

# **GENESYS**

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.

# Interaction Concentrator Deployment Guide

**Document Change History** 

# Document Change History

This topic provides a record of documentation improvements and corrections made outside the scope of a software release.

This topic also provides a historical record of document content that was new or that changed significantly since the initial 8.1 release of Interaction Concentrator.

The most recent changes appear first.

#### **Important**

- There was no 8.1.3 release of Interaction Concentrator.
- There was no 8.1.513 release of Interaction Concentrator.

#### New in Document Version 8.1.514.47

• Information about an issue that might cause the merge and purge procedures to fail in MS SQL Server 2019 Cluster deployments has been added to the Troubleshooting page.

# Change in Document Version 8.1.514.08

• Updated the description of the **[callconcentrator]**:acc-proc-tout option to indicate that, in all all 8.x releases, this option has a hard-coded value of 1 second and does not require you to set a value. If you change the option value, Interaction Concentrator disregards it.

# New in Document Version 8.1.514.06

- To restore backward compatibility, the default value for the **max-userdata-length** option has been changed from 1024 to 255. For details, see the **[callconcentrator]**:max-userdata-length option description.
- The topic containing the tables of new features and other changes that were made to Interaction Concentrator in 8.1.5 releases, which was part of the Interaction Concentrator online migration document, has been moved the New Features and Modification in 8.1.5 topic in the Deployment Guide.

- It has also been reformatted to provide a more complete list of new features, with links to the major documentation updates made for each new feature or modification.
- The migration procedures specific to 8.1.5 releases have been moved from the online migration document to the Appendix: Migration Procedures topic in the Deployment Guide. Note that this topic contains migration information only for releases 8.1.5 and higher. For instructions on how to migrate to earlier releases of Interaction Concentrator, see the Interaction Concentrator chapters in the Genesys Migration Guide.

#### New in Document Version 8.1.514.03

- To support the addition of functionality enabling you to set an alarm for situations in which Interaction Concentrator call handling rules result in unprocessed or destroyed calls, added descriptions of the new configuration option, [callconcentrator]:log-call-failure, and the new log event on which you can set an alarm, 09-20039. For more details on this functionality, see Setting Alarms for Call Processing Failures in the Interaction Concentrator User's Guide.
- Added information specifying the release starting with which Genesys Info Mart can store voice and multimedia data in the same IDB.
- Updated the description of the Configuration information ICON stores to indicate that ICON always stores data for all Tenants in your environment.
- Removed references to the send\_attribute configuration option, configured on the Field object, from Configuring for Outbound Contact Data. This option is not required for reporting on Outbound Contact interactions.
- The texts of two log events, 09-25032 and 09-25033, are revised for clarity.

# New in Document Version 8.1.514.02

• Interaction Concentrator now stores a user-configurable number of the last calls/interactions and parties associated with a device. This enables more detailed reporting on the progress and outcome of interactions. To support this functionality, the max-party-info configuration option has been added to the **[custom-states]** section.

# New in Document Version 8.1.512.00

- The new [callconcentrator]:timestamp-processing configuration option replaces the recently-introduced [callconcentrator]:ignore-milliseconds option. The timestamp-processing option offers a more precise specification of how you want ICON to handle any necessary shortening of millisecond and microsecond timestamp values.
- To keep backward compatibility with environments running Genesys Info Mart 7.6 or Genesys Info Mart 8.x releases earlier than 8.5.007.14, the new **[callconcentrator]**:max-userdata-length configuration option enables you to set the maximum data length in certain fields to 255 characters in IDB data.

- Added a note to the description of the [callconcentrator]:adata-default-storage configuration option
  indicating that the values of the attr\_is\_online and attr\_itx\_agent\_id attributes are always stored in
  the G\_USERDATA\_HISTORY table.
- Added a note to the Switch-level same-dn option description and to the Recognizing the Correct DN in Environments Where Internal and External DNs Have the Same Name section explaining that ICON does not correctly construct an external DN if it has the same name as the internal DN of the originating party.
- Added a section in the Connections toggle section on the Configuring for Outbound Contact Data page
  explaining how to add OCS and T-Server to your ICON Application object Connections tab so as to
  gather data correctly from the desired switches.
- Support for use of the HTTP Listener to monitor and report on Interaction Concentrator performance has been discontinued as of this release. A note recording the end of support has been added to the "HTTP Listener" section under the Configure the Options tab heading. As a result of this discontinued support, the following configuration sections and options are obsolete for release 8.1.512.08 and later:
  - [listeners] section
  - [user named section] section (by default, this section is known as the [http] section)
  - user-named-option configuration option in the [listeners] section
  - port configuration option in the [user\_named\_section] section
  - protocol configuration option in the **[user\_named\_section]** section
  - transport configuration option in the [user\_named\_section] section

