

# **GENESYS**

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# Workspace Desktop Edition Deployment Guide

Case Data

# Case Data

[Modified: 8.5.115.17, 8.5.117.18, 8.5.118.10, 8.5.125.04, 8.5.141.04]

This topic is part of a set of topics related to setting up channels and interaction handling.

Customer Case Data, also called Case Information, is the grouping in one location of all the information (Attached Data) about active interactions of all types for a single customer. The Customer Case facilities enable agents to store all information about the following actions in one location, as well as:

- · Handle two voice calls simultaneously.
- Toggle between two calls.
- Transfer/conference one or all interaction(s).

### Evolution and behavior of Attached Data or Case Data

Attached data, or Customer Case information, that is relevant to a call evolves and changes as a call progresses through the system in a contact center. For example, during a Transfer or Conference, information about who transferred a call and when, is attached to the Customer Case as case data. Not all agents in the chain will see the same case data. This information can be retrieved through the contact database by agents who have the following privileges assigned:

- Contact Can Use Contact History Case Data
- · Contact Can Use Contact My History

# Displaying and editing Case Information

# **Important**

The following section assumes that you are familiar with the use of Genesys Administrator Extention, Genesys Administrator, and/or Genesys Configuration Manager, and that you are familiar with the creation of Business Attribute objects and Business Attribute Values.

#### Refer to:

- Business Attribute Values
- Universal Routing 8.1 Business Process User's Guide
- Universal Routing 8.1 Reference Manual

#### 1. Basic attached data display

[**Modified:** 8.5.141.04]

To display attached data key-values in Workspace, you must first define a Business Attribute that contains a list of Business Attribute Values.

- The Names of Business Attribute Values correspond to the names of the attached data keys that you
  want to display.
- The Display Names of the Business Attribute Values display the key in the User Interface.

You must then assign the name of this Business Attribute to the interaction.case-data.formatbusiness-attribute option.

To pre-load case data Business Attribute objects when an agent logs in, configure the value of the general.configuration-business-attribute-cache-preload option with a list of Business Attributes to pre-load. Business Attributes and Transaction objects are otherwise loaded the first time that an interaction requiring them is received by an agent. They are then cached for future use. If there is a large number of possible attribute values, such as a large list of case data, there could be a delay in the display of the Interaction Notification while the case data loads. Pre-loading Business Attributes related to disposition and case data when an agent logs in ensures that there is no delay in displaying Interaction Notifications.

#### 2. Translated attached data values

To display a value of attached data by using a *display name* instead of *raw data*, in addition to what is described in step #1, you must define an additional Business Attribute in which each Business Attribute Value represents a way to display this value in the User Interface:

- The name of the Business Attribute Value is the raw attached value that is contained in the interaction.
- The Display Name of the Business Attribute Value is the label that is used for rendering in the User Interface.

Next, you must define the annex of the Business Attribute Value that was defined in step #1 to represent this attached data, such as the following:

- interaction-workspace/enum.business-attribute = the name of the Business Attribute that is defined to translated attached data value
- interaction-workspace/read-only = true
- interaction-workspace/display-type = enum

#### Example:

To display a key-value pair in the Case Information area of an interaction in Workspace, such as "CallQuality = "0" (which is stored in attached data), perform the following steps:

In Genesys Administrator Extension/Genesys Administrator:

1. Create a Business Attribute that is named "CaseData".

- 2. In this Business Attribute, create a Business Attribute Value that has the name Name="CallQuality" and Display Name = "Call Quality".
- 3. In the Workspace application object, set the value of the interaction-workspace/interaction.case-data.format-business-attribute to "CaseData"

Workspace can display the attached data, but the value "0" will be displayed.

