



Gplus Adapter

NICE-IEX WFM

Upgrading to Release 7.2

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About this guide

This guide provides a summation of new features and options that are new compared to your current installed Gplus WFM Adapter version. These new features and options should be addressed to ensure a smooth upgrade to v7.2.x.

How to use this guide

1. Determine your current installed version.
2. Go to that version section in this document.
3. Address the items in that section.
4. Continue in the document from that point with the remaining items.
5. Once complete, review the *Gplus Adapter for NICE-IEX WFM 7.2.x Release Note* document to ensure you are up to the most recent release.

Changes to review

Migrating from 6.0.002 or earlier release

6.0.003.01 01/23/2015

Short abandons support added

The "application/shortAbandonEnabled" option was added to allow for short abandons, which are abandons that should not show up in any of the historical reports at all, neither as within a service level or not. Short abandons are not counted in any way towards a service level calculation or in any other metric beyond the initial queueing event, which will still be reported when it occurs. The media specific default thresholds are either set on the media, in "voice/defaultShortAbandonThreshold", "chat/defaultShortAbandonThreshold", or the individual user-configured media type in "media:<mediaType>/defaultShortAbandonThreshold", and are defined in the same format as other time thresholds. The short abandon threshold can also be set per VQ in the annex tab using the "shortAbandonThreshold" option in the respective annex section. The default is zero seconds, and as such, both the "application/shortAbandonEnabled" and the respective threshold must be set for this feature to be active.

application/shortAbandonEnabled

Description: Allows for short abandons.
Default Value: false
Valid Values: true or false

Migrating from 6.0.003

6.0.004.00 01/26/2015

VHT support added

The option section "vht" has been added to allow for reporting on Virtual Hold Concierge Mode voice callbacks. When configured, the initial inbound call and any subsequent callbacks are treated as a single logical call that started when the customer called in. The queue delay will report the entire time, not just the time from the queued outbound callback, and will be reported on the queue it first arrived in on the initial inbound call.

attribute.determiner

Description: Identifies the attribute that contains the unique callback identifier which must be present on the initial call before it is released in order to be recognized by the adapter. This attribute must also be on any and all subsequent events for this callback. Only calls with matching identifiers are matched up.

Default Value: none, not enabled by default

Valid Values: Event Attribute Determiners as described in the Installation guide.

callbackAccepted.determiner

Description: Identifies the attribute that contains the value which indicates that this EventDiverted or EventAbandoned is a callback that should be combined with a later interaction. If this value is not set, all EventAbandoned or EventDiverted events with a VHT identifier will be treated as callbacks.

Default Value: none

Valid Values: Event Attribute Determiners as described in the Installation guide.

callbackAcceptedValue

Description: Identifies the value that indicates that a call is a callback. This value must match the value returned from the "vht/callbackAccepted.determiner". This option is only used if "vht/callbackAccepted.determiner" is set. If this option is not set while the above option is, no calls will be treated as callbacks.

Default Value: none
 Valid Values: Event Attribute Determiners as described in the Installation guide.

defaultRetries

Description: Queued callback attempts only include the callback ID if the call was established. If it was established (whether by a customer, voice mail, or any other reason), it will be tracked as an attempt. This is checked on EventAbandoned, and after the retries amount has been reached, the callback will be treated as an abandon. Due to the callback ID only being present if established, this is not a reliable way to ensure all callback failures are captured, and as such, "vht/defaultTimeout" should also be used. This option also requires that the dialing DN is monitored.

Default Value: 1
 Valid Values: Any positive integer.

defaultTimeout

Description: Specifies how long a VHT call is considered alive and active. After this time, the callback is considered to be abandoned. This is necessary due to the last callback attempt being indistinguishable from the first.

Default Value: 24h
 Valid Values: Threshold Format as described in the Installation guide

timeToFlushAt

Description: If set, this option specifies at what time in UTC that all unclosed callbacks are closed and reported as abandoned. This option allows for a specific interval where all callback abandons occur. This is only applicable if the maximum callback time is less than 24 hours. When this option is set with a defaultTimeout that expires after the timeToFlushAt occurs, the callback is considered and reported as abandoned at the timeToFlushAt.

