Outbound Contact Reference Manual

Communication Protocols

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Contents

Communication Protocols

This chapter explains the Outbound Contact Server (OCS) and Desktop communication protocol. The desktop uses this protocol to send requests to OCS, and OCS uses it to send information and acknowledgments to the desktop and the calling list database.

This chapter also describes the overall process of transmitting information from the calling list database, through OCS and either SIP Server or T-Server, to the agent desktop and back again until a call transaction is complete.

> **Important**
>
> For information about the eServices/Multimedia desktop protocols used in Push Preview dialing mode (also known as Proactive Routing Solution), see the *Genesys Proactive Routing 7.6 Solution Guide*.

Event Overview

There are telephony and user events in Genesys.

- *Telephony events,* which T-Server sends, indicate changes in the call status. Every telephony event contains outbound data from the calling list database, which OCS sends to T-Server with the request to make a call. An agent receives notice (`EventEstablished`) from T-Server that a call has been established and receives attached data along with this event. Every call has approximately 10 different associated events, all of which contain data. Once data is attached to a call, it is permanent and attached to every event associated with this call.
- *User events,* which include attached user data, are messages that provide a documented protocol of the interactions between OCS and the agent's desktop application.

Characteristics of Event Structures

There are two types of user events:

- Agent desktop request to OCS. All messages that travel from the desktop to OCS have the `GSW_AGENT_REQ_TYPE` key.
- OCS to desktop, either:
  - A response to a desktop request.
  - An unsolicited notification from OCS.

    All messages that travel from OCS to the desktop have the `GSW_USER_EVENT` key.

When OCS retrieves a record, it creates a unique record identifier (GSW_RECORD_HANDLE) that identifies the record. This attribute identifies the record to which attached data pertains in a user event. Any communication between the desktop and OCS concerning this record requires a key value with the GSW_RECORD_HANDLE. The key-value GSW_RECORD_HANDLE is internally generated and is not related to the RECORD_ID field of the call record.

All requests having GSW_RECORD_HANDLE as a mandatory field receive the Record Not Found response error if the record is not in the internal OCS buffers (for example, the record was already processed).

All events, whether they are from the desktop or from OCS, should have the key-value pair GSW_APPLICATION_ID <Int>, which is the OCS application ID (sometimes called the OCS DBID in the Configuration Server database). In Outbound Contact, after an agent logs in, OCS sends a Campaign status notification to the agent desktop. The OCS application ID sent with this notification is attached to every request sent to OCS. Only the OCS with the matching GSW_APPLICATION_ID responds to the request.

In case the primary and backup OCS have been switched, the OCS that just became primary notifies all logged-in desktops about the change by sending them a user event with new GSW_APPLICATION_ID and the current statuses of loaded and running dialing sessions for Campaigns. Then all desktops will use the new GSW_APPLICATION_ID in their communications with the new primary OCS, but they remember the previous GSW_APPLICATION_ID for a while, to let the backup OCS finish its work with the records started while it was the primary OCS.

Key-value pairs of a user event may be sent in any order. The desktop applications recognize the key-value pairs by the key and not by the sequence of the attached key-value pair.

Event Responses

When a desktop request to OCS is related to a specific record (using GSW_RECORD_HANDLE), the desktop must explicitly tell OCS that it has finished with the record, using the RecordProcessed request. The RecordProcessed request signals the final transaction for the record. The only requests that do not need a RecordProcessed request are DoNotCall and RecordCancel requests related to an open record (hence sent from the desktop to OCS with GSW_RECORD_HANDLE).

With the exception of ChainedRecordRequest, OCS acknowledges all events separately, by sending either an acknowledgment, an error, or the requested data. ChainedRecordRequest is the only request that OCS returns with multiple responses. ChainedRecordRequest responds with each record in the chain, and ChainedRecordDataEnd signals the end of the user event.

Error Events and Messages

OCS sends an error event, via T-Server, when OCS cannot interpret the desktop request. The error message conveys the reason for the failure.

All error events should have the key-value pair GSW_ERROR <Error Name> in the attached data. The key-value pairs in the Error Event Attributes table should be contained in all error events.

Error Event Attributes

Key	Type	Comment
GSW_ERROR	String	Error name; see Error Names and Codes.
GSW_ERROR_NUMBER	Int	Mandatory

Error Names and Codes lists the OCS error messages sent to the desktop, their corresponding values, and possible diagnostics.

Attaching Record Information to Desktop and OCS User Events

A calling list contains two types of fields: Genesys mandatory fields and custom (user-defined) fields. The value of these fields can be attached to user events (and telephony events) as user data. The attached data is then sent as a pair, called a key-value pair.

> **Important**
>
> Genesys recommends that you avoid naming user-defined fields in the calling list table the same as the name of the calling list table.

Default Record Information

The value of certain fields from each calling list record is attached to all telephony and user events by OCS, by default. Key-value pairs might include, for example:

- phone number (key `GSW_PHONE`)
- chain ID of the record (key `GSW_CHAIN_ID`)
- call result (key `GSW_CALL_RESULT`)

These pairs are sent when a user event, or telephony event, is related to handling a specific calling list record. The pair with the key `GSW_RECORD_HANDLE` is attached to outbound-related events as a unique record identifier. Genesys recommends that the desktop application should not change the value of these key-value pairs (except `GSW_CALL_RESULT`).

The Default Record Information table contains a list of key-value pairs that OCS attaches to outbound call's user data by default.

Default Record Information

Key	Type	Description
GSW_ABANDONED	Int64 (Unix timestamp)	The `timeAbandoned` parameter from FTC timestamps.