- 4. In Genesys Administrator Extension/Genesys Administrator:
  - a) Create a Business Attribute that is named enumCallQuality
  - b) In this Business Attribute, create the following Business Attribute Values:

Name = '0' and display name = '0 - Good'

Name = '1' and display name '1 - Poor'

Name = '2' and display name '2 - No audio'

- 5. In the "CallQuality" Business Attribute Value of the "CaseData" Business Attribute, set the following annex:
  - interaction-workspace/enum.business-attribute = enumCallQuality
  - interaction-workspace/read-only = true
  - interaction-workspace/display-type = enum

#### Enabling attached data editing

[Modified: 8.5.117.18, 8.5.118.10]

You can configure Workspace to give agents the ability to edit the case and interaction information that is attached to an interaction. You can also make it mandatory that an agent edits the attached data prior to marking the interaction as Done. You can make editable case data display as a field, a calendar, a list or a folder tree in a drop-down list, or a checkbox.

To make case data editable, you specify which key-value pairs are editable by an agent by adding a new section called interaction-workspace to the attribute in Genesys Administrator Extension/ Genesys Administrator, and then defining its properties.

When you define the properties of an attribute in a Business Attribute, you can also specify whether it has the property read-only or not. Attributes that are *not* read-only *can be edited by agents* who have the Contact - Can Use Contact History Case Data privilege allowed.

When you set the key-value pair to be editable (read-write enabled), agents can perform the following actions:

• edit plain strings (with format and length control)

- edit integer values (within a valid interval)
- edit float values (within a valid interval)
- edit date/time (by using a calendar control)
- edit enum (by using a drop-down control)
- edit enum-tree (by using a drop-down control containing a folder tree) [Added: 8.5.118.10]
- edit boolean (by using a check box control)

### Tip

An agent can only edit case information key-value pairs of those attributes that are displayed to the agent.

To make it mandatory that an agent edit an attribute before marking the interaction as Done, in the Business Attribute Value, create the interaction-workspace/mandatory option and set the value to true. [Added: 8.5.117.18]

#### Warning

Genesys recommends that you set the value of the interaction.case-data.is-read-only-on-idle option to false to ensure that mandatory case data fields do not become read-only by default after the agent ends a call or a chat.

Some interaction actions such as 'Transfer', 'Forward as an attachment', and 'Transfer' and/or 'Conference', have an uncertain final status. By configuring the following options, you can specify whether the agent must complete the mandatory case data:

- interaction.case-data.email.mandatory-actions Specifies whether the agent must complete the mandatory case data before applying a 'Transfer' or 'Forward as an attachment' action on an email interaction. If you specify Transfer and/or Forward for this option, agents must complete the mandatory case data before completing one of these actions. [Added: 8.5.150.06]
- interaction.case-data.<media-type>.mandatory-actions Specifies whether the agent must complete the mandatory case data before applying a 'Transfer' and/or 'Conference' action for any Digital Channel interaction other than email. If you specify Transfer and/or Conference for this option, agents must complete the mandatory case data before completing one of these actions. Agents can apply the Conference action only for the media types that support the functionality. [Added: 8.5.150.06]

These options can be overridden by a routing strategy as described in Overriding Options by Using a Routing Strategy.

The Editing Case Information table lists the case information Business Attribute keys that can be configured to be editable. For each attribute, add a new section named interaction-workspace, then define the options according to the type (boolean, string, integer, list, enum, enum-tree, float, and date) of the attribute.

# Tip

To view the table below, hover your mouse over it until the expand table icon appears. Click the icon to display the table in a separate window.



#### **Editing Case Information**

Attribute type	Option	Valid Values	<b>Default Value</b>	Description
	display-type	bool (for this type)	(none)	
	read-only	true, false	true	Specifies whether this key name can be modified
boolean	mandatory [ <b>Added:</b> 8.5.117.18]	true, false	false	Specifies whether it is mandatory for an agent to edit the value of this key before marking the interaction as done. The value true is ignored if the read-only option is set to true or the interaction.casedata.is-read-only-on-idle Workspace option is set to true.
	bool.false-value		false	Value accepted for false
	bool.true-value		true	Value accepted for true
	display-type	string (for this type)	(none)	
string	read-only	true, false	true	Specifies whether this key name can be modified
	mandatory [Added: 8.5.117.18]	true, false	false	Specifies whether it is mandatory for an agent to edit the value of this

