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# Interaction Concentrator

callconcentrator Section

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## acc-proc-tout

**Default Value:**  
**Valid Values:**  
**Changes Take Effect:**

In all 8.x releases of Interaction Concentrator, 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.

In releases up to 8.1.514.08, this option was incorrectly described as having a configurable value.

## acc-queue-lifespan

**Default Value:** 5  
**Valid Values:** Any positive integer  
**Changes Take Effect:** Immediately

Specifies the interval, in seconds, during which ICON accumulates records in its in-memory queue before writing them to a persistent queue (as the first stage of serialization). The process of writing to a persistent queue is triggered when the limit set either by this option or by the **acc-queue-size** option is exceeded.

## acc-queue-size

**Default Value:** 500  
**Valid Values:** Any positive integer  
**Changes Take Effect:** Immediately

Specifies the maximum number of serialization records that ICON keeps in the in-memory queue before writing them to a persistent queue (as the first stage of serialization). The process of writing to a persistent queue is triggered when the limit set either by this option or by the **acc-queue-lifespan** option is exceeded. This option also defines the size of a database writing transaction.

## adata-default-storage

**Default Value:** public  
**Valid Values:** public, secure  
**Changes Take Effect:** After restart

Specifies the default destination for storing attached data for keys not included in the XML specification file denoted by the **adata-spec-name** option value. ICON processes this option only if you enable attached data storage by setting the role option to either all or gud. This option applies to both voice and multimedia interactions.

**Valid Values:**

- public - Data is stored in the G\_USERDATA\_HISTORY table.
- secure - Data is stored in the G\_SECURE\_USERDATA\_HISTORY table.

**Notes:**

- The values for the hardcoded **attr\_is\_online** and **attr\_itx\_agent\_id** attributes are always stored in the G\_USERDATA\_HISTORY table.
- For descriptions of the valid values, see [Storage Types](#) in the *Interaction Concentrator User's Guide*.

## adata-extensions-history

**Default Value:** none

**Valid Values:** none, first, last, all

**Changes Take Effect:** After restart

Specifies what changes to a key's value must be recorded in IDB for a key that originates from the Extensions TEvent attribute but that is not included in the XML specification file denoted by the **adata-spec-name** option value. ICON processes this option only if you enable attached data storage by setting the **role** option to either all or gud.

This option applies to voice and multimedia interactions.

**Valid Values:**

- none - No value for a given key is recorded in IDB.
- first - Only the first value for a given key is recorded in IDB.
- last - Only the last value for a given key is recorded in IDB.
- all - Every change in value for a given key is recorded in IDB.

## adata-reasons-history

**Default Value:** none

**Valid Values:** none, first, last, all

**Changes Take Effect:** After restart

Specifies what changes to a key's value must be recorded in IDB for a key that originates from the Reasons TEvent attribute but that is not included in the XML specification file specified by the **adata-spec-name** option value. ICON processes this option only if you enable attached data storage by setting the **role** option to either all or gud.

This option applies to voice interactions only.

**Valid Values:**

- none - No value for a given key is recorded in IDB.
- first - Only the first value for a given key is recorded in IDB.
- last - Only the last value for a given key is recorded in IDB.
- all - Every change in value for a given key is recorded in IDB.

## adata-spec-name

**Default Value:** ccon\_adata\_spec.xml

**Valid Values:** Any valid file name > any string

**Changes Take Effect:** Immediately

Indicates the name of the XML file that contains the attached data specification; optionally you can follow the file name with the > character and then a string specifying an update option, as explained in the extended description. ICON processes this option only if you enable attached data storage by setting the **role** option to either all or gud.

For more information about the attached data specification, see [Attached Data Specification File](#) in the *Interaction Concentrator Deployment Guide*.

The first part of the value is any file name that is valid in the context of your environment. After reading the value for this option, ICON compares the file name with the previous one (if any). If there is a difference, ICON uses the new value and loads the new attached data specification.

**Example:**

- First value: **ccon\_adata\_spec.xml**
- Second value: **ccon\_adata\_spec2.xml**

ICON now uses the specification from **ccon\_adata\_spec2.xml**.

The second part of the value, which is optional, consists of the > character followed by any string.

ICON compares second part (the substring after the > sign) of new value with the previous one. If there is a difference in the second part, ICON returns to the first part of the option value and reloads the attached data specification, even though the file name is the same as it was previously.

**Example:**

- First value: ccon\_adata\_spec.xml > 3
- Second value: ccon\_adata\_spec.xml > upd

ICON rereads the specification from **ccon\_adata\_spec.xml**.

## adata-userdata-history

**Default Value:** none

**Valid Values:** none, first, last, all

**Changes Take Effect:** After restart

Specifies what changes to a key's value must be recorded in IDB for a key that originates from the UserData reporting event attribute, but that is not included in the XML specification file specified by the **adata-spec-name** option value. ICON processes this option only if you enable attached data storage by setting the role option to either `all` or `gud`.

This option applies to voice and multimedia interactions.

**Valid Values:**

- `none` - No value for a given key is recorded in IDB.
- `first` - Only the first value for a given key is recorded in IDB.
- `last` - Only the last value for a given key is recorded in IDB.
- `all` - Every change in value for a given key is recorded in IDB.

## advanced-ext-party-reconstruction

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately.

**Dependencies:** delivered-flag

For environments using SIP Server, Interaction Concentrator (ICON) supports call scenarios in which a call is sent from a monitored to an unmonitored site, and no party associated with the call remains on the monitored site. In these scenarios, the external party to which the call was sent can be reconstructed and stored in IDB.

- To use this functionality, you must also set the value for the **delivered-flag** option in the **[gts]** section of the Switch object's **Annex** tab to 1.

**Valid Values:**

- `0` - No external party is created.
- `1` - Enables advanced processing to create an external party in specific call scenarios in which a call is sent from a monitored to an unmonitored site and no party associated with the call remains on the monitored site.

The following are examples of call scenarios for which you might need Interaction Concentrator to reconstruct the external party on the unmonitored site:

- Single-step transfer to an external number.

- Single-step transfer to a Routing Point, which then routes the call to an external number.
- Redirection of a call to an external number.
- Routing of a call to an external number in such a way that no party that is associated with this call remains on the monitored site.

The non-monitored external party in these call scenarios is reported on and stored in IDB in the ALERTING state. This affects the following statistics:

- G\_PARTY\_STAT.TT\_ON\_CONNECTED - The total time, in seconds, that all parties in a call were in the CONNECTED state during the lifetime of the party.
- G\_CALL\_STAT.TT\_CONNECTED - The total time, in seconds, during which all parties in a call were simultaneously in the CONNECTED state.

## agent-pstorage-name

**Default Value:** apstorage.db

**Valid Values:** Any valid file name

**Changes Take Effect:** After restart

Specifies the name of the persistent cache file that ICON creates and uses to store information about agent login sessions before writing the information to IDB.

## calls-in-the-past

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies whether ICON stores data for multimedia interactions that begin while ICON is down, or while ICON has no connection to Interaction Server. The data stored for reconstructed interactions is the same as the data stored for the interactions that ICON tracks from their beginning.

### Valid Values:

- 1 - ICON reconstructs operational data about a Multimedia interaction that is already in progress when ICON receives one or more of the following reporting events from Interaction Server: EventPlacedInQueue, EventPlacedInWorkbin, EventAgentInvited, EventPartyAdded.
- 0 - ICON does not record data for multimedia interactions that begin while ICON is down, or while ICON has no connection to Interaction Server.

### Notes:

- The values true and false are also valid.
- ICON cannot restore a correct timestamp of interaction record creation, or the information about

previous parties, or the first values of user data keys.