Key	Type	Description
GSW_ACW_COMPLETED	Int64 (Unix timestamp)	The time when After Call Work is completed.
GSW_APPLICATION_ID	Integer	The OCS configuration application database ID. The unique identifier of the running OCS instance.
GSW_ATTEMPTS	Integer	The number of attempts for the record.
GSW_CALL_ATTEMPT_GUID	String	The global unique identifier of the call processing attempt used for historical reporting.
GSW_CALL_RESULT	Integer	Call Result saved from the previous call, or Call Result sent to change automatically detected call result; see Enumeration Table and Call Result Types.
GSW_CALLING_LIST	String	The name of the Calling List.
GSW_CAMPAIGN_GROUP_DESCRIPTION	String	The description of the Campaign Group.
GSW_CAMPAIGN_GROUP_GUID	String	The global unique identifier of the Campaign Group.
GSW_CAMPAIGN_GROUP_NAME	String	The name of the Campaign Group.
GSW_CAMPAIGN_NAME	String	The name of the Campaign.
GSW_CHAIN_ID	Integer	The unique Chain ID.
GSW_COMPLETE_PROCESSING	Int64 (Unix timestamp)	The time when processing of the call attempt was completed.
GSW_COUNTRY_CODE	String	The Client's country code.
GSW_D_AREA_CODE	String	The area code associated with the device.
GSW_HIST_SEQUENCE_NUM	Integer	Record submission sequential number `0` or `1`. Value `0` means the first call report record submission for a given call attempt. Value `1` means the second call report record submission for a given finalized call.
GSW_OPTIMIZE_BY	Integer	The optimization method (enumeration). Available for predictive dialing modes only.
GSW_OPTIMIZE_GOAL	Integer	The optimization goal. Available for predictive dialing modes only.
GSW_PHONE	String	The customer’s phone number.
GSW_POSTAL_CODE	String	The Client's postal code.
GSW_RECORD_HANDLE	Integer	The unique Record Identifier.

Key	Type	Description
GSW_SCHEDULED_TIME	Int64 (Unix timestamp)	The reschedule time for a record. Available only with records of particular types.
GSW_START_PROCESSING	Int64 (Unix timestamp)	The time that OCS started processing the call attempt. If pre-dial validation is in place, this is the time that the pre-dial validation request was sent.
GSW_TENANT_NAME	String	The value is populated from the current Tenant (where the Campaign Group belongs). The `Tenant\Annex\devops\customer_name` option. Defaults to `undefined` if not set.
GSW_TZ_CODE	String	The client's time zone.
GSW_TZ_OFFSET	Integer	Offset (time difference) in seconds between Universal Time Coordinated (UTC) and a particular time zone. It may contain different values throughout the year if Daylight Savings Time (DST) is used for the specified time zone. Values: -43200 ... 43200.

Send Attributes

If the value of a field is not attached by default, and you wish to include its value in the user data, then you must define the option named send_attribute in the field configuration object which corresponds to the field of the value you want to be attached.

The value of the `send_attribute` option defines the key of the pair that will be attached to the user data. The value of the field is the value of the pair.

For example, a calling list might have a user-defined field for `customer_name`. If you want to send the content of the field `customer_name` (John Doe, for example) to the desktop, you would set up the `send_attribute` option with the `value = customer_name`. The desktop will then receive the attached data with the `key = customer_name` and the `value = John Doe`.

You can define the `send_attribute` option in the Configuration Database, on the Annex tab of the Field configuration object.

> **Tip**
>
> The field name and the value of the `send_attribute` option generally do not need to match. They could be two different string values.

User Event Attributes

The User Event Attributes table shows a list of user event attributes that OCS uses to communicate with Stat Server for reporting purposes. The event type GSW_STAT_EVENT is the mandatory attribute for these events.

User Event Attributes

Key	Type	Description
GSW_STAT_EVENT	Int	Event Type
GSW_CAMPAIGN_DBID	Long (integer)	Reference to Campaign DBID of CFGCampaign object from Configuration Server
GSW_CALL_LIST_DBID	Long (integer)	Reference to calling list in Campaign DBID of CfgCallList from Configuration Server
GSW_GROUP_DBID	Long (integer)	Reference to group in Campaign DBID of CfgGroup
GSW_AGENT_DBID	Long (integer)	Reference to agent DBID of CFGPerson in Configuration Server
GSW_CALL_RESULT	Int	Call Result
GSW_CAMPAIGN_COMPLETE	Int	The sum of ready and retrieved chains for the campaign
GSW_LIST_COMPLETE	Int	Number of Ready chains for the given calling list
GSW_ERROR_DESCRIPTION	String	Error description
GSW_DIAL_MODE	Int	Dial mode. Valid values are as follows: 1 = Predict 2 = Progress 3 = Preview 4 = ProgressAndSeize 5 = PredictAndSeize 8 = PushPreview 9 = ProgressiveGVP 11 = PowerGVP
GSW_APPLICATION_ID	Int	OCS application DBID Valid values begin at 101

Key	Type	Description
GSW_CALLBACK_TYPE	Int	Callback Type
GSW_SCHED_REC_NUM	Int	Number of scheduled records in process. Valid values begin at 0.

Updating Genesys Mandatory Fields and Custom Fields

The desktop can use the `RecordProcessed` or `UpdateCallCompletionStats` request to modify the values in Genesys mandatory fields and custom fields. See Modifiable Mandatory Genesys Fields for modifiable mandatory Genesys fields.

Genesys Mandatory Fields

The Modifiable Mandatory Genesys Fields table contains the only Genesys mandatory fields that are modifiable by the `RecordProcessed` or `UpdateCallCompletionStats` events.