Attribute type	Option	Valid Values	Default Value	Description
				key before marking the interaction as done. The value true is ignored if the read-only option is set to true or the interaction.casedata.is-read-only-on-idle Workspace option is set to true.
	string.max-length	0 to max length	255	Maximum number of characters that are accepted for this option
	string.expression [ <b>Added:</b> 8.5.106.19]	A string defining a valid regular expression	(none)	Specifies what the agent is permitted to enter in the field. If the characters that are entered are not part of the expected input, the character is displayed, but an error icon appears and the entry will not be committed to the backend until the string matches the configured format. When the entered string is corrected, the error icon disappears. For example, the regular expression for an AMEX credit card number is: "^3[47][0-9]{13}\$" (American Express card numbers start with 34 or 37 and have 15 digits). It is possible to use this option with string.max-length; however, string.expression makes this option redundant.

Attribute type	Option	Valid Values	<b>Default Value</b>	Description
	string.expression- instructions [ <b>Added:</b> 8.5.106.19]	Any string	(none)	Specifies the instructions and/or examples that represent how the value configured by the 'string.expression' are populated. This string is displayed as a tooltip on top of the icon that informs the agent about incorrect formatting.
	display-type	int (for this type)	(none)	
	read-only	true, false	true	Specifies whether this key name can be modified
integer	mandatory [ <b>Added:</b> 8.5.117.18]	true, false	false	Specifies whether it is mandatory for an agent to edit the value of this key before marking the interaction as done. The value true is ignored if the read-only option is set to true or the interaction.casedata.is-read-only-on-idle Workspace option is set to true.
	int.min-value	integer	0	Minimum value accepted. If the value that is entered is not part of the expected input, the value is displayed, but an error icon appears and the entry will not be committed to the backend until the value matches the configured format. When the entered string is corrected, the error icon disappears.

Attribute type	Option	Valid Values	<b>Default Value</b>	Description
	int.max-value	integer	9223372036854775	Maximum value accepted. If the value that is entered is not part of the expected input, the value is displayed, but an error icon appears and the entry will not be committed to the backend until the value matches the configured format. When the entered string is corrected, the error icon disappears.
	int.storage-type	int or string	string	Type storage of the value
	display-type	enum (for this type)	(none)	
	read-only	true, false	true	Specifies whether this key name can be modified
enum	mandatory [ <b>Added:</b> 8.5.117.18]	true, false	false	Specifies whether it is mandatory for an agent to edit the value of this key before marking the interaction as done. The value true is ignored if the read-only option is set to true or the interaction.casedata.is-read-only-on-idle Workspace option is set to true.
	enum.business- attribute	(link to business attributes)	(none)	Link to business attributes that define the enum value. By default the items in this list are sorted alphabetically. To move some or all of the fields to the top of the list, use the order option.

Attribute type	Option	Valid Values	<b>Default Value</b>	Description
				This option must be created in the annex of the Business Attribute object that contains the list of values:
				<ul> <li>Section: interaction- workspace</li> </ul>
				Option: Order
				Default value:     ""
				<ul> <li>Valid values: A comma- separated list of Business Attribute Value names.</li> </ul>
	display-type	enum-tree (for this type)	(none)	
	read-only	true, false	true	Specifies whether this key name can be modified
enum-tree [ <b>Added:</b> 8.5.118.10]	mandatory	true, false	false	Specifies whether it is mandatory for an agent to edit the value of this key before marking the interaction as done. The value true is ignored if the read-only option is set to true or the interaction.casedata.is-read-only-on-idle Workspace option is set to true.
	enum.business- attribute	(link to business attributes)	(none)	Name of the Business Attribute object that defines the tree structure and enum values presented in the tree view. Agents can fold or unfold the treeview.