- In releases from 8.1.000.14 through 8.1.100.34, setting the **om-memory-optimization** option to 1 causes old interactions to be re-created in spite of setting the **calls-in-the-past** option to 0. In release 8.1.100.36 and higher, the **calls-in-the-past** option is no longer overridden by setting the **om-memory-optimization** option to 1.

## cfg-annex

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Enables ICON to store data in the GC\_ANNEX table, which stores changes to all options on the **Annex** tabs of Person, Agent Group, Agent Login, DN, DN Group, and Switch objects. This data enables Genesys Interactive Insights 8.1.4 and higher to control visibility of certain data and reports based on attributes such as geographical location, business line, or organization structure. This data is stored only when ICON has the **cfg** role and the value for this option set to 1.

After you set the value for **cfg-annex** to 1 and then restart ICON, the GC\_ANNEX table is populated with updates to **Annex** tab objects. You can then start the ICON **configuration resynchronization** process to populate the GC\_ANNEX table with options that were present before you set the **cfg-annex** option to 1.

- 1 - ICON processes changes to the specified **Annex** tab options and stores the data to IDB.
- 0 - ICON does not process changes to the specified **Annex** tab options.

## cfg-auto-resync

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately.

Specifies whether ICON will automatically initiate resynchronization of configuration data between Configuration Server data and IDB with the **cfg** role when an inconsistency is detected.

**Valid Values:**

- 0 - ICON does not initiate automatic resynchronization.
- 1 - ICON initiates automatic resynchronization.

## cfg-dbname

**Default Value:** cfg-sync.db

**Valid Values:** Any valid file path, absolute or relative, to the ICON start directory, and any valid file name.

**Changes Take Effect:** After restart

Controls the name and location of the persistent cache file where Configuration Server data used by ICON is stored locally. You can use this in order to run multiple ICON Applications from the same directory using the same executable. Each ICON Application must have a different value for the three following options: **cfg-dbname**, **pq-dbname**, and **agent-pstorage-name**. If the ICON Applications are configured to write log data to a file or files, these filenames should also be different.

**Notes:**

- This file is created only when ICON has **cfg** role set. For more on this role, see the description of the **role** option.
- This file should be on a local hard drive. Avoid placing it on a network or removable drive.

If the specified file name or path is invalid or cannot be opened for writing (such as when it is a read-only file or is located in a write-protected directory), ICON will try to rename it and then create a new file. If it cannot create a new file, ICON prints two standard-level error messages (ICON log events 09-25012 and 09-25024) and then exits.

## cfg-long-vag-script

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately

**Introduced:** 8.1.514.47

For virtual agent group (VAG) skills expressions, which ICON stores in the Script column in the GC\_GROUP table, specifies whether ICON stores values up to 1024 characters or limits the values to 255 characters, truncating the skills expressions if necessary.

**Valid Values:**

- 1 - ICON stores VAG skills expressions values up to 1024 characters.
- 0 - ICON stores VAG skills expression values up to 255 characters.

**Note:** The values `true` and `false` are also valid.

## cluster-iproxy-udata

**Default Value:** `cfg`

**Valid Values:** `cfg`, `none`, `all`

**Changes Take Effect:** After restart

**Related Options:** `adata-userdata-history`

This configuration option supports Genesys Engage cloud implementations only. It specifies the keys

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that ICON receives from the SIP Server IProxy port in AttributeUserData.

**Notes:**

- The adata-userdata-history option continues to control the processing of the keys received.
- This option does not affect EventUserEvent processing. EventUserEvent provides all userdata no matter what value you set for the following option.

**Valid Values:**

- none - The SIP Server IProxy connection sends no keys.
- cfg - The IProxy connection sends keys from the XML configuration file.
- all - The IProxy connection sends all available keys.

## cseq-adjustment

**Default Value:** 0

**Valid Values:** 0, 1, 2

**Changes Take Effect:** Immediately

**Introduced:** 8.1.000.37, 8.1.100.34

Improves sequence tracking for user data in the G\_USERDATA\_HISTORY table, which enables downstream reporting applications, such as Genesys Info Mart, to correctly associate user data with interaction activity when user data updates occur within the same second that the call is transferred or terminated.

To preserve compatibility with legacy behavior, **cseq-adjustment** enables you to control whether ICON implements improved behavior for populating the CSEQ field in the G\_USERDATA\_HISTORY table.

**Valid Values:**

- 0 - Compatibility mode. Preserves legacy behavior for pre-8.x Genesys Info Mart releases. See the extended description for a relevant known issue.
- 1 - Preserves legacy behavior, but corrects the known issue (see extended description). ICON stores correct values in the CSEQ field in the G\_USERDATA\_HISTORY table for all scenarios.
- 2 - Compatibility mode for Genesys Info Mart 8.x releases. ICON modifies the value of the CSEQ field in the G\_USERDATA\_HISTORY table to match the behavior that Genesys Info Mart 8.x expects.

This option is available in release 8.1.000.37 [05/02/2013] and in release 8.1.100.34 [10/01/2013] and higher. It is not included in release 8.1.100.25.

**Note:** The value 0 preserves legacy behavior, which includes the following known issue:

The value set in the CSEQ field in the G\_USERDATA\_HISTORY table sometimes behaves inconsistently. In some scenarios, the last CSEQ value is recorded, in other scenarios the next CSEQ value is recorded. This prevents Genesys Info Mart from consistently associating user data with the correct INTERACTION\_RESOURCE\_FACT if both a user data update and the end of the IRF record occur during the same second. (ER# 312034811)

To retain legacy behavior but correct the known issue, set the option value to 1.

## db-schema-name

**Default Value:**

**Valid Values:** Any string

**Changes Take Effect:** After restart

Specifies the database schema name ICON uses when the RDBMS requires an explicit schema name to be specified when executing stored procedures. For information about what the term *schema name* means and for any delimiters that the RDBMS syntax requires, see the vendor documentation for your RDBMS.

## dbw-request-tout

**Default Value:** 600

**Valid Values:** Any non-negative integer

**Changes Take Effect:** Immediately

Specifies the amount of time, in seconds, that ICON waits for the completion of a database writing transaction. If a transaction is not completed when this interval expires, ICON generates an error message and forces the transaction to be rolled back.

## dbw-req-step

**Default Value:** 500

**Valid Values:** Any non-negative integer

**Changes Take Effect:** After restart

Specifies the reservation value that ICON uses when updating the counter in the SEQCOUNTER field of the G\_PROV\_CONTROL table. At startup, ICON reads the initial counter value ( $M$ ) from the G\_PROV\_CONTROL table, increments the counter in every database transaction, and writes the new value into the GSYS\_SEQ or GSYS\_USEQ field of the tables that are participating in the transaction.

ICON updates the value of the SEQCOUNTER field in the G\_PROV\_CONTROL table as follows:

1. During the first database transaction after startup, ICON inserts the sum ( $L=M+N$ ) of the initial counter value ( $M$ ) and the reservation value specified by the **dbw-req-step** option ( $N$ ). For example, if the initial value that ICON retrieves at startup is 700, and if you keep the default value of 500 for the **dbw-req-step** option, ICON writes 1200 during the first transaction.
2. During the next  $N-1$  transactions, ICON does not update the G\_PROV\_CONTROL table, but updates only those tables that are participating in the transactions.
3. During the  $N$ th transaction, ICON inserts into the G\_PROV\_CONTROL table a new value ( $K=L+N$ ) that is

the sum of the current counter value ( $L$ ) set in Step 1 and the reservation value ( $N$ ).

Continuing the example from Step 1, during the 500th transaction, ICON writes the new counter value of 1700.

4. During each subsequent  $M$ th transaction, ICON uses the same logic to update the value of the SEQCOUNTER field in the G\_PROV\_CONTROL table.