Default Value: none, not enabled by default
 Valid Values: Any time in hh:mm format (24-hour format)

Migrating from 6.0.004 through 6.0.009

6.1.001.00 04/20/2015

ASM Predictive and Progressive added

The adapter can now report on Predictive or Progressive ASM (Agent Seizing Mode) Campaigns. No special configuration is necessary, however if the dial attempts occur on an unmonitored DN, those dial attempts will not be captured.

Migrating from 6.1.001 through 6.1.002

6.1.003.01 06/16/2015

im media section added

A new media type section "im" has been added for instant messages over SIP. These interactions occur on the TServer and look mostly like calls but are instant messages that are reported as if they were chats.

enabled

Description: enables the tracking of routed IM interactions
Default Value: false
Valid values: true or false

defaultServiceThreshold

Description: sets a default service threshold used for all IM targets
Default Value: 0
Valid values: Threshold Format as described in the Installation guide

defaultAbandonThreshold

Description: sets a default abandoned threshold used for all IM targets
Default Value: 0
Valid values: Threshold Format as described in the Installation guide

defaultShortAbandonThreshold

Description: sets a default short abandoned threshold used for all IM targets
Default Value: 0
Valid values: Threshold Format as described in the Installation guide

interaction.reason.determiner

Description:	identifies the attribute that will be used for the interaction RTA reason. This will be set on EventEstablished and can be updated by EventAttachedDataChanged as well. This reason code does not apply to the agent's place and will be gone when the interaction is.
Default Value:	Not Set
Valid values:	Event Attribute Determiners as described in the Installation guide

maxInteractionTime

Description:	the amount of time that an incomplete IM interaction will be retained before being terminated
Default Value:	Not Set - the interaction will be retained until the Agent logs out if on a place, or until the adapter is turned off, whichever comes first.
Valid values:	Threshold Format as described in the Installation guide

Migrating from 6.1.003 through 6.1.006

6.1.007.00 08/10/2015**ixn logout reason determiner added**

The "event.properties/ixn.logout.determiner" option was added to allow for a reason code to be attached to a logout state. This will appear in the RTA feed's reason code field and the Agent SignOn SignOff Report.

ixn.logout.determiner

Description:	The event attribute that contains the logout reason code.
Default Value:	eventAttribute: ReasonDescription
Valid Values:	Event Attribute Determiners as described in the Installation guide

Migrating from 6.1.007

6.1.008.00 10/15/2015**email.target.determiner and chat.target.determiner replace interactionTarget.determiner**

The "event.properties/interactionTarget.determiner" option originally specified which event attribute would be used as the "queue" for all the media interactions other than

voice calls. This was no longer a viable solution when multiple media were being routed. This has been replaced with "event.properties/chat.target.determiner" and "event.properties/email.target.determiner". Both will fall back to "event.properties/interactionTarget.determiner", but the individual determiner will take precedence if both are set.

chat.target.determiner

Description: The event attribute that contains the queue (or other) identifier the chat interaction is to be reported under.

Default Value: eventAttribute: ThisQueue

Valid Values: Event Attribute Determiners as described in the Installation guide

email.target.determiner

Description: The event attribute that contains the queue (or other) identifier the email interaction is to be reported under.

Default Value: eventAttribute: ThisQueue

Valid Values: Event Attribute Determiners as described in the Installation guide

Migrating from 6.1.008

6.1.009.00 11/01/2015

Initial support for Genesys Callback

Initial support for *Genesys Callback*, see current installation guide for details.

Migrating from 6.1.009

6.1.010.00 12/08/2015

application/lcalnStalled option added

The "application/lcalnStalled" option was added to allow for the adapter to be installed on a machine without LCA (Local Control Agent). Previously, exceptions would be thrown in the logs on every reconnect attempt.

application/lcalnStalled

Description: allows the adapter to be installed on a machine without LCA.

Default Value: true

Valid Values: true or false

Migrating from 6.1.010

6.1.011.00 12/23/2015

ftp session timeouts are now configurable

The "historical.ftp/sessionTimeout" and "historical:<streamName>/ftp.sessionTimeout" options have been added to allow for ftp sessions on slow networks where the 120s default timeout is insufficient.

historical.ftp/sessionTimeout or historical:<streamName>/ftp.sessionTimeout

Description: the maximum duration that an SSH session transferring report files will be kept open.

