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Orchestration Server Developer's Guide

Interaction Interface Object Model

12/12/2025

Contents

- 1 Interaction Interface Object Model
- 2 _genesys.ixn Object
 - 2.1 _genesys.ixn.mediaType ENUM Object
 - 2.2 _genesys.ixn.callState ENUM Object (since 8.1.3)
- 3 Interaction Objects
 - 3.1 interaction Object
 - 3.2 party Object
- 4 Voice Objects
 - 4.1 voice Object
 - 4.2 voicep Object
- 5 Message Objects
 - 5.1 msgbased Object
 - 5.2 msgbasedp Object
 - 5.3 content Object
- 6 Chat Objects
 - 6.1 chat Object
 - 6.2 chatp Object
 - 6.3 chatmessage Object

Interaction Interface Object Model

The following are the ECMAScript objects for the interaction model interface. **Notes:**

- The object model is changed only in results of events. Every interaction event can result in a change in content of the "object model".
- After the session is started, it does not have any interactions - the `_genesys.ixn.interactions[]` array is empty (even if the platform started the session at the request of an interaction).
- Before accessing or manipulating interactions, the application logic must be sure that session has at least one interaction in its data (that is, the `_genesys.ixn.interactions[]` array is not empty). For example, the session needs to wait for an event like `interaction.added` before trying to use the interaction array.
- Attempts to access interactions in the object model before they are available will result in a runtime exception in the session, with the corresponding error event.

_genesys.ixn Object

Each SCXML session will have an association with the Interaction functional module (if an interaction is involved with the session). This object allows the session to access the set of interaction-related objects and properties that are associated with the given SCXML session. The name of the object will be "_genesys.ixn". This object is accessible through the _genesys.FMname property.

Name	Access	Type	Default Value	Valid Values	Description
interactions	read only	array of interaction objects	none		This is the list of interactions currently associated with the logic. Each interaction will be represented by an ECMAScript object owned by the Interaction functional module. For routing strategy-based logic only the first entry in the list (interactions[0]) will be used. This list is maintained by the orchestration platform based on the interaction between the orchestration logic and the interaction-related functional modules. So when an interaction is associated with the orchestration logic through an event or action, it is added to the list and when the interaction ends it is removed from the list. This property (list only) is read only. See section interaction object for details on the interaction object.

_genesys.ixn.mediaType ENUM Object

This represents the media type enumeration.

Name	Access	Type	Default Value	Valid Values	Description
TMediaVoice	read only	integer	none	0	The media for the interaction is voice.
TMediaVoIP	read only	integer	none	1	The media for the interaction is VoIP.
TMediaEMail	read only	integer	none	2	The media for the interaction is e-mail.
TMediaVMail	read only	integer	none	3	The media for the interaction is voice mail.
TMediaSMail	read only	integer	none	4	The media for the interaction is snail mail.
TMediaChat	read only	integer	none	5	The media for the interaction is chat.
TMediaVideo	read only	integer	none	6	The media for the interaction is video.
TMediaCobrowsing	read only	integer	none	7	The media for the interaction is co-browse.
TMediaWhiteboard	read only	integer	none	8	The media for the interaction is whiteboard.
TMediaAppSharing	read only	integer	none	9	The media for the interaction is application sharing.
TMediaWebform	read only	integer	none	10	The media for the interaction is web form.
TMediaWorkItem	read only	integer	none	11	The media for the

Name	Access	Type	Default Value	Valid Values	Description
					interaction is work item.
TMediaCallback	read only	integer	none	12	The media for the interaction is callback.
TMediaFax	read only	integer	none	13	The media for the interaction is fax.
TMediaIMChat	read only	integer	none	14	The media for the interaction is IM.
TMediaBusinessEvent	read only	integer	none	15	The media for the interaction is business event.
TMediaAlert	read only	integer	none	16	The media for the interaction is alert.
TMediaSMS	read only	integer	none	17	The media for the interaction is SMS.
TMediaOutboundPreview	read only	integer	none	18	The media for the interaction is outbound preview.
TMediaOpenMedia	read only	integer	none	19	The media for the interaction is open media item.
TMediaNativeSMS	read only	integer	none	20	The media for the interaction is native SMS.

_genesys.ixn.callState ENUM Object (since 8.1.3)

This represents the call state type enumeration.