## dbw-seq-tout

**Default Value:** 60

**Valid Values:** Any non-negative integer

**Changes Take Effect:** Immediately

Specifies the amount of time, in seconds, after which ICON writes the current value of the transaction counter to the SEQCURRENT field in the G\_PROV\_CONTROL table. The ICON merge procedure relies on this field for the detection of newly-updated records. (For more information, see the section about the merge stored procedure in the *Interaction Concentrator User's Guide*.)

## dest-busy-processing

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately

This option dynamically enables you to specify how to handle EventDestinationBusy TEvents.

**Valid Values:**

- 1 - ICON processing of EventDestinationBusy records the cause of the party state change; cceventcause is set to busy (value = 1).
- 0 - ICON processing of EventDestinationBusy does not record the cause of the party state change; cceventcause is set to normal (value = 6). This preserves ICON legacy behavior (prior to release 8.0.000.37).

**Note:** The values true and false are also valid.

## dss-no-data-tout

**Default Value:** 300

**Valid Values:** 60-86400

**Changes Take Effect:** After restart

Specifies the time interval, in seconds, after which, if no new data has been written to the persistent queue, ICON creates a "no data" record for the applicable provider and updates the NODATA\_IUTC field in the applicable G\_DSS\_\*\_PROVIDER table. The NoData indication enables you to distinguish cases in which there was no data from those in which a connection problem prevented the data from

being properly recorded.

## enable-fwd-on-routing

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately

**Introduced:** 8.1.514.52

Improves support of scenarios where forwarding occurred during call routing, by enabling correct party records to be created when redirection is detected.

### Valid values:

- 0 — Preserves legacy behavior, which might result in incorrect party creation timestamps in the G\_PARTY table.
- 1 — Correct party records are created when forwarding occurs during call routing.

## enable-supervision-subscription

**Default Value:** false

**Valid Values:** true, false

**Changes Take Effect:** After restart

**Dependencies:** sip-enable-call-info and sip-enable-call-info-extended

**Introduced:** 8.1.514.09

**Related Feature:** Support reporting on agent supervision (monitoring)

**Related Options:** store-event-extensions, EventExtensions

Set this option to `true` to turn on recording of data relating to supervisor monitoring of agent calls.

### Important

To use this functionality, you must also set the values for the following SIP Server options to `true`: **sip-enable-call-info** and **sip-enable-call-info-extended**.

If you intend to report on agent supervision, you must also set the **[custom-states]:store-event-extensions** option to `all` or `conf` and, optionally, use the **[custom-states]:EventExtensions** option to specify particular KVPs to store.

## extended-route-result

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

**Related Options:** report\_reasons, report\_targets

Specifies whether ICON stores extended routing results (statuses of interactions distributed by URS 7.6) in IDB.

**Valid Values:**

- 0 - ICON stores route results in G\_VIRTUAL\_QUEUE and G\_ROUTE\_RESULT IDB tables as implemented in ICON release 7.5.
- 1 - ICON stores extended routing results in G\_VIRTUAL\_QUEUE and G\_ROUTE\_RESULT IDB tables as implemented in ICON release 7.6.

**Notes:**

- The values true and false are also valid.
- For details about the routing results stored in IDB when **extended-route-result** = 0 or 1, refer to the chapter about monitoring virtual queues and route points in the *Interaction Concentrator User's Guide*.
- Writing extended routing results into IDB (G\_ROUTE\_RESULT and G\_VIRTUAL\_QUEUE IDB tables) requires:
  - Universal Routing Server (URS) release 7.6.
  - URS configuration options **report\_reasons** and **report\_targets** set to true.

## gcti-mode-monitoring

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Regulates the mode that ICON uses for multi-site scenario recognition.

**Valid Values:**

- 1 - Enables scenario recognition logic that was implemented in ICON release 7.6.000.21.
- 0 - Preserves ICON legacy behavior (prior to release 7.6.000.21).

## gcti-re-registration-tout

**Default Value:** 0 10

**Valid Values:** 0, any integer between 10 and 1800 (seconds)[space] any integer between 10 and 1800 (seconds)

**Changes Take Effect:** Immediately

**Introduced:** On the Switch level: 8.1.503.03; on the ICON Application level: 8.1.514.09

**Related Feature:** Configuring DN Re-registration

Enables you to control the re-registration timer, which enables you to set up a DN re-registration procedure on the T-Server/SIP Server link. Re-registration attempts will continue until all unregistered DN's on the specified Switch are registered.

This option is configured on the ICON Application object, or on the Switch configuration object, or both. If it is set only on the ICON Application object, it applies to all switches ICON is configured to monitor. If any Switch object is configured with a value different from that set on the ICON Application object, the Switch value takes precedence for that Switch.

This option contains two parameters, which control the following:

- Minimum re-registration timeout
- Maximum re-registration timeout

Configure the option as two integers separated by a space: `minimum maximum`

If you do not configure **gcti-re-registration-tout** (which is equivalent to setting the min re-registration timeout to 0), ICON does not perform re-registration of DN's on this T-Server link. (Note that initial DN-list registration procedure is always performed when ICON starts up).

On connecting to T-Server/SIP Server, ICON starts the registration procedure. If ICON receives DN registration errors, it will continue attempts to register the unregistered DN's, increasing the timeout by the previous timeout value x 1.5 with each attempt, until ICON reaches the specified maximum re-registration timeout value.

**Important:** The increase in the timeout value is intended to reduce network traffic load.

After reaching the max re-registration timeout, ICON returns to the minimum re-registration timeout value and starts the process of building to the maximum timeout again. This process continues indefinitely. After all DN's are registered, ICON deletes the re-registration timer and stops sending requests.

#### **Invalid Values:**

- If you enter an invalid value for the minimum, the value defaults to 0 and no re-registration attempts occur.
- If you enter an invalid value for the maximum, the value defaults to 10.

#### **Reasons the Timer Might Reset**

If you do either of the following, the current re-registration timeout is reset to the minimum timeout value:

- If the minimum value is changed.
- If the maximum value is decreased compared to the previous value.

If the maximum value is increased compared to the previous value, ICON continues the re-registration procedure until the re-registration timeout exceeds the new maximum value.

#### **Examples**

- 20—ICON starts re-registration attempts every 20 seconds. Attempts are endless.
- 10—ICON starts re-registration attempts every 10 seconds. Attempts are endless.
- 3—ICON does try to re-register. The invalid minimum value is reset to 0.

- 60 600—ICON starts re-registration attempts starting at 60 seconds and then increasing the timeout with every attempt in the following pattern: 60 seconds, 90 seconds (60 x 1.5), 135 seconds (90 x 1.5), and so on, until it reaches the max timeout value of 600 seconds. Then ICON continues re-registration attempts starting from the minimum timeout value and repeating the sequence indefinitely.
- 5 300—ICON does not start re-registration attempts. The invalid minimum value is reset to 0.

**Limitation:** This functionality applies to voice Switches only.

**Limitation:** There is a possible scenario in which ICON has sent TRegisterAddress but does not receive an EventError response from T-Server/SIP Server. Because ICON does not receive a response to the previous request, it does not try to send re-registration requests for this DN until the delayed message arrives or until the next time ICON reconnects with the associated T-Server/SIP Server.

## gls-active-reason-codes

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies whether ICON captures and stores the values of active agent state reason codes.

### **Valid Values:**

- 1 - ICON captures active agent state reason codes, and temporarily stores the values in the G\_AGENT\_STATE\_RC\_A table in IDB. When the reason code is terminated, ICON deletes the record from the G\_AGENT\_STATE\_RC\_A table, and it creates a new record for the terminated reason code in the G\_AGENT\_STATE\_RC table, which stores the values of reason codes that have been changed or terminated.
- 0 - ICON stores information about agent state reason codes only when the reason code is changed or terminated. The information is stored in the G\_AGENT\_STATE\_RC table.