Default Value: 120s

Valid Values: Threshold Format as described in the Installation guide

Determiners can be chained in comma separated lists

The various determiners are now configurable with comma separated lists of determiners. For example, if a reason code could be in two different places, the determiner could be set up as something like "eventAttribute: Reasons.ReasonCode, eventAttribute: UserData.ReasonLocation".

Migrating from 6.1.011 through 6.1.012

6.1.013.00 04/04/16

outbound/pushPreviewMediaType was added for non-default Push Preview media types

The "outbound/pushPreviewMediaType" option was added to allow for non-default media types used with Push Preview Campaign calls.

outbound/pushPreviewMediaType

Description: the media type that contains the Push Preview outbound records

Default Value: outboundpreview

Valid Values: any string matching the interaction's media type exactly, case sensitive

Migrating from 6.1.013

6.2.001.01 05/12/16

Option to ignore campaign target determiner

The adapter can now be configured to ignore the campaign target determiner on Campaign consult calls, using the inbound reporting instead.

outbound/ignoreCampaignConsults

Description: specifies whether the campaign target determiner is used (false) or the inbound callType determiner is used (true).

Default Value: false

Valid Values: true or false

Addp settings

The addp settings have changed names from previous versions. The same number of options exist, only the names changed. This is set in the addpTraceMode option in the GPlusWFM.properties file.

Addp Trace Mode	Previous Name	6.2 Name
None	Off	None
Local	local	Local
Remote	remote	Remote
Trace on Both Sides	full	Both

callback/connectedValue option was removed

The callback/connectedValue option was removed, as it is no longer needed.

event.properties/interactionTarget.determiner option replaced

The event.properties/interactionTarget.determiner option has been replaced with the event.properties/chat.target.determiner and event.properties/email.target.determiner options.

Migrating from 6.2.001.01

6.2.002.00 06/22/16

Support to change recovery log location

The adapter can now be configured to write the recovery log to a non-default location. This can be specified in the GPlusWFM.properties file using the recoveryPath option.

The reported RTA state for an open outbound record concurrent with ACW at the end of an outbound campaign has been changed from OutboundPreview to AfterCallWork.

A new media filter type has been added to the filter:<filterName> option sections. The associated media type can be either included or excluded by using the new filter.

filter:<filterName>/media.<mediaType>

Description: allows the configured filter to include or exclude specific media types

Default Value: media.*=include

Valid Values: include or exclude

A new option section, individualDNs has been added to allow for monitoring of DN's that do not fall into the existing categories. The DN number is the option key, and the option value is ignored. This is most likely to be used when a dialer is being used.

Migrating from 6.2.002 through 6.2.006

6.2.007 09/15/16

Password options

Password options have been added to the Adapter to ensure that the passwords used by the application are not presented as plaintext in either *Genesys Administrator* or *Configuration Manager*. When the Adapter is parsing the configuration Options, it will use the four new Options if they have been set. If the new Options are not present, then the Adapter will default to the original replaced Options that will still show the associated passwords as plaintext.

historical.ftp/password

Description: contains the hidden password for the FTP connection

Replaces: historical.ftp/userPassword

Valid Values: any alphanumeric password

historical:<streamName>/password

Description: contains the hidden password for the Stream's FTP connection

Replaces: historical:<streamName>/ftp.userPassword

Valid Values: any alphanumeric password

rta/password

Description: contains the hidden password for the RTA connection

Default Value: rta/nice_iex.password

Valid Values: any alphanumeric password

rta:<streamName>/password

Description: contains the hidden password for the Stream's RTA connection

Default Value: rta:<streamName>/nice_iex.password

Valid Values: any alphanumeric password

Migrating from 6.2.007 through 6.2.013

6.2.014 03/07/17

Agent LoginID not required

The Adapter no longer requires that an Agent LoginID be used in the AgentID attribute of voice TServer/SIPServer events. The default behavior is to still check the AgentID attribute against the list of Agent LoginIDs but if there is no match, the Adapter attempts to match one of the EmployeeID fields in the list of CfgPerson objects.