Modifiable Mandatory Genesys Fields

Genesys Mandatory Field Name	Recommended Key for send_attribute	Type	Description
call_result	GSW_CALL_RESULT	Int	Sent to change an automatically detected call result. See Enumeration Table and Call Result Types.
daily_from	GSW_FROM	Int	GSW_FROM to GSW_UNTIL: Time frame when a record can be called, in seconds from midnight (system or local time).
contact_info	GSW_PHONE	String	Customer’s phone number.
contact_info_type	GSW_PHONE_TYPE	Int	Customer phone type. See Enumeration Table.
daily_till	GSW_UNTIL	Int	GSW_FROM to GSW_UNTIL: Time until a record can be called, in seconds from midnight (system or local time).

Custom Data Formats

The data type of custom fields may change as data is attached to a call; the attached data can then be sent to the desktop as user data. Integer data is sent as an integer. All other data is sent as a string.

Custom data should be formatted as shown in Custom Data Formats.

Custom Data Formats

Data Type in Calling List	User Data Format
FLOAT	STRING
CHAR	STRING
DATETIME	STRING
INT	INTEGER
VARCHAR	STRING

Reserved Keys

The key names in Reserved Keys are reserved and cannot be used as the `send_attribute` for custom fields. The values associated with some of these keys can be changed; others cannot. The primary source of data for the values in this table is the calling list database. Values for all keys of type String are case sensitive and should appear in desktop application code exactly as shown in the Values column.

> **Important**
>
> In Outbound Contact, all reserved key names include the `GSW_` prefix. Do not use this prefix for custom key names that you define using `send_attribute`.

Reserved Keys

Key	Values	Type	Description
GSW_AGENT_ANSWERED		Int64 (Unix timestamp)	The time when an agent answers a call.
GSW_AGENT_RELEASED		Int64 (Unix timestamp)	The time when an agent

Key	Values	Type	Description
			releases a call.
GSW_AGENT_ID		String	The Login ID of the last agent who worked with the record.
GSW_AGENT_REQ_TYPE		String	The event identifier for events coming from desktops to OCS.
GSW_APPLICATION_ID	101...	Integer	The OCS configuration application database ID; unique identifier of the running OCS instance.
GSW_ASM_OVERDIAL	1	Integer	The presence of this key indicates that the outbound call was not merged with an engaging call in ASM mode (VoIP environment) and the call is considered overdialled by OCS.
GSW_ASSURED_HANDLE	1...	Integer	The handle of a record which is dialed with guaranteed connection to an agent; added to an engaging call used to seize an agent for guaranteed connection.
GSW_ATTEMPTS	0 ...	Integer	The number of attempts for the record; used when a new record is added.
GSW_BLOCKING_RULE		String	The name of the rule that caused a negative result of pre-dial validation. OCS might receive it from a third-party validation server in a negative validation response. In such case, OCS passes it in a call attempt record submission unchanged.
GSW_BLOCKING_RULE_TYPE		Integer	The type of the compliance object that caused a negative pre-dial validation (Mandatory Suppression List, Custom Compliance Rule, etc). OCS may receive it from a third-party validation server in a negative

Key	Values	Type	Description
			validation response. In such case, OCS passes it in a call attempt record submission unchanged.
GSW_CALL_ATTEMPT_GUID		String	The global unique identifier of the call processing attempt used for historical reporting (same value as in the primary for all the chained records).
GSW_CALL_RESULT		Integer	Call Result saved from the previous call, or Call Result sent to change an automatically detected call result; see Enumeration Table and Call Result Types.
GSW_CALL_RESULT_FEEDBACK	1	Integer	The presence of this key indicates that the given outbound call is selected as a test call for Answering Machine Detection (AMD) false positives and AMD false negatives. This call will be delivered to an agent, even if Answering Machine has been detected by the CPD engine and treatments on AM require otherwise. The call result for this call requires manual verification by an agent. Agent Desktop is expected to provide the actual call result to OCS in the `GSW_CALL_RESULT` attribute of the `UpdateCallCompletionStats` or `RecordProcessed` `desktop` request.
GSW_CALL_TIME	0...	Integer	The system time when a record was called, in seconds from 1/1/70 (GMT). This key is used when a new record is added.
GSW_CALLBACK_TYPE	Personal, Campaign	String	The type of callback an agent wants to create,

Key	Values	Type	Description
			either Personal or Campaign.
GSW_CALLING_LIST		String	The name of the calling list.
GSW_CAMPAIGN_DESCRIPTION		String	The description of the Campaign. A value may be an empty string.
GSW_CAMPAIGN_MODE	Power GVP, Predictive, Predictive with Seizing, Preview, Progressive, Progressive with Seizing, Push Preview	String	Campaign dialing mode. See Enumeration Table. The values Engaged Predictive and Engaged Progressive correspond to the `Predictive with seizing` and `Progressive with seizing` dialing modes.
GSW_CONTACT_MEDIA_TYPE	any, email, voice	String	The media type for the calling record that corresponds to the value of the `contact_info_type` field in the calling list.
GSW_CAMPAIGN_GROUP_DBID		String	The DBID of the Campaign Group.
GSW_CAMPAIGN_GROUP_NAME		String	The name of the Campaign Group.
GSW_CAMPAIGN_GROUP_DESCRIPTION		String	The description of the Campaign Group. A value may be an empty string.
GSW_CAMPAIGN_NAME		String	The name of the Campaign.
GSW_CAMPAIGN_TEMPLATE_NAME		String	The name of the Campaign Template (the Script of type Outbound Campaign, referenced by the Campaign Group via the scriptDBID attribute).
GSW_CHAIN_ATTR	AllChain, RecordOnly	String	The flag determining whether to update a record chain or just a single record.
GSW_CHAIN_ID	0...	Integer	The unique chain ID.
GSW_CHAIN_N	0...	Integer	The unique identifier of a record in a chain.
GSW_CPD_COMPLETED		Int64 (Unix timestamp)	The time when CPD is completed.
GSW_CPN_DIGITS		String	CPNDigits as configured