Name	Access	Type	Default Value	Valid Values
Ok	read only	integer	none	0

Name	Access	Type	Default Value	Valid Values
Transferred	read only	integer	none	1
Conferenced	read only	integer	none	2
GeneralError	read only	integer	none	3
SystemError	read only	integer	none	4
RemoteRelease	read only	integer	none	5
Busy	read only	integer	none	6
NoAnswer	read only	integer	none	7
SitDetected	read only	integer	none	8
AnsweringMachineDetected	read only	integer	none	9
AllTrunksBusy	read only	integer	none	10
SitInvalidnum	read only	integer	none	11
SitVacant	read only	integer	none	12
SitIntercept	read only	integer	none	13
SitUnknown	read only	integer	none	14
SitNocircuit	read only	integer	none	15
SitReorder	read only	integer	none	16
FaxDetected	read only	integer	none	17
QueueFull	read only	integer	none	18
Cleared	read only	integer	none	19

Name	Access	Type	Default Value	Valid Values
Overflowed	read only	integer	none	20
Abandoned	read only	integer	none	21
Redirected	read only	integer	none	22
Forwarded	read only	integer	none	23
Consult	read only	integer	none	24
Pickedup	read only	integer	none	25
Dropped	read only	integer	none	26
Droppednoanswer	read only	integer	none	27
Unknown	read only	integer	none	28
Covered	read only	integer	none	29
ConverseOn	read only	integer	none	30
Bridged	read only	integer	none	31
SilenceDetected	read only	integer	none	32
Deafened	read only	integer	none	49
Held	read only	integer	none	50

Interaction Objects

interaction Object

Each interaction associated with a given SCXML session will have an object to represent the common properties of an interaction. This object and its properties are maintained by the functional module, but certain properties can be set or updated by the orchestration logic itself. The name of the object will be "interaction". This object is accessible through the `_genesys.FMname.interactions[]` property. This is the set of properties for the object:

Name	Access	Type	Default Value	Valid Values	Description
g_uid	read only	string	none		This is the globally unique ID for the interaction that is defined by the underlying media system. <ul style="list-style-type: none">• T-Server - g_uid• Interaction Server - attr_itx_id
category	read only	string	none	voice, msgbased, chat	This is the media category associated with the interaction. It defines the type of media extension that is associated with the interaction.
tenantid	read only	string	none		This is the ID of the tenant that this interaction was originated from.
parentid	read only	string	none		This is the globally unique ID of this interaction's parent interaction.
contactedaddr	read only	string	none	Any valid string that represents the address	This is the address of the resource that was initially contacted and

Name	Access	Type	Default Value	Valid Values	Description
					<p>started this interaction. This property will also be represented in a media- or channel-specific property. For example:</p> <ul style="list-style-type: none">• <code>_genesys.ixn.interaction</code> for voice interactions• <code>_genesys.ixn.interaction</code> for msgbased interactions
parties	read only	array of party objects	none		<p>This is the list of parties or resources currently associated with the interaction. Each party will be represented by an ECMAScript object owned by the Interaction functional module.</p>
udata	read only	object	none	Any valid ECMAScript object	<p>This is application data that can be associated with and attached to the interaction so that the coordination of processing between resources is seamless. An application will manage this data through this property and the defined set of functions. For example,</p> <ul style="list-style-type: none">• Get udata kvpair value - <code>xvalue = _genesys.ixn.interaction</code>• Set or add udata kvpair - <code>_genesys.ixn.setuData()</code>• Remove

Name	Access	Type	Default Value	Valid Values	Description
					<p>udata kvpair - _genesys.ixn.deleteuDa</p> <p>As a result of these actions, the appropriate action will be taken on the underlying Interaction functional module system (for example, T-Server and user data). The udata property does not support ECMAScript arrays either as a value of the udata property or as a property of any object in the tree. This will be used not only for user data, but also for URS-based business data and interaction data.</p>
voice	read only	voice object			<p>This is the object that contains the voice extensions to the interaction. NOTE: This property only exists for voice interactions.</p>
msgbased	read only	msgbased object			<p>This is the object that contains the msgbased extensions to the interaction. NOTE: This property only exists for message based interactions.</p>
chat	read only	chat object			<p>This is the object that contains the chat extensions to the interaction. NOTE: This property only exists for chat interactions.</p>
xdata	read only	object	none	Any valid ECMAScript object	<p>This is extension data that has been associated with the interaction as a</p>

Name	Access	Type	Default Value	Valid Values	Description
					result of the event that started this session and is read only. An application may access extension data through this property. For example, Get xdata kvpair value - x value = _genesys.ixn.interactions[x].xda
location	read only	object	none		This is the location property of the interaction. This object consists of the following properties: control_server media_server

party Object

Each party or business resource involved in the associated interaction will be represented by an object and a common set of properties. These objects and their properties are maintained by the functional module, but certain properties can be set or updated by the orchestration logic itself. The name of the object will be "parties" and is accessible through the **interaction object**. This is the set of properties for the object:

Name	Access	Type	Default Value	Valid Values	Description
g_uid	read only	string	none		This is the globally unique ID for the party that is defined by the underlying media system.
interactionid	read only	string	none		This is the globally unique ID of the interaction this party belongs to.
devicetype	read only	unknown	For voice: agent, queue, routepoint, treatmentport, unknown For multimedia: queue, unknown For non-voice		This is the general type of device associated with this interaction.