**Note:** The values true and false are also valid.

## gls-acw-first

**Default Value:** 0

**Valid Values:** 1, 0

**Changes Take Effect:** After restart

Specifies which interaction ICON associates with after-call work (ACW). By default, ICON associates after-call work metrics with the voice interaction that immediately precedes the completion of the after-call work (the last voice interaction).

Setting this option to 1 enables ICON to associate after-call work with the voice interaction that most recently changed the agent's state from NotBusy to Busy (the first voice interaction). In this case, subsequent voice interactions that occur during the period of after-call work are considered as related to ACW processing and should not interrupt measurement of ACW-related metrics.

When the agent logs out, changes his or her state to Ready, or goes NotReady for any reason other than to perform after-call work, ICON reports the end of the current ACW state.

This option applies to all switches that ICON is configured to monitor. However, the value of this option set in the the Switch configuration object overrides, for that Switch, the value set in the ICON Application object.

**Valid Values:**

- 1 - ICON associates the first voice interaction with after-call work.
- 0 - ICON associates the last voice interaction with after-call work.

**Note:** The values true and false are also valid.

## gls-enforce-reason-code

**Default Value:** 0

**Valid Values:** 0, 1, 2, 3

**Changes Take Effect:** After restart.

Enables you to control whether software (SW) and hardware (HW) reason code changes are processed separately for separate devices in multi-device login sessions. (Multi-device login sessions refers to scenarios in which an agent logs in to a DN and to one or more queues at the same time.)

Specifies whether changes to the HW reason code or the SW reason code for a particular device affect the HW reason code, SW reason code, or both types of reason code on all other devices on which an agent is logged in.

**Valid Values:** (additional explanation and examples in the extended option description)

- 0 - Both types of reason code changes are processed independently for each device.
- 1 - Only HW reason code changes are enforced on all devices.
- 2 - Only SW reason code changes are enforced on all devices.
- 3 - HW or SW reason code changes are enforced on all devices.

**Extended Explanation of Option Values:**

- 0 - Both types of reason code changes are processed independently for each device. A new HW or SW reason code does not terminate the previous HW and SW reason codes for all other devices.  
For example, for an agent logged in to DN1 and Queue1, a change of HW reason code on Queue1 does not affect the SW reason code on Queue1 or either type of reason code on DN1.
- 1 - Only HW reason code changes are enforced on all devices. A new HW reason code becomes active on the device for which it is reported and terminates the previous HW reason codes for all other devices.  
For example, a change of HW reason code on Queue1 terminates the HW reason code on DN1, but it does not affect the SW reason code on Queue1 or DN1; by contrast, a change of SW reason code on Queue1 does not affect the SW reason code on DN1 or the HW reason code on any device.

- 2 - Only SW reason code changes are enforced on all devices. A new SW reason code becomes active on the device for which it is reported and terminates the previous SW reason codes for all other devices.
- 3 - HW or SW reason code changes are enforced on all devices. A new HW reason code becomes active on the device for which it is reported and terminates all previous HW and SW reason codes for all other devices; similarly, a new SW reason code becomes active on the device for which it is reported and terminates all previous HW and SW reason codes for all other devices. A simultaneous change of both HW and SW reason codes on a device makes only the new SW reason code active on the device for which these reason codes are reported, terminates the HW reason code on this device, and terminates all previous HW and SW reason codes for all other devices.  
For example, a change of HW reason code on Queue1 terminates the HW reason code on DN1 and also terminates the SW reason codes on Queue1 and DN1.

## gls-stats-update

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies whether agent metrics (such as the duration of a particular agent state) are updated in the GS\_AGENT\_STAT and GS\_AGENT\_STAT\_WM tables in IDB as the agent login session progresses. By default, ICON stores agent metrics only after an agent login session ends.

**Valid Values:**

- 1 - Agent metrics (such as a state duration) are updated dynamically in IDB.
- 0 - Agent metrics (such as a state duration) are stored in IDB after a login session ends.

**Note:** The values true and false are also valid.

## gls-stats-update-delta

**Default Value:** 10

**Valid Values:** Any integer between 10 and 3600

**Changes Take Effect:** After restart

Specifies the minimum change, in seconds, in the duration of an agent state that causes an updated metric value to be stored in IDB. ICON processes this option only if you set the **gls-stats-update** option to 1.

## gls-store-event-seq

**Default Value:** 1

**Valid Values:** 1, 0

**Changes Take Effect:** After restart

Specifies whether ICON stores event sequence numbers when events related to an agent login session trigger creation of new records in the following IDB tables:

- G\_AGENT\_STATE\_HISTORY
- G\_AGENT\_STATE\_RC
- G\_DND\_HISTORY.

By default, ICON retrieves event sequence numbers from T-Server or Interaction Server Events and stores the numbers, along with new records, in the specified tables.

**Valid Values:**

- 0 - ICON does not store a sequence number of the event that triggered a new record in an agent-related table.
- 1 - ICON stores a sequence number of the event that triggered a new record in an agent-related table.

**Note:** To provide event sequence numbers with multimedia events, Interaction Server release 7.6 or higher is required.

## gos-long-cust-field

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately

**Introduced:** 8.1.514.56

Specifies whether ICON stores values up to 4000 characters for OCS custom-defined fields:

- 1 (true) — ICON stores OCS custom-defined field values up to 4000 characters.
- 0 (false) — ICON stores OCS custom-defined field values up to 255 characters, truncating the OCS custom-defined fields if necessary.

The option affects population of the following tables and columns:

- GO\_Custom\_Fields.Value
- GO\_FieldHist.OldValue
- GO\_FieldHist.NewValue
- GO\_Secure\_Fields.Value
- GO\_Sec\_FieldHist.OldValue
- GO\_Sec\_FieldHist.NewValue

**Note:** The values true and false are also valid.

## gos-write-duplicate-metrics

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies whether all metrics related to active outbound objects are stored in IDB exactly as Outbound Contact Server (OCS) provides them, or whether ICON filters out duplicate metrics. ICON identifies active outbound objects by CampaignGUID, ChainGUID, and CallAttemptGUID.

**Valid Values:**

- 0 - ICON does not subsequently write the same precalculated OCS metric after it is stored in IDB.
- 1 - ICON writes all metrics related to active objects, exactly as OCS provides them, without filtering out possible duplicate metrics.

For more information about outbound-related metrics, refer to "Integrating with Outbound Contact" in the *Interaction Concentrator User's Guide*.

## gos-write-metrics

**Default Value:** 1

**Valid Values:** 1, 0

**Changes Take Effect:** After restart

Specifies whether ICON writes any precalculated OCS metrics to IDB.

**Valid Values:**

- 0 - ICON does not store any precalculated metrics that OCS provides.
- 1 - ICON stores precalculated metrics that OCS provides.

## gos-write-metrics-only

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies whether ICON excludes from database storage all outbound data except precalculated metrics.

**Valid Values:**

- 0 - ICON stores both OCS data and precalculated OCS metrics, regardless of the **gos-write-metrics** option value.

- 1 - Provided that the **gos-write-metrics** option is also set to 1, ICON stores precalculated metrics, but not the other data that OCS provides.

## gud-cust-disp

**Default Value:** 0

**Valid Values:** 0, 1, 2

**Changes Take Effect:** Immediately

Specifies whether ICON calls a custom stored procedure to handle attached data and store the information in custom tables.

ICON starts executing the new custom dispatcher as soon as the new configuration option value is set. Processing of interaction information stored in the persistent queue that was begun by the old custom dispatcher is handled in IDB by the old custom dispatcher.

### Valid Values:

- 0 - ICON does not call a custom dispatcher.
- 1 - ICON calls the gudCustDisp1 stored procedure.
- 2 - ICON calls the gudCustDisp2 stored procedure.