Key	Values	Type	Description
			for a given record.
GSW_CPN_DIGITS_SET		String	The name of the Caller ID Set (the Script configuration object) that is included the CPNDigits value used in this call attempt. May not be present if no CPNDigits is configured or if CPNDigits is configured not via a Caller ID Set (via SCXML or the CPNDigits OCS option at any level).
GSW_CUSTOMER_ID		String	The customer ID that is used for requests.
GSW_DATE_TIME	A string represented in time in this format: MM/DD/YY(YYYY) HH:MM.	String	The date and time of a scheduled call, in the record's time zone.
GSW_DIALING		Int64 (Unix timestamp)	The time when call dialing is started.
GSW_D_STATE_CODE		String	The region code of a device.
GSW_D_TZ_JAVA_NAME		String	The time zone of a device.
GSW_DEVICE_MASK		String	The device mask.
GSW_ERROR	Error name	String	The error name. See Error Names and Codes.
GSW_ERROR_DESCRIPTION	Error description	String	The error description. See Error Names and Codes.
GSW_ERROR_NUMBER	Error Number	Integer	The error code. See Error Names and Codes.
GSW_FROM	0...	Integer	GSW_FROM - GSW_UNTIL: Time frame when a record can be called, seconds from midnight.
GSW_LOGOUT_TIME	1...N	Int	Time remaining, in seconds, before an agent may log out after an unsuccessful logout attempt.
GSW_MESSAGE		String	The DoNotCall message or a record cancellation message
GSW_PHONE		String	The customer's phone number.

Key	Values	Type	Description
GSW_PHONE_TYPE		Integer	The customer's phone type. See Enumeration Table.
GSW_RECORD_HANDLE	1...	Integer	The Unique Record Identifier.
GSW_RECORD_STATUS	See Enumeration Table.	Integer	The status of adding a record sent from a desktop.
GSW_RECORD_TYPE	See Enumeration Table.	Integer	The type of an added record sent from a desktop.
GSW_RELEASED		Int64 (Unix timestamp)	The time when a call is released.
GSW_SCRIPT_ID		Integer	The DBID of the `Script` configuration object.
GSW_STATE_CODE		String	The Client's region code.
GSW_SWITCH_DBID		Integer	The DBID of the `Switch` configuration object.
GSW_TENANT_CCID		Integer	The Contact Center ID. The value is populated from the current Tenant (where the Campaign Group belongs). The `Tenant\Annex\devops\customer_name` option. Defaults to `undefined` if not set.
GSW_TREATMENT	RecordTreat Personal, RecordTreat Campaign	String	The treatment that should be applied to a record chain for `RecordProcessed` event.
GSW_TZ_JAVA_NAME		String	The Client's time zone.
GSW_TZ_NAME		String	The Configuration Server time zone name (usually a standard three-letter abbreviation).
GSW_TZ_OFFSET	-43200 ... 43200	configuration	Offset (the time difference) in seconds between UTC and a particular time zone. It might contain different values throughout the year if Daylight Savings Time (DST) is used for the specified time zone.
GSW_UNTIL	0... > GSW_FROM	configuration	GSW_FROM -

Key	Values	Type	Description
			GSW_UNTIL: The time frame when a record can be called (in seconds from midnight).
GSW_USER_EVENT	Event Type, see All Desktop Protocol Events and Event Type Protocols.	String	The event identifier for events coming from OCS to desktops.
InteractionType	Outbound	String	The type of the interaction that is created by OCS. The value of this key is always set to `Outbound`.
InteractionSubtype	OutboundNew	String	The subtype of the interaction that is created by OCS. The value of this key is always set to `OutboundNew`.

Genesys Enumeration Tables

Some Genesys mandatory fields in a calling list table are represented as predefined integer constants. When these fields are attached to user events or telephony events as key-value pairs, the values of these fields are sent as integers (sometimes called enumeration values or internal representations). Enumeration Table lists the Genesys mandatory fields that are sent as enumeration values and their corresponding descriptive strings displayed in various applications (such as Outbound Contact Manager and Genesys Administrator). The desktop application should translate the enumeration value to the appropriate description when required for display.

Enumeration Table

Genesys Mandatory Field in Calling List Table	Key	Enumeration Value	Data Type in User Event	Description
call_result	GSW_CALL_RESULT	See Call Result Types for the call result enumeration values and descriptions.	Int	Call result saved from the previous call, or the call result sent to change an automatically detected call result.
contact_info_type	GSW_PHONE_TYPE	0, No Contact Type 1, Home Phone 2, Direct Business Phone 3, Business With Ext 4, Mobile 5, Vacation Phone 6, Pager	Int	Customer phone type.

Genesys Mandatory Field in Calling List Table	Key	Enumeration Value	Data Type in User Event	Description
		7, Modem 8, Voice Mail 9, Pin Pager 10, E-mail Address 11, Instant Messaging		
record_status	GSW_RECORD_ STATUS	0, No Record Status 1, Ready 2, Retrieved 3, Updated 4, Stale 5, Canceled 6, Agent Error 8, Missed CallBack	Int	Status of adding record sent from a desktop.
record_type	GSW_RECORD_TYPE	0, No Record Type 1, Unknown 2, General 3, Campaign Rescheduled 4, Personal Rescheduled 5, Personal CallBack 6, Campaign CallBack 7, No Call	Int	Type of record sent from a desktop.