Name	Access	Type	Default Value	Valid Values	Description
			and non-multimedia: customer		
device	read only	string	null		This is the device associated with this interaction party.
resource	read only	string	null		This is the resource ID associated with this interaction party.
voicep	read only	voicep object			This is the object that contains the voice extensions to the party. NOTE: This property only exists for voice interactions.
msgbasedp	read only	msgbasedp object			This is the object that contains the msgbased extensions to the party. NOTE: This property only exists for message based interactions.
chatp	read only	chatp object			This is the object that contains the chat extensions to the party. NOTE: This property only exists for chat interactions.

Voice Objects

voice Object

The following is the ECMAScript object which contains the interaction extensions for voice-related interactions. Properties of that object may be updated during interaction lifetime, for example, when interaction parties have been added/removed/changed, so keep that in mind when you decide to use them. This object is accessible through the `_genesys.FMname.interactions[].voice` property. These properties can be dynamically accessed using the following format: `_genesys.FMname.interactions[x].[_genesys.FMname.interactions[x].category].xxx`. They are also accessible via actions or events. The following are the voice extension properties of the interaction object.

Name	Access	Type	Default Value	Valid Values	Description
type	read only	string	none	unknown, internal, inbound, outbound, consult, callback	This is the origin type of the interaction.
media	read only	string	none	The following properties from <code>_genesys.ixn.mediaType</code> object: <code>TMediaAny</code> , <code>TMediaCallback</code> , <code>TMediaOutboundPreview</code> , <code>TMediaVideo</code> , <code>TMediaVMail</code> , <code>TMediaVoice</code> , <code>TMediaVoIP</code>	This is the originating media type of the interaction.
ani	read only	string	none		This is the ANI associated with the calling party.
dnis	read only	string	none		This is the DNIS associated with phone number that the customer called.
ced	read only	string	none		This is the last set of digits collected from the caller. NOTE: This property is populated from the event data, which is optional. If digits were collected, then this

Name	Access	Type	Default Value	Valid Values	Description
					properly is set.
acdq	read only	string	none		This is the ACD queue that this interaction is or was queued in. NOTE: This property is populated from the event data, which is optional. If ACD queue was used, then this property is set.
callid	read only	string	none		This is the callid created by the switch.
connid	read only	string	none		This is the connection ID generated for this interaction by the underlying media system (that is, T-Server).

voicep Object

The following are the voice-specific values for the party object.

Name	Access	Type	Default Value	Valid Values	Description
state	read only	string	none	null initiated alerting connected hold queued fail	This is the state of the party in relationship to the interaction.

Message Objects

msgbased Object

The following is the ECMAScript object which contains the interaction extensions for msgbased-related interactions. This object is accessible through the `_genesys.FMname.interactions[].msgbased` property. These properties can be dynamically accessed using the following format: `_genesys.FMname.interactions[x].[_genesys.FMname.interactions[x].category].xxx`. They are also accessible via actions or events. The following are the msgbased extension properties of the interaction object.

Name	Access	Type	Default Value	Valid Values	Description
type	read only	string	none	The list of valid values are those that are defined in configuration server under: Business Attributes / Interaction Attributes / Attributes Values	This is the origin type of the interaction.
state	read only	string	none	queued, cached, routing, handling, unknown	This is the state of the interaction.
media	read only	string	none	The following properties from <code>_genesys.ixn.mediaType</code> object: TMediaAny, TMediaEMail, TMediaFax, TMediaSMail, TMediaNativeSMS, TMediaSMS, TMediaWebForm, TMediaOpenMedia	This is the originating media type of the interaction.
from	read only	URI	none	Any valid string or Resource Object	This is the address that the message came from.
to	read only	array of URIs	none	Any valid string or Resource Object	This is the list of addresses that this message was sent to
cc	read only	array of URIs	none	Any valid string or	This is the list of

Name	Access	Type	Default Value	Valid Values	Description
				Resource Object	addresses that were copied on this message.
queue	read only	string	none	Any valid string	This is the current queue name associated with this interaction.
view	read only	string	none	Any valid string	This is the current view associated with this interaction. First appears in Orchestration release 8.1.2
subject	read only	string	none	Any valid string	This is the subject line of the associated message.
content	read only	content object	none	none	<ul style="list-style-type: none"> • This property is not yet supported*** <p>This is the content of the message itself.</p>
received_at	read only	string	none	none	Value of "_attr_itx_received_at" interaction attribute
submitted_at	read only	string	none	none	Value of "_attr_itx_submitted_at" interaction attribute
placed_in_queue_at	read only	string	none	none	Value of "_attr_itx_placed_in_queue_at" interaction attribute
is_online	read only	boolean	none	none	Value of "_attr_itx_is_online" interaction attribute