**Note:** For more information, see Custom Dispatchers in the *Interaction Concentrator User's Guide*.

## gud-cust-disp-groups

**Default Value:** 16

**Valid Values:** 0-255

**Changes Take Effect:** After restart

Specifies the maximum number of key groups that ICON can process. If you code more than the maximum number of groups in the XML file, ICON ignores the extra key groups and does not provide data to the active custom dispatcher.

Key names that you specify must be unique both within and across key groups. The maximum number of keys that you can specify for any particular key group is limited to 34 (17 key-value pairs for string values, and 17 for integer values).

A value of 0 indicates that ICON does not process any groups.

## http-protocol-enabled

**Default Value:** 1

**Valid Values:** 1, 0

**Changes Take Effect:** After restart

Enables or disables the HTTP connection to the main ICON port.

**Valid Values:**

- 1 - HTTP connection on main ICON application port is enabled. This is the same functionality as in releases prior to 8.1.
- 0 - HTTP connection on main ICON application port is disabled.

**Note:** The values `true` and `false` are also valid.

## ignore-milliseconds

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately

**Important:** This option is deprecated. It has been replaced by the **timestamp-processing** option.

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.

**Valid Values:**

- 0 - Compatibility mode (8.1.+ ICON behavior). Enables ICON to round microseconds in timestamps to milliseconds, but not across all IDB tables. Note that the millisecond value is not reliable and is provided for reference only. ICON provides only one-second precision for time.
- 1 - No rounding. ICON truncates fractions of seconds for timestamps in any T-Lib and OCS event to seconds. Applied across all IDB tables.

**Notes:**

- When printing events, Interaction Concentrator prints the original values of timestamps, not the rounded or truncated version.
- The value you set for this option does not affect Multimedia events, which do not use fractions of second in timestamps.
- The value you set for this option does affect URS Queued and Diverted events that arrive via T-Server or Interaction Server.
- In compatibility mode (the option value = 0), OCS values are not rounded.
- In compatibility mode (the option value = 0), ICON does not round fractions of seconds for T-Lib events (Queued/Diverted) that were received from Interaction Server.

## log-call-failure

**Default Value:** 0

**Valid Values:** 0, 1, 2

**Changes Take Effect:** Immediately

Specifies whether Interaction Concentrator should print a standard-level error message when any of a number of call-processing errors occur. The message, if configured to appear, identifies the problem call using its CallUUID and call-creation timestamp. For details, see [Setting Alarms for Call Processing Failures](#) in the *Interaction Concentrator User's Guide*.

### Valid Values:

- 0 - ICON does not print a standard-level error message.
- 1 - ICON prints a standard-level error message, but not more often than once every 30 minutes.
- 2 - ICON prints a standard-level error message for every problem call. This value might result in an unduly large number of messages sent to Message Server. Use this value for diagnostic purposes only.

## max-userdata-length

**Default Value:** 255

**Valid Values:** Any integer between 255 - 1024

**Changes Take Effect:** Immediately

**Introduced:** 8.1.512.08

**Modified:** 8.1.514.06 (default value changed)

Specifies the maximum length of data stored in the following columns in IDB:

- The G\_SUBJECT field in the GM\_F\_USERDATA table.
- The VALUE field in the G\_USERDATA\_HISTORY and G\_SECURE\_USERDATA\_HISTORY tables.

If ICON receives userdata values longer than the specified value, they are truncated and ICON generates the Standard-level log message [09-25109](#).

### Notes:

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, ensure that the option is set to 255.

In releases 8.1.512.08, when the option was introduced, through release 8.1.514.05, setting this option value to a longer length, such as 1024 (the default value in the specified releases), can cause various stability, data recording, or downstream reporting problems. In certain instances when this occurs, ICON generates log error message 09-25005.

In release 8.1.514.06 and higher, setting the option to a longer length no longer causes stability or data recording issues.

The default value changed in various releases as follows:

- Prior to 8.1.512.08, the value was hard-coded to 255.
- In releases 8.1.512.08 through 8.1.514.05, the default value was 1024.
- In release 8.1.514.06 and higher, the default was reset to 255.

## mcr-om-processing

**Default Value:** 1

**Valid Values:** 1, 0

**Changes Take Effect:** After restart

Specifies whether ICON stores information about 3rd Party Media interactions in IDB. By default, ICON processes interactions other than chat, e-mail, or voice and stores the type of media in special fields of the following tables: GX\_SESSION\_ENDPOINT, G\_AGENT\_STATE\_HISTORY, GS\_AGENT\_STAT, G\_AGENT\_STATE\_RC, G\_CALL.

**Valid Values:**

- 0 - ICON does not store data in IDB about interactions other than chat, e-mail, or voice. ICON processes neither interactions nor agent data for 3rd Party Media
- 1 - ICON stores information in IDB about 3rd Party Media interactions.

For more information about 3rd Party Media support, refer to "Integrating with Multimedia" in the *Interaction Concentrator User's Guide*.

## om-check-filter-flag

**Default Value:** 1

**Valid Values:** 1, 0

**Changes Take Effect:** After restart

Specifies whether ICON stores strategy activity according to the value of the **om-activity-report** configuration option that is defined in the Script object (of the type Simple Routing). If the value is set to 0, ICON stores *all* strategy activity regardless of the value of the **om-activity-report** option.

## om-flush-adata

**Default Value:** 0

**Valid Values:** 0,1

**Changes Take Effect:** Immediately

**Introduced:** 8.1.514.43

**Related Options:** calls-in-the-past, om-memory-optimization

This option specifies whether ICON stores in IDB the user data values attached to the event that

triggers interaction re-creation in the ICON operational memory. ICON writes to IDB only the user data fields you configured it to store. This compensates for any changes to user data that arrived while the interaction was absent from operational memory. This can happen, for example, if the user data changes arrive attached to an `EventPropertiesChanged` event, which does not trigger interaction re-creation.

- 1 - ICON stores in IDB the user data from the event triggering interaction re-creation. The user data is tagged as updated (`ChangeType = 3`), even if the value has not changed since the previous time it was stored.
- 0 - ICON works as in previous releases.

The following tables are affected:

- `G_USERDATA_HISTORY`
- `G_SECURE_USERDATA_HISTORY`
- `G_CALL_USERDATA_CUST`
- `G_CALL_USERDATA_CUST1`
- `G_CALL_USERDATA_CUST2`

To use this functionality, you must observe the following conditions:

- This feature works only for events received from Interaction Server.
- You must enable memory optimization in the **om-memory-optimization** option.
- You must set the **calls-in-the-past** option to `true`.
- The ICON Application must have the **gud** role configured to store attached user data.

## om-force-adata

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

For deployments that have been configured to report data for multimedia interactions that started in the past (the **calls-in-the-past** configuration option has been set to 1), specifies whether ICON stores a `UserData` snapshot that corresponds to the interaction-related data.

### Valid Values:

- 1 - If the **calls-in-the-past** configuration option has also been set to 1, ICON stores a `UserData` snapshot in the `GM_F_USERDATA` table for interactions created in the past.
- 0 - If the **calls-in-the-past** configuration option has been set to 1, ICON does *not* store a `UserData` snapshot when it restores a Multimedia interaction that was created in the past.

### Notes:

- The values `true` and `false` are also valid.

- When the first event relative to the interaction is EventProcessingStopped, ICON does not restore the interaction. Nevertheless, if the **om-force-adata** option is set to 1, ICON stores the data in the GM\_F\_USERDATA table.

## om-max-in-memory

**Default Value:** 100

**Valid Values:** 1-2000 (in units of one thousand)

**Changes Take Effect:** After restart

Specifies the maximum number of keep-in-memory interactions that were placed in queues or interaction workbins (in units of one thousand).

**Warning:** An incorrect value for this option can affect ICON performance, or cause ICON to stop processing interactions. Keep the default value unless you are advised otherwise by Genesys Customer Care.