Migrating from 6.2.014 through 6.2.016

6.2.017.00 04/19/17

A new option, application/logoutOnEmptyMediaTypes, has been added.

This option changes the adapter behavior when an agent logs out of all medias but has not logged out of Interaction Server. The agent will be considered logged out if this option is set. This is intended for use with Agent Desktops that fail to log out correctly.

application/logoutOnEmptyMediaTypes

Description: When set to true, an agent will be considered logged out after logging out of the last media. When set to false, the agent would still be considered to be logged in until logging out of the servers as well.

Default Value: false

Valid Values: true or false

A new option, application/pendingLogout, has been added.

This option allows for agents to still be reported on if they logout mid-interaction until the interaction is complete.

application/pendingLogout

Description:	When set to true, the logout will be delayed until the interaction is complete. When set to false, all reporting activity gets truncated when the agent logs out.
Default Value:	false
Valid Values:	true or false

Migrating from 6.2.017 through 6.2.019

6.2.020.00 06/19/17**New functionality has been added to support the new Premise version of Genesys Callback 8.5.**

The original support added with Hot Fix Release 6.1.009.00 was restricted to the initial Cloud version. Both "customer first" and "agent first" modes are supported for the Premise version. These modes refer to whether the customer or the agent is the first party on the outbound callback. Tracking the unsuccessful callbacks in "agent first" mode has required the adapter to delay processing those callbacks when determining when the retry limit has been reached (the information is not available to the adapter). The delay is configurable through a new option and it should be greater than the combination of the configured delay between callback retries and the time threshold that an agent has to refuse a callback retry. After this delay expires, the callback will be considered abandoned. Configuring this delay requires a low-level knowledge of the Callback implementation details and should be undertaken with the collaboration of qualified personnel. For more details, see the section on callback in the installation guide. The default value for callback/connectedDeterminer was changed to reflect these changes as well.

callback/callbackType

Description:	Whether the premise or cloud logic is used by the adapter.
Default Value:	cloud
Valid Values:	cloud or premise

callback/abandonDelay

Description:	The delay between the last attempt and when a callback should be considered abandoned for "agent first" callbacks. Since this option defaults to 0, this option must be set if "agent first" callbacks are used.
Default Value:	0
Valid Values:	any non-negative integer

callback/connectedDeterminer

Description:	The determiner used to check on EventDiverted if the call was answered by an agent or if it was a failed attempt.
Default Value:	eventAttribute: UserData._CB_T_CUSTOMER_CONNECTED
Valid Values:	any event attribute name found in the EventDiverted that contains the connection timestamp or status flag.

Migrating from 6.2.020

6.2.021 08/14/17

The Virtual Hold flush time can now be set on a per VQ basis

The Virtual Hold flush time can now be set on a per VQ basis in the annex tab using the vhtFlushTime option in the annex tab with the other per VQ settings. This allows for the flush time to be set based on local timezones that may differ based on site or line of business.

vhtFlushTime

Usage:	set the Virtual Hold flush time for all calls queued in the VQ
Default Value:	not set
Valid Values:	00:00 to 23:59 (24-hour clock - GMT)

New options, rta/reportDndAsNotReady and rta:<streamName>/reportDndAsNotReady, have been added.

This allows for Do Not Disturb to be reported as DndOn instead of as NotReady.

rta/reportDndAsNotReady

Description:	If set to true, DndOn will be used when reporting Do Not Disturb. If set to false, NotReady will be used instead.
Default Value:	false
Valid Values:	true or false

rta:<streamName>/reportDndAsNotReady

Description:	If set to true, DndOn will be used when reporting Do Not Disturb. If set to false, NotReady will be used instead.
Default Value:	false
Valid Values:	true or false

Migrating from 6.2.021 through 6.2.022

6.2.023 11/09/17

New option, nice_iex.version

A new option, nice_iex.version, has been added to the rta and rta:<streamName> options. This option allows the adapter to use the increased size limits specified for NICE-IEX versions of 4.0 and greater for the following fields in the RTA messages:

- Logon ID - maximum 256 characters in 4.x, maximum of 40 characters in 3.x
- Agent State - maximum 100 characters in 4.x, maximum combined width of 19 of both Agent State and Reason Code in 3.x
- Reason Code - maximum 100 characters in 4.x, maximum combined width of 19 of both Agent State and Reason Code in 3.x

rta/nice_iex.version

Description: sets the NICE-IEX specification level to use. 4.x will use the above field widths. 3.x will use the old values.