Name	Access	Type	Default Value	Valid Values	Description
is_locked	read only	boolean	none	none	Value of "_attr_itx_is_locked" interaction attribute
moved_to_queue_at	read only	string	none	none	Value of "_attr_itx_moved_to_queue_at" interaction attribute
externalID	read only	string	none	none	This is the ID of the interaction that has been assigned by the originating media server.

msgbasedp Object

The following are the msgbased-specific values for following the party object.

Name	Access	Type	Default Value	Valid Values	Description
state	read only	string	none	null initiated alerting connected hold queued fail	This is the state of the party in relationship to the interaction.

content Object

The following are the msgbased-specific values for following the message content object.

Name	Access	Type	Default Value	Valid Values	Description
btype	read only	string	none	application/ msword, application/octet- stream, application/ postscript, application/rtf, application/ vnd.ms- powerpoint, application/	This is a string that specifies the MIME type of the binary content.

Name	Access	Type	Default Value	Valid Values	Description
				vnd.ms-project, application/vnd.visio, application/voicexml+xml, application/xml-dtd, application/zip, audio/basic, audio/mpeg, audio/mpeg4-generic, image/gif, image/jpeg, image/tiff, message/delivery-status, message/http, message/news, message/partial, message/rfc822, message/sip, message/sipfrag, message/tracking-status, multipart/alternative, multipart/form-data, multipart/mixed, multipart/parallel, multipart/voice-message, text/html, text/plain, text/richtext, text/xml, video/DV, video/JPEG, video/MPEG, video/mpeg4-generic, video/quicktime, video/raw	
binary	ready only	binary	none	none	This is the complete content of the message (for example, raw text plus MIME content, if any, plus attached files if any).
structuredtext	ready only	string	none	none	This is only the structured content of the message.
text	read only	string	none		This is only the raw text content (unformatted and unstructured) of the message

Chat Objects

chat Object

The following is the ECMAScript object which contains the interaction extensions for chat-related interactions. This object is accessible through the `_genesys.ixn.interactions[].chat` property. These properties can be dynamically accessed using the following format: `_genesys.ixn.interactions[x].[_genesys.FMname.interactions[x].category].xxx`. They are also accessible via actions or events. The following are the chat extension properties for the interaction object.

Name	Access	Type	Default Value	Valid Values	Description
queue	read only	string	none	any valid string	This is the current queue name associated with this interaction.
type	read only	string	none	unknown, chat, chatrequest, cobrowse,	This is the origin type of the interaction.
state	read only	string	none	queued, cached, routing, handling, unknown	This is the state of the interaction.
media	read only	string	none	The following properties from the <code>_genesys.ixn.mediaType</code> object: <code>TMediaAny</code> , <code>TMediaChat</code> , <code>TMediaCoBrowsing</code> , <code>TMediaIMChat</code>	This is the originating media type of the interaction.
received_at	read only	string	none	none	Value of <code>"_attr_itx_received_at"</code> interaction attribute
submitted_at	read only	string	none	none	Value of <code>"_attr_itx_submitted_at"</code> interaction attribute
placed_in_queue_at	read only	string	none	none	Value of <code>"_attr_itx_placed_in_queue_at"</code> interaction attribute

Name	Access	Type	Default Value	Valid Values	Description
is_online	read only	boolean	none	none	Value of "_attr_itx_is_online" interaction attribute
is_locked	read only	boolean	none	none	Value of "_attr_itx_is_locked" interaction attribute
moved_to_queue_at	read only	string	none	none	Value of "_attr_itx_moved_to_queue_at" interaction attribute
externalID	read only	string	none	none	This is the ID of the interaction that has been assigned by the originating media server.

chatp Object

The following are the chat-specific values for the following party object.

Name	Access	Type	Default Value	Valid Values	Description
state	read only	string	none	null initiated alerting connected hold queued fail	This is the state of the party in relationship to the interaction.

chatmessage Object

The following are the chat message object properties:

Name	Access	Type	Default Value	Valid Values	Description
date	read only	integer	none	none	This is the number of seconds since 1/1/1970.

Name	Access	Type	Default Value	Valid Values	Description
device	read only	URI	none	Any valid string or Resource Object .	This is the device address of the party that created the message.
text	read only	string	none	none	This is the text message that was sent.