If you need to change the option value, use the following formula to calculate an approximate value for this option:

Size of available operational memory (K)/((1,000 + size of user data (K))\*2)

where:

size of user data = average size of the interaction user data that is attached to the interaction in Interaction Server.

## om-memory-optimization

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

**Dependencies:** om-max-in-memory, om-memory-clean

Specifies whether memory usage is optimized.

### Valid Values:

- 1 - ICON optimizes memory usage according to the values that are set for the **om-max-in-memory** option and the Script-level **om-memory-clean** option.
- 0 - Preserves legacy behavior (prior to ICON release 7.6.1).

**Note:** The values true and false are also valid.

In releases from 8.1.000.14 through 8.1.100.34, setting the **om-memory-optimization** option to 1 causes old interactions to be re-created in spite of setting the **calls-in-the-past** option to 0. In

release 8.1.100.36 and higher, the **calls-in-the-past option** is no longer overridden by setting the **om-memory-optimization** option to 1.

## partition-type

**Default Value:** 0

**Valid Values:** 0, 1, 2

**Changes Take Effect:** Immediately

Dynamically specifies the content of the gsys\_partition field in IDB tables that contain this field.

### Valid Values:

- 0 - For all interactions, the gsys\_partition field contains the date, in YYYYMMDD format, from the created\_ts field.
- 1 - For all interactions, the gsys\_partition field contains the UTC from the created\_ts field.
- 2 - For multimedia interactions:
  - In the G\_IR, G\_IR\_HISTORY, G\_CALL, and G\_CALL\_HISTORY tables, the gsys\_partition field contains the UTC from the attr\_itx\_submitted\_at attribute in the Interaction Server EventInteractionSubmitted event.
  - In the G\_AGENT\_STATE\_RC, G\_CALL\_STAT, and GM\_L\_USERDATA tables, the gsys\_partition field contains the timestamp of interaction termination.
  - In all other tables, the gsys\_partition field contains the UTC from the created\_ts field.

### Notes:

- For voice interactions, setting **partition-type=2** has the same effect as setting **partition-type=1**.
- If you are partitioning an Oracle database, you must set the **partition-type** value to 2.
- Genesys Info Mart requires that you set the value of this option to 2.

## ph-use-epn

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately

**Introduced:** 8.1.509.07

**Related Feature:** SIP Cluster

Applies to ICON working in a SIP Cluster environment only. This option determines what ICON writes as the new destination DN name for the final record in the GSYS\_EXT\_VCH1 field of the G\_PARTY\_HISTORY table.

### Valid Values:

- 1 - ICON writes the new destination DN name only when the destination DN is internal.
- 0 - ICON writes the new destination DN name when the destination DN is either external or internal. This value preserves the standard ICON behavior.

## pq-backlog-alarm-threshold

**Default Value:** 0

**Valid Values:** 0-4294967295

**Changes Take Effect:** After restart

Specifies the maximum number of records allowed to be pending in the persistent queue for submission to IDB. When the threshold is reached, ICON generates log message 09-25025.

A value of 0 indicates that no log message will be generated.

The purpose of the option is to enable an alarm to be generated when the number of records not submitted to IDB is unacceptably high because of some failure in the environment. The following are examples of environment failure:

- The database is not available, or it is not responding to ICON requests.
- The load on the ICON server is too high.
- The ICON process has not been suitably configured (for example, large quantities of expensive attached data are being stored).
- The network is slow.
- The load on the RDBMS is too high.
- There is an overall system overload.

To avoid triggering the alarm because of expected fluctuations in the ICON server load, do not set the value of this option too low. The optimal value depends on your specific deployment and contact center activity profile.

Genesys recommends basing the value on the average load in your contact center. For example, if 100,000 records are queued during 15 minutes of average load, consider setting the **pq-backlog-alarm-threshold** value to 400,000, to cover one hour of average load and allow for some peak loads.

## pq-backlog-clearance-threshold

**Default Value:** 0

**Valid Values:** An integer in the range of 0 to (value of pq-backlog-alarm-threshold)

**Changes Take Effect:** After restart

Specifies the minimum number of records pending in the persistent queue. When this number is

reached, ICON will generate message 09-25026, if log message 09-25025 was previously generated (see the **pq-backlog-alarm-threshold** option).

A value of 0 indicates that no log message is generated.

## pq-dbname

**Default Value:** icon\_<dbid>.pq

**Valid Values:** Any valid file name, :memory:

**Changes Take Effect:** After restart

Specifies the name of the persistent queue file that ICON creates and uses to store information before writing the information to IDB. With the default setting, the file name consists of the prefix icon\_, followed by the identifier that Configuration Server assigns to this particular ICON application (the DBID) - for example, icon\_161.pq.

The special value :memory: instructs the Persistent Queue Manager to use memory as storage instead of a physical file. Using memory for persistent queue storage may improve ICON performance with regard to database writes. However, this setting increases memory consumption, and you run the increased risk of losing data in the event ICON terminates abnormally.

### Important:

- Genesys recommends that this file reside locally, not on a network.
- Do not use the :memory: value if the **role** option for the ICON instance is set to cfg. By design, configuration synchronization requires persistent storage, so the temporary storage provided by pq-dbname = :memory: will generate configuration synchronization errors for an ICON configured to perform the cfg role.

## pq-purge-number

**Default Value:** 10

**Valid Values:** Any non-negative integer

**Changes Take Effect:** Immediately

Specifies the number of committed transactions after which ICON purges from its persistent queue the information that is already stored in IDB. For example, if the value is set to 10, ICON performs a purge operation on its persistent queue after every ten transactions.

## pq-startup-check

**Default Value:** 1

**Valid Values:** 1, 0

**Changes Take Effect:** After restart

Specifies whether ICON checks the integrity of its persistent queue at startup. With a large-sized persistent queue file (hundreds of megabytes), the integrity check takes up to three minutes of startup time. For any integrity violations that it finds during the integrity check, ICON issues an error message, changes the extension of the corrupted queue file to **\*.bak**, and creates a new database queue.

**Warning!** If you disable the option, problems with internal PQ file structure might cause ICON to stop processing data. If this happens, ICON logs error message **09-25024** "ICON cannot preserve or store the data." Genesys strongly recommends that you set an alarm on this log message.

**Note:** The values `true` and `false` are also valid.

## pq-startup-purge

**Default Value:** 0

**Valid Values:** 0, 1, any other positive integer

**Changes Take Effect:** After restart

Controls the purging of the persistent queue (PQ) file, which reduces the total file size by releasing unused file space. Purging a large PQ file may take several minutes. Therefore purging is performed only at ICON initialization, before ICON is fully started and has active interactions.

If ICON has unprocessed transactions in the PQ file at startup (for example, because of DBServer or database unavailability during the previous session) only space not occupied by these unprocessed transactions can be released.

### Valid Values:

- 0 - Never purge the PQ file
- 1 - Always purge the PQ file when ICON starts up
- Any other positive number (optionally followed by kb, mb, or gb) - Maximum file size before ICON purges the PQ file at startup. The default unit is bytes; the units should be set in lowercase. For example, you might set the value to 100 mb or 100 kb.

**Note:** When purging the ICON PQ file, the content is copied into a temporary file. ICON then overwrites the original PQ file with the content of the temporary file. This means that the temporary file should have at least two times the size of the original PQ file in available free disk space to safely purge the PQ file.

## role

**Default Value:** all

**Valid Values:** A comma-separated list of valid roles

**Changes Take Effect:** After restart

Specifies the type of data that this ICON instance processes and stores in IDB. The option value must be lowercase. If you use uppercase letters in the option setting, the role defaults to `all`.