Attribute type	Option	Valid Values	<b>Default Value</b>	Description
				Agents can search for values inside the tree structure.
	display-type	float (for this type)	(none)	
	read-only	true, false	true	Specifies whether this key name can be modified
float	mandatory [ <b>Added:</b> 8.5.117.18]	true, false	false	Specifies whether it is mandatory for an agent to edit the value of this key before marking the interaction as done. The value true is ignored if the read-only option is set to true or the interaction.casedata.is-read-only-on-idle Workspace option is set to true.
	float.min-value	float	0	Minimum value accepted. If the value that is entered is not part of the expected input, the value is displayed, but an error icon appears and the entry will not be committed to the backend until the value matches the configured format. When the entered string is corrected, the error icon disappears.
	float.max-value	float	3.40282347E+38	Maximum value accepted. If the value that is entered is not part of the expected input, the value is displayed, but an error icon appears and the entry will not be committed to the backend

Attribute type	Option	Valid Values	Default Value	Description
				until the value matches the configured format. When the entered string is corrected, the error icon disappears.
	display-type	date (for this type)	(none)	
	read-only	true, false	true	Specifies whether this key name can be modified
	mandatory [ <b>Added:</b> 8.5.117.18]	true, false	false	Specifies whether it is mandatory for an agent to edit the value of this key before marking the interaction as done. The value true is ignored if the read-only option is set to true or the interaction.casedata.is-read-only-on-idle Workspace option is set to true.
date	date.time-format [ <b>Added:</b> 8.5.102.06]	The value of this option must be specified according to Windows Standards: http://msdn.microsoren-us/library/8kb3ddd4.aspx	ft.com/	Specifies the format in which time values in attached data are stored or parsed, for example, yyyy-MM-dd HH:mm:ss. Use this key-value pair to make the time format consistent across users and workstations. When this option is not specified, the Workspace date and time format is inherited from the local system setting, which can cause inconsistencies for global deployments. Genesys recommends that

Attribute type	Option	Valid Values	Default Value	Description
				you configure a date/time format that contains both date and time-of-day information.
	date.time-display- format [ <b>Added:</b> 8.5.125.04]	The value of this option must be specified according to Windows Standards: http://msdn.microsoren-us/library/8kb3ddd4.aspx	ft.com/	Specifies the format in which time values for the DateTime variable in attached data are displayed in Workspace views. You can specify date and time, just date, or just time.
	date.utc-time-zone [ <b>Added:</b> 8.5.102.06]	true, false	false	Specifies whether the local time zone or UTC time zone is used to store data and time information for case information. If the value false is specified, the time is saved as local time. If the value true is specified, the time and the following time zone information is added to the formatted time in case no time zone information is specified as part of the value of the date.time-format option: "+00:00".

# Using enum-tree to display folders in Case Data

[Added: 8.5.118.10][Modified: 8.5.141.04]

The enum-tree option is intended to enable you to create a complex tree structure of categories in a drop-down list that presents all potential outcomes (dispositions) for an interaction. This is a supplement to the Disposition feature in each interaction. Agents can both browse and search the category tree.

The enum-tree value selected by an agent while handling an interaction can be used to improve routing or suggested responses for the interaction.

You can specify more than one enum-tree for each interaction.

You can specify that the agent must edit the case data (select a category) before marking the iteraction Done.

To support this feature, you must create multiple categories in a folder structure.

- 1. Using Genesys Administrator Extension, create a Business Attribute (for example Category Structure>).
- 2. In the Attribute Values folder, add a series of folders that represent the categories that you want to use for your business outcomes or dispositions.
- 3. In each category folder, create one or more new Attribute Values.



For case data that employ the folder/tree structure, you can choose to pre-load the folder structure when a agent logs in by using the general.configuration-business-attribute-folder-cache-preload option to specify the list of Business Attributes containing the folders that you want to pre-load.

# **Important**

You must specify the Business Attributes containing folders in both the general.configuration-business-attribute-folder-cache-preload and general.configuration-business-attribute-cache-preload options for the Business Attributes containing folders to be pre-loaded.

## Interaction Server and T-Server system properties keys

[Added: 8.5.115.17]

You can access Interaction Server system properties keys and T-Server system properties keys to be used in case information.

When you use the system properties keys that are listed in the *Supported Interaction Server System Properties*' and *Supported T-Server System Properties* tables. Only the ScheduledAt property can be modified to be read-only or read-write, the other properties are read-only.

