

MicroStrategy provides detailed diagnostic logging capabilities that can help you to troubleshoot problems you may encounter. By default, these logs are stored in subfolders below **/mnt/log**. The path is specified in the **volumeMounts** section of **gcxi.yaml**:

```
mountPath: /mnt/log
name: log
```

Genesys CX Insights logs certain components by default; other are logged only if you enable them.

Depending on the release of MicroStrategy in your environment, the list of what logging is enabled varies; for example, in MicroStrategy 2021 Update 4.1, the following logs are generated:

Authentication Server@@Warning, Distribution Service@@Create Job Details@DS Request Details@DS Trigger Details@Delivery Details@Info@Persist Result Details@Scheduler Details@Summary, Odbc@@Error, Query Engine@@Warning, SMTPSender@@Trace

Each log file has a specified maximum size. When a MicroStrategy log file reaches its maximum size, the file is renamed with a .bak extension, and a new log file is created using the same file name.

For example, if the **DSSErrors.log** file reaches its maximum size, MicroStrategy renames it as **DSSErrors.bak**, and creates a new **DSSErrors.log** file. **DSSErrors.log** is the main error log recorded by the MicroStrategy Intelligence Server, and is the first log file you should examine when troubleshooting an issue with MicroStrategy Intelligence Server.

Check the log configuration

To find out what logs are configured in your environment, execute the following command inside the GCXI container

```
/var/opt/MicroStrategy/bin/mstrctl -s IntelligenceServer gsc | xmlstarlet sel -t -c  
"//configuration/log_destinations" | xmlstarlet fo
```

By default, a limited set of MicroStrategy logs are preconfigured. For example, in MicroStrategy 2021 Update 4.1, the following logs are configured in the file **mstr_log.xml**:

```
<log_destinations>  
  <log_destination n="SystemLog" tp="2" callstack_message_ids="0x800438C7"/>  
  <log_destination n="ServerControl" tp="3" max_size="2048" max_backup="1"  
callstack_message_ids=""/>  
  <log_destination n="Query_Merge" tp="3" max_size="200" callstack_message_ids=""/>  
  <log_destination n="MigrationSQL" tp="3" max_size="51200"  
callstack_message_ids="0x800438C7"/>  
  <log_destination n="MetadataObjectTelemetry" tp="3" max_size="2048"  
callstack_message_ids=""/>  
  <log_destination n="LicenseSummary" tp="3" max_size="4000" callstack_message_ids=""/>  
  <log_destination n="DebugOutput" tp="1" callstack_message_ids=""/>  
  <log_destination n="DSSPerformanceMonitor" tp="4" max_size="2000" callstack_message_ids=""/>  
  <log_destination n="DSSErrors" tp="3" max_size="131072" max_backup="1"  
callstack_message_ids="0x800438C7"/>  
  <log_destination n="DSSCap" tp="3" max_size="2048" callstack_message_ids=""/>  
  <log_destination n="BlockedURL" tp="3" max_size="2048" callstack_message_ids=""/>  
</log_destinations>
```

For more information about parameters in **mstr_log.xml**, see the [MicroStrategy website](#).

Modify logging

Use the information in this section to control what components are logged.

Procedure: Configuring logging

Purpose: Use the steps in this procedure to capture logs for additional components.

Steps

1. Edit the **gcxi.properties** file.
2. Add the following parameters:

```
{MSTR_LOG_CONF_EXT:=}
```

For example:

```
{MSTR_LOG_CONF_EXT="Database Classes@@Connection Instances@Connection  
Management@Error@Info@SQL Trace"}
```

3. {MSTR_LOG_MAX_BACKUP:=}

The value you enter here sets the **max_backup** value in the **mstr_log.xml** file. The default value is 2. This controls the maximum number of back-up files that MicroStrategy will store for this log.

For example:

```
{MSTR_LOG_MAX_BACKUP:=3}
```

4. {MSTR_LOG_MAX_SIZE:=}

The value you enter here sets the **max_size** value in the **mstr_log.xml** file. The default value is 2048 KB. This controls the maximum size that a log file can reach before MicroStrategy moves it to the backup location and creates a new file.

For example:

```
{MSTR_LOG_MAX_SIZE:=4096}
```

5. Deploy or redeploy Genesys CX Insights.

You can also configure logging by using the MSTR_LOG_XML variable to pass custom xml that explicitly overwrites the entire **mstr_log.xml** file. For more information about this advanced feature, contact your Genesys representative.

Procedure: Reset logging to default values

Purpose: Use the steps in this procedure to reset all logs to default settings:

Steps

1. Edit the **gcxi.properties** file.
2. Add the following parameter:

```
{MSTR_LOG_OFF:=}
```
3. Deploy or redeploy Genesys CX Insights.

For more information about diagnostic logging in MicroStrategy, including the commands discussed above, see the MicroStrategy website, including:

- [KB15868: How to modify diagnostics logging...](#)
- [Configuring What is Logged.](#)
- [Explanation of parameters given for logging locations.](#)