**Valid Values:**

- `all` - Stores all types of data.
- `cfg` - Stores the initial configuration state and a history of configuration changes retrieved from Configuration Server.
- `gcc` - Stores interaction-related and party-related information; that is, T-Server and Interaction Server data that pertains to voice and multimedia interactions, and the parties associated with those interactions.
- `gls` - Stores T-Server and Interaction Server data that pertains to agent states and agent login sessions.
- `gud` - Stores T-Server and Interaction Server data that pertains to the attached data associated with calls.
- `lrm` - In an environment with License Reporting Manager, stores license reporting data.
- `gos` - In an environment with the Outbound Contact solution, stores OCS data that pertains to outbound calls and campaigns.

Prefixing an option value with a tilde (~) excludes that type of data from ICON processing, and includes all other types.

**Note:** Ensure that the role that you specify for the ICON instance is consistent with the role that you specify for the DAP.

**Examples:**

- `role = cfg,gcc,gud`
- `role = all`
- `role = gcc,gud,gls,gos`
- `role = ~cfg`

(The last two examples are equivalent.)

## route-res-vqid-hist-enabled

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies whether virtual queue (VQ) IDs associated with G\_ROUTE\_RESULT records are stored in the G\_ROUTE\_RES\_VQ\_HIST table.

**Valid Values:**

- 1 - The G\_ROUTE\_RES\_VQ\_HIST table stores VQ IDs associated with G\_ROUTE\_RESULT records.
- 0 - The G\_ROUTE\_RES\_VQ\_HIST table is not populated.

**Note:** The values `true` and `false` are also valid.

## ssc-processing

**Default Value:** 1

**Valid Values:** 1, 0

**Changes Take Effect:** Immediately

Enables support for single-step conference reporting. By default, this option is set to recognize single-step conferences.

- Single-step conferences made to an external DN are not supported.

**Valid Values:**

- 1 - ICON processes single-step conference scenarios when an internal DN is added to the conference.
- 0 - ICON does not process single-step conference scenarios. This value is provided solely for backward compatibility.

## start-cfg-sync

**Default Value:** -1

**Valid Values:** -1, 0, 1

**Changes Take Effect:** Immediately

Specifies whether ICON performs synchronization of configuration data between Configuration Database and IDB. By default, ICON ignores this option.

To start data synchronization, first set the option value to 0; then, change the option value to 1. This action prompts ICON to start the synchronization process. Once started, the synchronization process completes regardless of the subsequent changes to the option value.

- To perform data synchronization, ICON must have a connection to Configuration Server from the moment you change the option value from 0 to 1 until the moment when data synchronization is complete.

**Valid Values:**

- -1 - ICON ignores this option even when it is defined in the configuration.
- 0 - ICON acknowledges that this option is specified in the configuration and waits for a notification about the option value change from 0 to 1.
- 1 - ICON starts the data synchronization between Configuration Database and IDB under the condition that the value changed first to 0 and then from 0 to 1 during ICON run time. The value of 1 at ICON startup does not trigger the synchronization of configuration data.

## store-releasing-party

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

For those deployments in which T-Server reports the required data, specifies whether ICON stores data in the G\_CALL\_STAT and G\_PARTY\_STAT tables in IDB to identify the party that released the call.

### Valid Values:

- 1 - For terminated calls, ICON stores data about the endpoint and party that initiated termination in the G\_CALL\_STAT table (GSYS\_EXT\_VCH1 and GSYS\_EXT\_VCH2 fields) and G\_PARTY\_STAT table (GSYS\_EXT\_INT1 field) in IDB.
- 0 - ICON does not store data about the endpoint and party that released the call. In the G\_CALL\_STAT table, the value of the GSYS\_EXT\_VCH1 and GSYS\_EXT\_VCH2 fields is an empty string. In the G\_PARTY\_STAT table, the value of the GSYS\_EXT\_INT1 field is 0.

### Notes:

- To determine whether your switch supports this feature, review the documentation for your switch. In Interaction Concentrator release 8.0, this feature is supported only for the Alcatel A4400/OXE switch.
- For information about how ICON populates the values of the fields, see [Identifying Who Released the Call](#) in the *Interaction Concentrator User's Guide*.

## store-route-result-reliability

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

**Dependencies:** extended-route-result, store-route-result-reliability

Determines whether the GSYS\_EXT\_INT1 field in the G\_ROUTE\_RESULT table stores a value indicating the reliability of the data received from Universal Routing Server (URS).

This field is updated based on the values set in the **extended-route-result** and **store-route-result-reliability** options.

- If **extended-route-result** = 1, ICON stores a reliability flag in the GSYS\_EXT\_INT1 field in the G\_ROUTE\_RESULT IDB table.
- If **extended-route-result** = 0 BUT **store-route-result-reliability** = 1, ICON stores a reliability flag.

### Valid Values:

- 0 - No value is stored in the GSYS\_EXT\_INT1 field.
- 1 - ICON stores a value in the GSYS\_EXT\_INT1 field. For the values stored in this field and their meanings, see the Interaction Concentrator 8.1 Physical Data Model document for your RBDMS.

**Note:** The values `true` and `false` are also valid.

## support-unicode

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies whether Interaction Concentrator should expect Unicode data in environments with a Microsoft SQL IDB. This option overrides the DB Server **utf8-ucs2** configuration option, which is configured in the DB Server **Annex** section.

### Valid Values:

- 0 - Retains the same functionality as in previous releases except that some additional Standard-level log messages are generated noting compatibility with the current Configuration Server encoding.
- 1 - ICON checks that all necessary conditions to support Unicode are met: IDB encoding, Configuration Server encoding, and the DB Client version. If any necessary condition is violated, ICON prints a Standard-level log message and shuts down.

### Notes:

- You can leave the default value for this option on Oracle and PostgreSQL RDBMSs.
- If you set the value for this option to 1 but do *not* turn Unicode on for your Oracle or PostgreSQL IDB, Interaction Concentrator generates an error message and shuts down.
- Unicode is not supported on DB2.

## suppress-user-data

**Default Value:** 1

**Valid Values:** Choose a value from the list

**Changes Take Effect:** After restart

Specifies whether ICON instructs T-Server to propagate attached data only when the attached data changes. This optimizes processing of attached data by reducing network traffic.

- **false** Unchanged attached user data is not suppressed.
- **true** Unchanged attached user data is suppressed.

**Note:** This option can be set at the level of the Switch or the ICON application. ICON automatically detects the Switch-level option setting. If the Switch-level option is set to the value of 1 (unchanged attached data suppressed), T-Server TEvents are optimized for all ICON applications that connect to the T-Servers for that Switch. In this case, the Switch-level option setting overrides any ICON-level settings of 0 (unchanged attached data not suppressed). If the Switch-level option is set to -1 (the default), an ICON Application-level setting of 1 will override it.

## sync-call-data-limit

**Default Value:** 1000000  
**Valid Values:** 0-4294967295  
**Changes Take Effect:** Immediately

Specifies the maximum number of pending synchronizations for calls and attached data. This option controls memory consumption during the process of synchronizing calls and user data. The call record is not terminated in IDB until all attached data related to that call has been written to the database. Until then, ICON keeps in memory all information that is related to the call.

If the limit is reached, no more call records are locked until the number of pending synchronizations falls below the configured limit. This situation does not produce any loss or duplication of data, but call records that have not been locked might be marked as terminated before their related attached data has been written to IDB.

- The value 0 indicates that no synchronization takes place.

**Warning!** Genesys recommends that you do not change the default value.

## timestamp-processing

**Default Value:** 0  
**Valid Values:** 0, 1, 2  
**Changes Take Effect:** Immediately  
**Introduced:** 8.1.512.08

Enables you to choose different alternatives for how Interaction Concentrator handles timestamps having fractions of milliseconds in TEvents and Interaction Server events.