#### New in Document Version 8.1.511.00

- Added a description of the new **[callconcentrator]**:ignore-milliseconds configuration option, which enables you to choose whether you want Interaction Concentrator to truncate microsecond values to seconds or round off microsecond values to milliseconds before storing the values in IDB.
- Updated the description of the **[callconcentrator]**:ssc-processing configuration option to specify that Interaction Concentrator does not support single-step conferences that include an external DN.
- Added notes indicating that PostgreSQL IDB requires you to use DB Server release 8.1.301.11 or higher, which uses DB Client 8.5.1, to the Planning your Deployment and Deploying DB Server pages.
- Consolidated the deployment information by moving the content from the top-level Deployment Procedures page (now deleted) to the top of the Configuration and Installation page.

# New in Document Version 8.1.510.00

- Added the following information relevant to Unicode support for IDB on Microsoft SQL (Unicode is already supported for Oracle and PostgreSQL RDBMSs; it is not available for DB2):
  - Notes about Unicode support in the following locations: Compatibility.

#### Deploying DB Server.

#### Deploying IDB.

- A new section, Configuring for Unicode Support in an Environment with a Microsoft SQL IDB, which
  includes full deployment instructions. This section is in a new topic, Configuring for Multi-Language
  Support, which contains information collected from previously-scattered locations in the
  Deployment Guide and User's Guide.
- The description of a new configuration option, [callconcentrator]:support-unicode.
- Descriptions of five new log events, 09-25032, 09-25033, 09-25034, 09-25035, and 09-25036.
- Moved the information formerly contained on the Special Configuration Requirements topic to separate subtopics to make it easier to locate information.
- Moved two configuration-related sections from the How ICON Works page in the User's Guide to the Deployment Guide: Configuring for Multi-Language Support and Configuring Conferencing and Transfer Options.
- Added a note under "Interaction Database" to the deployment planning information recommending that DB Server be located close to a PostgreSQL IDB.
- Added a note to the **[callconcentrator]**:use-dss-monitor and **[callconcentrator]**:role configuration options indicating that if the **use-dss-monitor** option is not configured, or is set to false or 0, the GSYS DOMAIN field in role-related IDB tables contains the value 0 (zero).

#### New in Document Version 8.1.509.00

• Added a note in the description of the **[callconcentrator]**:use-server-partyuuid configuration option explaining that the parent parties identified by ICON and SIP Server might not correspond.

# New in Document Version 8.1.508.00

- Added a short explanation of the new functionality that enables ICON to correctly store the value for otherDN when both an internal (local) DN and an external DN have the same name. This functionality requires you to configure the new Switch-level same-dn configuration option.
- Added a description of the new [callconcentrator]:use-server-partyuuid configuration option, which
  enables Interaction Concentrator to support multiple routing scenarios in single-site and multi-site
  environments running SIP Server release 8.1.102.13 or higher.
- Added information about the settings required for internationalization on the PostgreSQL RDBMS.
- Updated a number of ICON configuration options to indicate that the values 0 and 1 are valid as well as the already-documented values of false and true.

# New in Document Version 8.1.507.00

- Updated the descriptions of the **[custom-states]**: Store-event-data and **[custom-states]**: EventData options to indicate the settings required to report on EventCustomReporting data (which can be used to report on interaction focus time).
- Created a Log Events Appendix, which contains full documentation of all Interaction Concentrator log
  events that have been added since the latest publication of the Framework Combined Log Events Help.
- Corrected the list of user data keys that must be explicitly specified in the attached data specification file to capture all possible Universal Routing Server (URS) attached data. For details, see Universal Routing Server Attached Data.
- Updated the description of the DN-level ring-divert option to indicate that ICON can identify the PARENTPARTYID and the PARENTLINKTYPE of the Ringing party even if the **ring-divert** option is set to 0, as long as the Switch-level lookup-queue-on-ringing option is set to 1.