Attaching Scripts to OCS User Events and Telephony Events

The Configuration Object Script with the Type `Outbound Campaign` defines all of the attributes that are required by Agent Scripting.

References to this script can be defined in the Script combo box of a Campaign, Calling List, or Campaign Group Configuration Objects.

When a script is defined in either of these objects: Outbound Contact Server attaches the DBID of the corresponding Object Script to a User Data of an Outbound Call or Preview Record, as a value of a key-value pair where GSW_SCRIPT_ID is a key.

When the script is specified in multiple Outbound Objects related to a particular Record (for example, in both Campaign and Calling List), then OCS selects the script DBID in the following order:

1. Calling List (highest priority)
2. Campaign
3. Campaign Group (lowest priority)

In this case, when different Scripts are specified in the Campaign and Calling List, the script DBID of the Script that is specified in the Campaign is attached to the call.

Desktop Requests and OCS Responses

The previous sections gave a general overview of the OCS/Desktop Communication protocol. The rest of this chapter describes desktop requests and the corresponding OCS responses in more detail. The topics covered include:

- Campaign status notifications
- Campaign agent assignment
- Starting Preview dialing mode
- Request preview records
- `ReadyTime` request
- Updating call results and custom fields
- Chained records
- Rejecting records
- Canceling records
- Submitting DNC requests
- The differences between canceling records and marking them DoNotCall
- Scheduling and Rescheduling records
- Adding records to the calling list
- Unsolicited notifications
- Agent logout

Finally, it provides a library of error codes and all Genesys events and event type protocols.

The general format for each event section is:

- A diagram (when appropriate) with the event sequence, conditions, and responses.
- A table that features the description, desktop action, mandatory fields, and additional fields for that event.
- Another table that shows the values and descriptions of the additional fields, gives the default values, and describes whether those keys are mandatory or optional.

It is important to note that key-value pairs can be sent in any order. That is, they may be sent in an order other than that specified in the tables in this document. Therefore, any program should have the intelligence to understand keys not by sequence, but by key name.

> ### Important
> All requests from the desktop receive the response error `Invalid Request` or `Invalid Request Data` if the request does not have all mandatory fields specified or if the mandatory fields have the wrong data.

Campaign Status Notification from OCS to Desktop

Agents receive immediate information about the active Campaign at login. When an agent logs in, OCS sends notification to the desktop telling the agent if a Campaign/Campaign group is running, the name of the Campaign, and the Campaign mode.

The following are notification messages from OCS to the desktop:

- CampaignStarted
- CampaignLoaded
- CampaignUnloaded
- CampaignStopped
- CampaignModeChanged
- CampaignGroupAssigned

Notification messages are sent to the agent desktop when:

- The status of a Campaign changes.
- The agent logs in to a group that has a running or active (loaded) Campaign associated with it.
- The agent assignment is changed.

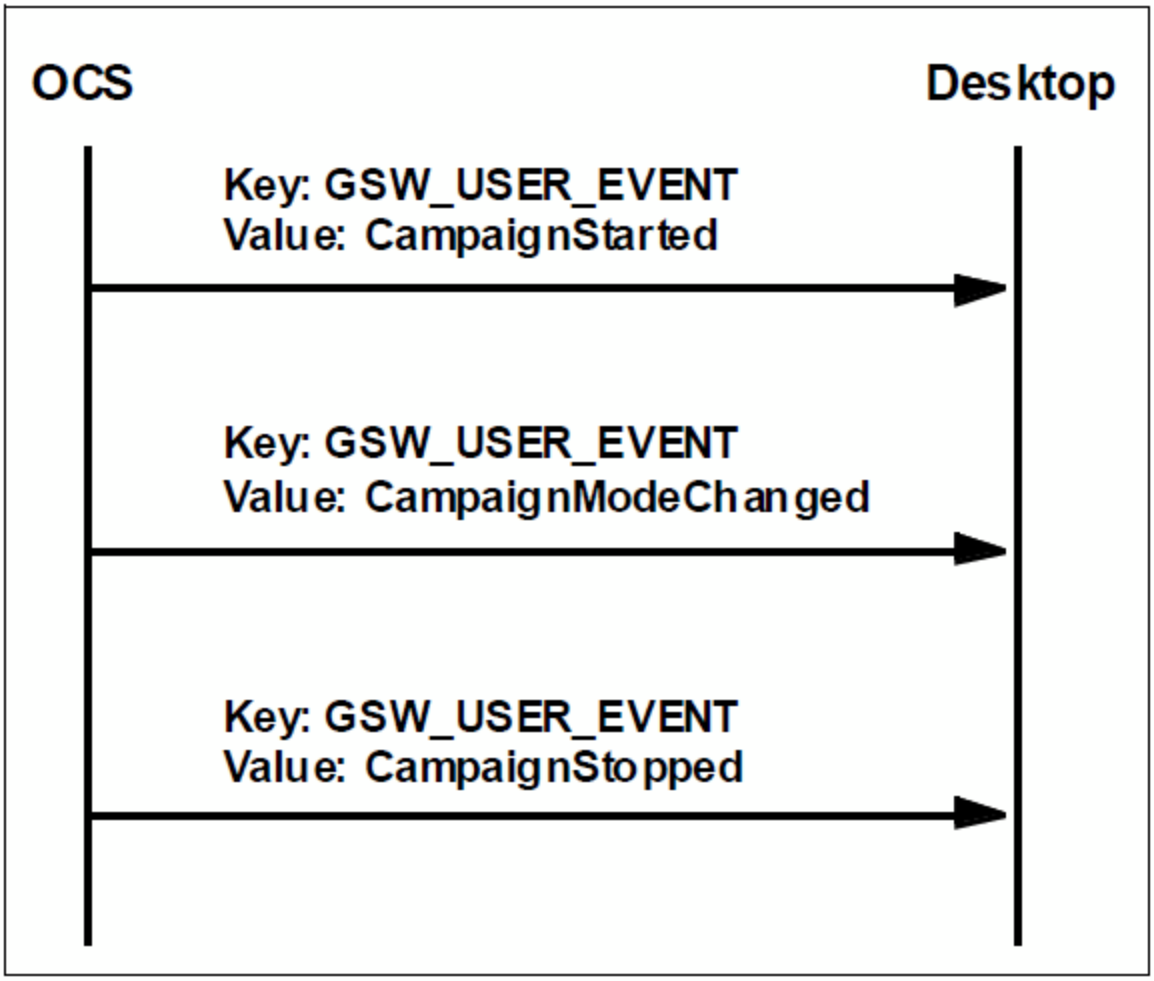
If the primary and backup OCS switch for any reason, a new primary server sends event `CampaignStarted/CampaignLoaded` to every agent in the Campaign to let the desktop know that the `GSW_APPLICATION_ID` attribute has changed. For more information, see Characteristics of Event Structures.