When you use system properties keys to display a system property in the Attached Data, create a Case Data object that uses the system property name. Since system properties keys have a

predefined configuration, you can only specify the display-name parameter in the interaction-workspace section that you create in the object.

The Supported Interaction Server System Properties table lists the Interaction Server system properties that you can use in Attached Data.

#### **Supported Interaction Server System Properties**

System Properties Key	Predefined Display Type	Notes
AbandonedAt	date	
DeliveredAt	date	
MovedToQueueAt	date	
PlacedInQueueAt	date	
ReceivedAt	date	
ScheduledAt	date	This property can be changed by agents if read-only parameter is set to false.
SubmittedAt	date	
HeldAt	date	
CompletedAt	date	
AssignedAt	date	
Externalld	string	
InteractionId	string	
InteractionSubtype	string	
InteractionType	string	
MediaType	string	
OutQueues	string	
ParentId	string	
Queue	string	
SubmittedBy	string	
Workbin	string	
WorkbinAgentGroupId	string	
WorkbinAgentId	string	
WorkbinPlaceGroupId	string	
WorkbinPlaceId	string	
AssignedTo	string	
InteractionState	integer	
IsLocked	integer	
IsOnline	integer	
PlaceInQueueSeq	integer	
SubmitSeq	integer	
TenantId	integer	

The Supported T-Server System Properties table lists the T-Server system properties that you can use in Attached Data. All properties are read-only.

**Supported T-Server System Properties** 

System Properties Key	Predefined Display Type
ANI	string
CallID	integer
ConnID	string
CustomerID	string
DNIS	string
NetworkCallID	string
NetworkNodeID	integer
PreviousConnID	string
Server	string
ThisDN	string

## **Important**

- All system attributes can be displayed in the following views: Case Information, Workbins Case Data tab, and Interaction Queues Case Data tab.
- Some system attributes are not available in the History and Interaction Search views depending on the media type of interaction.
- There might be some display issues between Interaction Server System Properties and T-Server System Properties in Case Information during the following times:
  - after the preview phase of a Push Preview interaction
  - · after the preview phase and after call work phase of a Web Callback interaction
  - · after adding a multimedia channel to a voice interaction and vice versa

# Displaying active URLs in Case Information

You can configure Workspace to render some key-values as clickable hyperlinks in the Case Information area and also enable previewing of web pages by tooltip on the clickable hyperlinks.

Use the following configuration options to control the way that hyperlinks are displayed, whether they are active or not, and to enable the display of a tooltip that displays a preview of the web page.

- expression.url—The option is configured by default to display most valid URLs as clickable hyperlinks.
- interaction.case-data.enable-url-preview—If this option is set to true, the tooltip-preview of linked web pages is enabled.

To control the display of hyperlinks in the Case Information area, format the attached data:

- If the attached data contains a raw URL, the hyperlink will be displayed as a raw URL (for example, http://<your web site>).
- If the attached data is formatted in the following way, the TITLE is displayed as a clickable hyperlink, and the target is the URL:
  - <a href="URL" title="TITLE" />
  - <a href="URL">TITLE<a/>

The Business Attribute Value of the key that contains the URL must contain the following key value: [interaction-workspace]/display-type=string

# Add key-value pair to the Case Information

You can enable the ability to edit the case information to add Key-Values that are missing from the case information. For example, the country or region contact information might be missing. If the agent obtains this information, the agent can edit the Case Information view to add the data value.

#### Pre-requisites:

- Enable the following privilege to allow editing of case information: Case Information Can Add
- To enable a key to be added, the key must be configured as editable (refer to Enabling Attached Data Editing).

# Sharing case information between conversation participant and making it persistent in UCS

Case information structure is dependent on the context. For example, it will vary according to the agent configuration and any interaction overrides. Workspace attaches dedicated data to the interaction, in the form of key-value pairs, that is shared by anyone accessing the interaction, whether it is during live handling, from a workbin, or from the history. Workspace maintains these key-value pairs in a sub-list stored in the IWAttachedDataInformation key in the interaction.