Default Value: 3.x

Valid Values: 3.x or 4.x

rta:<streamName>/nice_iex.version

Description: sets the NICE-IEX specification level to use. 4.x will use the above field widths. 3.x will use the old values.

Default Value: 3.x

Valid Values: 3.x or 4.x

Migrating from 6.2.023 through 6.2.026

6.2.027 01/31/19

New timeZone options have been added to the historical:<streamNames> option sections.

This allows for reports to be formatted using a different timezone than from the main timezone found in application/timeZone.

historical:<streamName>/timeZone

Description: the timeZone to be used in this stream. If this is not set, the value from application/timeZone will be used.

Default Value: not set
Valid Values: any Java TimeZone

Migrating from 6.2.027 through 6.2.029

6.2.030 06/19/19

More than one FTP transfer attempt

The adapter can now be configured to make more than one FTP transfer attempt when the files are written using the new option `historical.ftp/retry`. Unless the FTP server being used or the network it is on is unreliable, this option should not be required. The new option specifies the number of retries to be attempted. Depending on security policies, too many attempts in a short time could cause problems, and this option should not be set without consulting your system administrators. This is a global setting and applies to all historical streams.

`historical.ftp/retry`

Description: how many retries to attempt after failing to send the reports via FTP
Default Value: 0
Valid Values: 0 to 25

Migrating from 6.2.030 through 6.2.031

7.0.100.01 05/04/18

Java 6 is no longer supported.

OpenJDK 11 is required for 7.2.x versions. This change was made to align with Genesys' supported Java versions, and due to the lack of continued support for the older versions.

Graceful shutdown via SCS

The adapter can now be gracefully shut down via SCS. The adapter will write a `stateDump.json` file that enables the long running interactions, their backlog levels, and their initial queue times to be recovered. This will only happen if they are still queued when the adapter restarts. This is intended for situations where the Genesys environment is being brought down for maintenance, as bringing down the adapter while activity is still occurring will cause data loss.

The adapter now supports TLS version 1.2 (all), and TLS version 1.3 (7.1.x and 7.2.x only).

These are part of the Java Security suite and are connected to the Java version used in that version of the adapter.

The adapter can now make use of IPv6 addresses for Genesys server connections.

New option, extendedRtaStates

A new option, extendedPhoneStates, has been added that enables OffHook, Dialing, and Ringing phone states as reported RTA states if set to true.

rta/extendedPhoneStates

Description: adds phone states to the reported RTA states.
 Default Value: false
 Valid Values: true or false

rta:<streamName>/extendedPhoneStates

Description: adds phone states to the reported RTA states.
 Default Value: false
 Valid Values: true or false

Option name changes

The following option names have been changed to reflect the incorporation of the *IEX Total View* into the NICE product suite. The options retain their former functionality:

- historical.reports/iex.version has changed to historical/nice_iex.version
- rta/iex.heartbeat has changed to rta/nice_iex.heartbeat
- rta/iex.listenPort has changed to rta/nice_iex.listenPort
- rta/iex.password has changed to rta/nice_iex.password
- rta/iex.userName has changed to rta/nice_iex.userName

Migrating from 7.0.100.01

7.0.101 05/18/18

New option, timeZone, added to the historical:<stream name> Option section

timeZone

Description: This option sets the time zone for the stream's report timestamps.

Default value:	NA (By default, this value is not set)
Valid Values:	Time Zone IDs for the Java JVM - listed in Appendix A of the installation document.

Migrating from 7.0.101 through 7.0.104

7.0.105 04/24/19

New option, `retry`, added to the `historical.reports` Option section

`retry`

Description:	sets the maximum ftp retries.
Default value:	0
Valid Values:	0 to 25

Migrating from 7.0.105+, 7.1.001+, or 7.2.001+

Changes from these versions onward are the same in the 7.0, 7.1, and 7.2 releases. Refer to *Gplus Adapter for NICE-IEX WFM 7.2.x Release Note* document for additional updates.