#### New in Document Version 8.1.506.00

- ICON now enables you to run multiple ICON Applications from the same directory using the same executable. See Running Multiple ICON Applications from the Same Directory for details. The new [callconcentrator]:cfg-dbname option must be configured to support this functionality.
- The description of the [callconcentrator]:store-releasing-party configuration option has been updated
  to specify that ICON supports this functionality for all switches that provide the necessary information.
  To determine whether your switch supports this functionality, check your T-Server/SIP Server
  documentation.
- Added a recommendation to set the NLS\_LANG environment variable in all installations using an Oracle database.

# New in Document Version 8.1.505.00

- ICON now hides sensitive attached data information in the ICON log file at every log level. For details, see the Security Features section in Prerequisites and Hide Selected Data in Logs (in the Genesys Security Deployment Guide).
- Added information about the new <a href="Purge2\_PartitionType0\_ora.sq">Purge2\_PartitionType0\_ora.sq</a> database initialization script, which optimizes performance in environments with large Oracle-based IDBs in which the ICON [callconcentrator]:partition-type option is set to 0 (the default value).

# New in Document Version 8.1.504.00

• Added a brief statement of support for Hunt Groups, with links to the relevant configuration information.

• The valid value for minimum re-registration timeout in the Switch-level gcti-re-registration-tout configuration option has been corrected. 0 is now included as a valid value.

#### New in Document Version 8.1.503.00

- Added information on the new DN re-registration functionality. For details see "Configuring DN Re-registration" on the Configuring for Voice Data page and the description of the new gcti-re-registration-tout Switch-level configuration option.
- Added a note to inform you that the separate purge procedures (gsysPurgeIR, gsysPurgeUDH, gsysPurgeLS, and, gsysPurgeOS) have been discontinued as of this release. To purge IDB, use the gysyPurge81 or purgePartitions811 purge procedure.
- Corrected the descriptions for the delivered-flag, support-dn-type-N, and suppress-user-data Switch-level configuration options.

#### New in Document Version 8.1.502.00

- Edited the instructions for adding a connection to Interaction Server to indicate that you can now add an Interaction Server type Application object to the ICON **Connections** tab. Previously, you had to add a connection to an Application object of the type T-Server, which was a stand-in for the Interaction Server Application object. For the instructions on how to configure the T-Server connection required by previous releases, see Configuring for Multimedia Data.
- Added a new section—[[Architecture#mmarch|MultimediaDeployments—to the Supported Deployment Scenarios page, describing the support for connections to multiple Interaction Servers.
- Edited descriptions of the following configuration options:
  - x-print-attached-data (in the ICON [log] section)
  - The Switch-level **support-dn-type-5** option has been renamed to support-dn-type-N. **support-dn-type-5** is just one of the valid names for this option, in which the variable N should be replaced by the number indicating the DN type to which the option setting will apply.
  - Corrected the valid values for the Switch-level call-deletion-timeout option.
  - Corrected the default value for the Switch-level emulate-event-queued-extrp, emulate-event-queued-rp, and emulate-event-queued-rg options.
- Removed the following obsolete configuration options:
  - min-tsync-roundtrip (formerly configured on the Switch configuration object)
  - tsync-threshold (formerly configured on the ICON Application object)

# New in Document Version 8.1.501.00

- · Added descriptions of the following configuration options:
  - [callconcentrator]:ssc-processing—Added in release 8.1.500.04.
  - lookup-queue-on-ringing (Switch-level)—Added in release 8.1.400.20.
  - [callconcentrator]:use-nts-call-state—Added in release 8.1.400.14.
- Added a note about support for single-step conference scenarios to the description of the DN-level ringdivert option.
- Revised the information about the attached data specification file to indicate that changes to the file are now made dynamically. See Configuring for Attached Data and the About tab on the Attached Data Specification File page.
- Updated the configuration recommendations for License Reporting Manager (LRM) to include the
  updated instructions on how to configure the ICON 1 rm role for LRM reporting. See the Recommended
  Role Assignments tab on the ICON Roles page and Configuring for LRM Data.