Within a given group, and simultaneously, one or all of the following can be occurring:

- One Campaign/Campaign group is running in auto dialing mode.
- Several Campaigns/Campaign groups are running in the `Preview` or `Push Preview` dialing mode
- Several Campaigns are loaded (active) within a group.

Therefore, the status of the Campaign must be stated for each group, since a dialing session for a Campaign may be started and stopped for different groups at different times.

Campaign Status from OCS to the Desktop shows the user events `CampaignStarted`, `CampaignStopped`, and `CampaignModeChanged`, which OCS sends to the desktop.



Campaign Status from OCS to the Desktop

CampaignStarted

OCS sends this event to the desktop when a dialing session for a Campaign is started. CampaignStarted contains more information.

CampaignStarted

CampaignStarted User Event	
Description	OCS sends this event to all logged in agents when the dialing for a Campaign begins, or, as a response to an agent login when a dialing session for a Campaign is started.

CampaignStarted User Event	
Recommended Desktop Action	The desktop should store the Campaign name and OCS application ID from the attached data of this user event. The desktop can choose to display the Campaign information from the attached data.

The CampaignStarted Attached Data table lists the attached data for the `CampaignStarted` event.

CampaignStarted Attached Data

Data Key	Type	Key Required	Value	Description
GSW_USER_EVENT	String	Yes	`CampaignStarted`	Hard coded request name
GSW_APPLICATION_ID	Int	Yes	<OCS application DBID>	DBID for OCS from Configuration DB
GSW_CAMPAIGN_ DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign Group.
GSW_CAMPAIGN_MODE[a]	String	Yes	`Power GVP, Progressive GVP.Predictive, Predictive with Seizing, Preview, Progressive, Progressive with Seizing,` and `Push Preview.` **Note:** In the OCS log, Predictive with Seizing and Progressive with Seizing appear as Engaged Predictive and Engaged Progressive respectively.	Mode in which the dialing session of a Campaign started.
GSW_CAMPAIGN_NAME	String	Yes	<Campaign name>	
GSW_CAMPAIGN _GROUP_NAME	String	Yes	<Campaign Group name>	

[a] In the OCS log, the Predictive with Seizing and Progressive with Seizing modes are referred to as Engaged Predictive and Engaged Progressive, respectively.

CampaignLoaded

OCS sends this event to the desktop when a Campaign/Campaign group is loaded. CampaignLoaded

contains more information.

CampaignLoaded

CampaignLoaded User Event	
Description	OCS sends this event to all logged in agents when a Dialing Session for a Campaign Group is loaded, or, as a response to an agent login when a Dialing Session for a Campaign Group is started.
Recommended Desktop Action	The desktop should store the Campaign name and OCS application ID from the attached data of this user event. The desktop can choose to display the Campaign information from the attached data.

CampaignLoaded Attached Data lists the attached data for the `CampaignLoaded` event.

CampaignLoaded Attached Data

Data Key	Type	Key Required	Value	Description
GSW_USER_EVENT	String	Yes	`CampaignLoaded`	Hard coded request name
GSW_APPLICATION_ID	Int	Yes	<OCS application DBID>	DBID for OCS from Configuration DB
GSW_CAMPAIGN_ DESCRIPTION	String	Yes	<description> or an empty string.	Description of Campaign
GSW_CAMPAIGN_NAME	String	Yes	<Campaign name>	
GSW_CAMPAIGN _GROUP_DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign Group
GSW_CAMPAIGN _GROUP_NAME	String	Yes	<Campaign Group name>	

CampaignUnloaded

OCS sends this event to the desktop when a Dialing Session for a Campaign is unloaded. CampaignUnloaded contains more information.

CampaignUnloaded

CampaignUnloaded User Event	
Description	OCS sends this event to all logged in agents when a Dialing Session for a Campaign is unloaded.
Recommended Desktop Action	The desktop should stop sending requests to the Campaign.

The CampaignUnloaded Attached Data table lists the attached data for the `CampaignUnloaded` event.