### Valid Values:

- 0 - Compatibility mode (8.1.+ ICON behavior).
- 1 - No rounding. ICON truncates fractions of milliseconds for timestamps in IDB.
- 2 - Rounding enabled. ICON rounds fractions of milliseconds for timestamps in IDB.

### Important:

- Interaction Concentrator supports precision only to the level of seconds. Millisecond information is not reliable for TEvents and is not available for multimedia interaction events.
- Datetime timestamps from Microsoft SQL Server have a precision of approximately seven milliseconds. The timestamps are not precise to one millisecond.
- The value you set for this option does affect URS Queued and Diverted events that arrive via T-Server or Interaction Server.

- The value for the **timestamp-processing** option overrides the value set in the **ignore-milliseconds** option. The **ignore-milliseconds** option is deprecated.
- ICON prints the original (untruncated) values of timestamps when printing events.

## trim-broken-utf8

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** Immediately

**Introduced:** 8.1.514.10

**Modified:** 8.1.514.56 (behavior modified); 8.1.514.23

When this option is enabled (**trim-broken-utf8** = 1), ICON checks for and removes incomplete UTF-8 symbols from the end of truncated data strings. These incomplete UTF-8 symbols might occur when a long data string is truncated in the middle of a multi-byte UTF-8 character.

- In releases 8.1.514.10 through 8.1.514.20, this functionality applies to user data written to the following tables: G\_USERDATA\_HISTORY, G\_CUSTOM\_DATA\_S, G\_CUSTOM\_DATA\_P, GM\_F\_USERDATA, and GM\_L\_USERDATA.
- In releases 8.1.514.23 and higher, this functionality applies to data in *all* IDB tables.
- In releases earlier than 8.1.514.56, ICON incorrectly truncated one extra symbol of a long data ASCII string when the string exceeded the size of the database field.

Enable this option if you use long UTF-8 (non-ASCII) data strings and are encountering database error messages resembling the following, which is generated by the PostgreSQL RDBMS: `invalid byte sequence for encoding 'utf-8'`. Similar errors might occur on other RDBMSs.

## tsync-threshold

**Default Value:** 1000

**Valid Values:** 0-2000

**Changes Take Effect:** Immediately

**Discontinued:** 8.1.400.22

**Related Options:** min-tsync-roundtrip

Specifies the maximum time difference, in milliseconds, allowed between the ICON host and the T-Server (or, if applicable, Interaction Server) host. When the threshold is reached, ICON generates standard log message 25130.

A value of 0 indicates that no log message is generated.

See also the Switch-level **min-tsync-roundtrip** option.

## update-ixn-f-adata

**Default Value:** false

**Valid Values:** true, false

**Changes Take Effect:** Immediately  
**Introduced:** 8.1.514.12

Specifies whether Interaction Concentrator updates fields in the GM\_F\_USERDATA table that initially contained NULL values with new data received in the EventPropertiesChanged event. The following fields can be updated: G\_FROM\_NAME, G\_SUBJECT, G\_ORIGIN\_SOURCE, G\_FROM\_ADDRESS.

Only fields with NULL values are updated. If some value was already written to a field, ICON does not change it.

## use-dss-monitor

**Default Value:** 0  
**Valid Values:** 0, 1  
**Changes Take Effect:** After restart

Specifies whether ICON synchronizes user data and call-termination timestamps in IDB, and whether ICON writes to the G\_DSS\*\_PROVIDER tables.

### Valid Values:

- 1 - ICON does not synchronize user data and call-termination timestamps in IDB. As a result, user data and call-termination data are stored independently in IDB. Also, ICON writes data to the G\_DSS\*\_PROVIDER tables.
- 0 - ICON synchronizes user data with call-termination data, or the call-termination data is updated only after user data is stored in IDB. Also, ICON does not write data to the G\_DSS\*\_PROVIDER tables.

The values true and false are also valid.

### Notes:

- If you want the G\_DSS\*\_PROVIDER tables to be populated, you must set the value to 1.
- If you set the **use-dss-monitor** option to 0, the GSYS\_DOMAIN field in all role-related IDB tables contains the value 0 (zero).

## use-nts-call-state

**Default Value:** 0  
**Valid Values:** 0, 1  
**Changes Take Effect:** Immediately  
**Dependencies:** sst-options

Supports reporting on transfers made by agents using Network Attended Transfer (NAT).

- When **use-nts-call-state** is set to 1, you must also set the Switch-level **sst-options** option (found on the **Annex** tab in the **[gts]** section) to 1. If you do not do this, ICON cannot complete the single-step transfer transaction.

**Valid Values:**

- 0 - Keeps the previous ICON behavior, which is to ignore network call states.
- 1 - Recognizes network call states.

**Limitations:**

- ICON does not recognize transfers made via switch DTMF signaling.
- ICON does not recognize Network Attended Conferences or Network Attended Consult calls. For two-step transfers, only the fact of the transfer is reported. The transfers are reported as single-step transfers whether a network consult call happened during the transfer or not.
- If the premise T-Server receives EventNetworkCallStatus from the Network T-Server after the EventReleased, ICON might not always be able to detect the network transfer. As a result, some NAT scenarios may not be recognized by ICON (such as blind or implicit transfers). It is important to test this functionality before using the reported information on Network Attended Transfers in a production environment.

## use-server-partyuuid

**Default Value:** 0

**Valid Values:** 0, -1, 1

**Changes Take Effect:** After restart

**Introduced:** 8.1.508.09

Interaction Concentrator can use the SIP Server PARTYUUID as the PARTYGUID value to support multiple routing attempts in single-site and multi-site scenarios, if SIP Server provides this information. ICON stores the data in the TS\_PARENTPARTYGUID column in the G\_PARTY table with the key name parent-party-uuid from AttributeExtensions.

**Valid Values:**

- 0 - ICON works in compatibility mode and generates the PARTYGUID rather than taking it from an external source. This also means that ICON does not write TS\_PARENTPARTYGUID values. Note that when running in cluster mode, ICON always uses AttributePartyUUID to generate the PARTYGUID.
- 1 - ICON takes the PARTYGUID from AttributePartyUUID (if available) and writes TS\_PARENTPARTYGUID values (if available).
- -1 - ICON behavior is defined at the moment it connects to T-Server or SIP Server.

**Notes:**

- The functionality enabled by this option requires SIP Server release 8.1.102.13 or higher.
- SIP Server provides a parent PARTYUUID value only if the parent party is a Routing Point.

- The party identified by SIP Server in the TS\_PARENTPARTYID field may differ from the party ICON stores in the PARENTPARTYID field. For example, if the parent party is associated with an external routing point, SIP Server reports the grandparent (as reported by ICON) as a parent party.

### Which Option Setting Takes Precedence?

The **use-server-partyuuid** option can be set on the ICON Application level or the Switch level.

- If you set a specific value on the Switch level (0 or 1), this value takes precedence.
- If you set the Switch-level option value to -1 (or leave it as the default) and set the ICON Application object option value to either 0 or 1, then the ICON Application object value takes precedence.
- If you set the option to -1 at both the Switch-level (where it is the default value) and the ICON Application object-level, the actual value is defined when ICON connects to SIP Server or a T-Server. If ICON connects to SIP Server, the value is reset to 1. If ICON connects to a T-Server, the value is reset to 0.

## vq-write-mode

**Default Value:** 0

**Valid Values:** 0, 1

**Changes Take Effect:** After restart

Specifies how ICON writes to IDB information about a particular association between an interaction and a virtual queue.

### Valid Values:

- 0 - ICON stores virtual queue-related data in one step. ICON creates a complete IDB record when the association is terminated, as indicated by either EventDiverted or EventAbandoned.
- 1 - ICON stores virtual queue-related data in two steps. ICON initially creates an IDB record when the association starts, as indicated by the EventQueued TEvent; after the association is terminated, as indicated by either EventDiverted or EventAbandoned, ICON updates the existing record.