#### New in Document Version 8.1.401.00

- The *Deployment Guide* was converted from PDF-only format to this online format, with the option of printing a PDF, if desired.
- Added descriptions of two new configuration options: **[callconcentrator]**:cfg-annex and the DN-level do-not-register.
- Updated the name of the new migration script name format used in releases 8.1.4 and higher. For details on the migration scripts, see the *Interaction Concentrator 8.1 Deployment Procedure*.
- Added an item to the **About Interaction Concentrator** topic noting support for encrypted RDBMSs and support for having TEvent attached data hidden in log files. For details on this functionality and how to configure it, see the *Genesys Security Deployment Guide*.

# New in Document Version 8.1.201.00

- Added information on how to configuring IDB on PostgreSQL and specified the details of DAP configuration appropriate to PostgreSQL.
- Added notes stating new ICON support for dynamic updates to T-Server host and port changes.
- Added a section on security features and configuration requirements to the section on Deployment Planning.
- Added a recommendation to install ICON on the same host as the T-Server or Interaction Server for which it writes data.
- Added information about the option to purge the persistent queue file upon ICON startup to the information on the Persistent Queue file.
- Added notes to indicate that the gsysIRMerge and gsysIRMerge2 stored procedures are compatible

with Genesys Info Mart 7.x but are not needed by Genesys Info Mart 8.x.

- Added notes to indicate that the gsysIRMerge and gsysIRMerge2 stored procedures are not applicable to the PostgreSQL RBDMS.
- Configuration option additions, updates and corrections:
  - Added descriptions of the [callconcentrator]:cseq-adjustment, [callconcentrator]:gls-enforce-reason-code, [callconcentrator]:pq-startup-purge, ring-divert (Switch-level and DN-level), and gls-improve-data-for-agent (Switch-level) configuration options.
  - Added a reference to the information about the GSYS\_EXT\_INT1 field in the G\_PARTY\_HISTORY table to the description of the DN-level ivr configuration option.
  - Added notes to the [callconcentrator]:om-memory-optimization and [callconcentrator]:calls-in-the-past options stating the releases in which the om-memory-optimization setting could override the calls-in-the-past setting.
  - Corrected and clarified the wording for the gls-acw-first option (configured on the ICON Application object, [callconcentrator] section, and the Switch object).
  - Corrected and amplified the description for the Switch-level sst-options configuration option.
  - Added notes to advise users that the values for the **[callconcentrator]**:role option must be set in lowercase only, not uppercase or mixed case.
- Updated the name of the Genesys eServices product by changing it from eServices/Multimedia simply to eServices, its current name. Multimedia was the former product name.
- Added notes instructing readers to restart the ICON server after any change to the attached data specification file.

#### New in Document Version 8.1.101.00

- Purge by Truncating Partitions
  - Described new scripts and stored procedure, **purgePartitions811**, for creating and using a partitioned Oracle RDBMS that is set up so as to be able to purge data by truncating partitions:
  - Added the **purgePartitions811** stored procedure to the list of purge procedures.
  - Noted important considerations to take into account before implementing the purge by truncating partitions functionality.
  - Added deployment instructions for creating a partitioned Oracle IDB that can then be purged using the **purgePartitions811** stored procedure.
  - Listed the new initialization scripts used to partition IDB and to enable purging by truncating partitions.

# **Important**

In this release, partitioning is supported only on Oracle 11 or higher.

New Configuration Options—Added descriptions of the following configuration options:

- [callconcentrator]:cfg-auto-resync
- [callconcentrator]:advanced-ext-party-reconstruction
- [callconcentrator]:dest-busy-processing
- [log]:x-server-http-trace-level
- [log]:x-server-smtp-trace-level
- [log]:x-server-dbw-debug-level
- Switch-level third-party-queue-in-divert
- Corrected Configuration Option Values
  - Corrected the Changes Take Effect values for the **[callconcentrator]**:pq-backlog-alarm-threshold and **[callconcentrator]**:pq-backlog-clearance-threshold options from Immediately to After restart.
- Added Information on IDB Update Scripts for Genesys Info Mart—Added descriptions of the update\_idb\_for\_gim.sql and update\_idb\_for\_gim\_mm.sql scripts, required for environments running Genesys Info Mart.
- New PQ File Requirement—Added a note informing users of the requirement to locate persistent queue files on a local drive.