CampaignUnloaded Attached Data

Data Key	Type	Key Required	Value	Description
GSW_USER_EVENT	String	Yes	`CampaignUnloaded`	Hard coded event name
GSW_APPLICATION_ID	Int	Yes	<Unique ID of OCS>	
GSW_CAMPAIGN_NAME	String	Yes	<Campaign name>	
GSW_CAMPAIGN_DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign
GSW_CAMPAIGN_GROUP_DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign Group
GSW_CAMPAIGN_GROUP_NAME	String	Yes	<Campaign Group name>	

CampaignStopped

OCS sends this event to the desktop when a Dialing Session for a Campaign is stopped. CampaignStopped contains more information.

CampaignStopped

CampignStopped User Event	
Description	OCS sends this event to all logged in agents when a Dialing Session for a Campaign stops.
Recommended Desktop Action	The desktop should stop sending requests to the Campaign.

The CampaignStopped Attached Data table lists the attached data for the `CampaignStopped` event.

CampaignStopped Attached Data

Data Key	Type	Key Required	Value	Description
GSW_USER_EVENT	String	Yes	`CampaignStopped`	Hard coded event name
GSW_APPLICATION_ID	Int	Yes	<Unique ID of OCS>	
GSW_CAMPAIGN_NAME	String	Yes	<Campaign name>	
GSW_CAMPAIGN_DESCRIPTION	String	Yes	<description> or an empty string	The description of the Campaign
GSW_CAMPAIGN_GROUP_DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign Group
GSW_CAMPAIGN_GROUP_NAME	String	Yes	<Campaign Group name>	

CampaignModeChanged

OCS sends this event to the desktop when the dialing mode for a Campaign has changed. CampaignModeChanged contains more information.

CampaignModeChanged

CampaignModeChanged User Event	
Description	Description of change sent to all logged-in agents when the

CampaignModeChanged User Event	
	dialing mode for a Campaign changes from Predictive mode to Progressive mode or vice-versa.
Recommended Desktop Action	The desktop can choose to display the Campaign information from the attached data.

The CampaignModeChanged Attached Data table lists the attached data for the `CampaignModeChanged` event.

CampaignModeChanged Attached Data

Data Key	Type	Key Required	Value	Description
GSW_USER_EVENT	String	Yes	`CampaignModeChanged`	Hard coded event name
GSW_APPLICATION_ID	Int	Yes	<Unique ID of OCS >	
GSW_CAMPAIGN_MODE	String	Yes	`Power GVP, Progressive GVP, Predictive, Predictive with Seizing, Preview, Progressive, Progressive with Seizing, and Push Preview.` **Note:** In the OCS log, Predictive with Seizing and Progressive with Seizing appear as Engaged Predictive and Engaged Progressive respectively.	Mode in which Campaign is currently running.
GSW_CAMPAIGN_NAME	String	Yes	<Campaign name>	
GSW_CAMPAIGN_ DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign
GSW_CAMPAIGN _GROUP_DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign Group
GSW_CAMPAIGN _GROUP_NAME	String	Yes	<Campaign Group name>	

Campaign Group Agent Assignment

OCS sends this event to the desktop when the agent has been assigned to a Campaign Group. CampaignGroupAssigned contains more information.

> **Important**
>
> This notification is a new part of Outbound Contact functionality. Refer to Agent Assignment in Multiple Campaigns in the *Outbound Contact Deployment Guide* for more information about this functionality.

CampaignGroupAssigned

CampaignGroupAssigned User Event	
Description	Sent by OCS when the agent assignment has changed
Recommended Desktop Action	Process the changed Campaign Group assignment.

The CampaignGroupAssigned Attached Data table lists the attached data for the `CampaignGroupChanged` event.

CampaignGroupAssigned Attached Data

Data Key	Type	Key Required	Value	Description
GSW_USER_EVENT	String	Yes	`CampaignGroupAssigned`	Hard coded event name
GSW_APPLICATION_ID	Int	Yes	<Unique ID of OCS>	
GSW_CAMPAIGN_NAME	String	Yes	<Campaign name>	
GSW_CAMPAIGN_ DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign
GSW_CAMPAIGN _GROUP_DESCRIPTION	String	Yes	<description> or an empty string	Description of Campaign Group
GSW_CAMPAIGN _GROUP_NAME	String	Yes	<Campaign Group name>	

CampaignStatusRequest

OCS responds to `CampaignStatusRequest` with the same message that is delivered to the agent's desktop upon the agent's login, in the case where the agent is identified as a participant in the active/running dialing session for a Campaign group. Possible status notification messages in a response to this request include:

- CampaignLoaded
- CampaignStarted
- CampaignGroupAssigned

CampaignStatusRequest contains more information.

CampaignStatusRequest

CampaignStatus Request User Event	
Description	This request queries information on Campaign Group(s) statuses from OCS at any arbitrary time when the agent desktop needs to synchronize with OCS on current outbound activities for the agent.
Recommended Desktop Action	Synchronize with OCS on all Campaigns in which the agent participates.

The CampaignStatusRequest Attached Data table lists the attached data for the `CampaignStatusRequest` event.

CampaignStatusRequest Attached Data

Data Key	Type	Key Required	Value	Description
GSW_AGENT_REQ_TYPE	String	Yes	`CampaignStatusRequest`	Hard coded request name
GSW_APPLICATION_ID[a]	Int	No	OCS application DBID	Target OCS application DBID
GSW_REFERENCE_ID[b]	Int	No	Request ID	Reference identifier for the request

[a] `GSW_APPLICATION_ID` is an optional attribute in the message. If it is present, it narrows the request for Campaign Group(s) statuses, and only the OCS application with the provided application DBID will process it. If this attribute is absent from the message, then all of the OCS applications that receive this request will process it.

[b] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

> **Important**
>
> OCS will never reply to `CampaignStatusRequest` with an error message. It will either reply with status notification message(s) or not reply at all (for example, in the case where there are no active or running dialing sessions for Campaign groups within OCS, or the agent is unknown to OCS).

Campaign Group Status Notification from OCS to Web or Application Server

The notifications about the change in status of a Campaign Group can be sent from OCS to a Web or Application Server, such as Campaign Manager. The data is communicated to the Web or Application server using HTTP POST. The following states and information can be reported:

- Campaign Group loaded
- Campaign Group started
- Campaign Group stopped
- Campaign Group unloaded
- Campaign Group dial mode change

OCS can also periodically send data about active Campaign Groups, with a user-configurable time interval.

For information about the body of the HTTP POST message, see Fields in HTTP POST Requests to Web or Application Server in the *Outbound Contact Deployment Guide*.

PreviewDialingModeStart Request

The `PreviewDialingModeStart` request applies to both `Preview` and `Predictive` dialing modes. It is used for receiving scheduled calls or `Preview` mode records. The `PreviewDialingModeStart` request can be activated by setting the `agent_preview_mode_start` option in the Campaign Group object or the OCS `Application` object in Genesys Administrator. If the option is set to `true`, the desktop must send this request after an agent logs in to receive scheduled call records from OCS. If the agent wants to participate in a preview Campaign, the desktop is required to send this request before sending any preview record request. Without the Preview Dialing Mode Start request, OCS ignores all preview record requests sent from the desktop. This setting and request are most often used to ensure that no rescheduled call records are sent to the desktop directly after the agent logs in.

When the option `agent_preview_mode_start` is set to `false`, OCS assumes that the agent is ready to receive any rescheduled call records. If a preview Campaign is running when the agent logs in, a Preview Record Request can be sent anytime without sending a Preview Dialing Mode Start request.

PreviewDialingModeStart

The desktop sends this request to OCS when the Preview dialing mode starts. PreviewDialingModeStart contains more information.

> **Important**
>
> The `PreviewDialingModeStart` request is not required from the Agent Desktop in `Push Preview` and `Power GVP` modes, regardless of the setting for the agent_preview_mode_start option.

PreviewDialingModeStart

PreviewDialingModeStart Request	
Description	Request to activate preview session for the agent. Needed if the `agent_preview_mode_start` option is set to `true`.
OCS Action	Link agent DN and Campaign ID.

The PreviewDialingModeStart Attached Data table lists the attached data for the `PreviewDialingModeStart` request.

PreviewDialingModeStart Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`PreviewDialingModeStart`
GSW_APPLICATION_ID	Int	Yes	Unique ID of OCS.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the

Data Key	Type	Key Required	Description
			request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

PreviewDialingModeStartAcknowledge

OCS sends this event to the desktop to acknowledge the start of Preview dialing mode. PreviewDialingModeStartAcknowledge contains more information.

PreviewDialingModeStartAcknowledge

PreviewDialingModeStartAcknowledge	
Description	OCS accepts a desktop request to initiate preview session.
Recommended Desktop Action	The desktop can send requests to OCS and receive callbacks.

The Preview Dialing Mode Start Acknowledge Attached Data table lists the attached data for the `PreviewDialingModeStartAcknowledge` event.

Preview Dialing Mode Start Acknowledge Attached Data

Data Key The ! rowspan="1" colspan="1" | Type	Key Required	Description	
GSW_USER_EVENT	String	Yes	`PreviewDialingModeStartAcknowledge`
GSW_APPLICATION_ID	Int	Yes	Unique ID of OCS
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign

PreviewDialingModeOver

The desktop sends this request to OCS when the Preview dialing mode is over. PreviewDialingModeOver contains more information.

> **Important**
>
> The `PreviewDialingModeOver` request is not required from the Agent Desktop in `Push Preview` or `Power GVP` modes, regardless of the setting for the agent_preview_mode_start option.

PreviewDialingModeOver

PreviewDialingModeOver User Event	
Description	Request to terminate preview session for the agent.
OCS Action	Remove the link between agent DN and Campaign ID.

The PreviewDialingModeOver Attached Data table lists the attached data for the `PreviewDialingModeOver` request.

PreviewDialingModeOver Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`PreviewDialingModeOver`
GSW_APPLICATION_ID	Int	Yes	Unique ID of OCS
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] GSW_REFERENCE_ID is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

PreviewDialingModeOverAcknowledge

OCS sends this event to the desktop to acknowledge the end of Preview dialing mode. PreviewDialingModeOverAcknowledge contains more information.

PreviewDialingModeOverAcknowledge

PreviewDialingModeOverAcknowledge User Event	
Description	OCS accepts a desktop request to close preview session.
Recommended Desktop Action	Desktop should disable the function for sending further requests to OCS and for receiving callbacks.

The PreviewDialingModeOverAcknowledge Attached Data table lists the attached data for the PreviewDialingModeOverAcknowledge event.

PreviewDialingModeOverAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	PreviewDialingModeOverAcknowledge
GSW_APPLICATION_ID	Int	Yes	Unique ID of OCS
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.

ReadyTime Request

This request is used to increase campaign performance in the Predictive or Predictive with seizing dialing modes for small groups. This request only applies when the predictive_algorithm option is set to small_group or advanced_small_group and Overdial Rate is used as the optimization parameter.

Through this event, the agent's desktop provides OCS with an estimate of the time (in seconds).that the agent will need to finish processing of the current outbound call and before he or she will go to the Ready state.

Note:	• This request was added in the 7.6.1 release.

ReadyTime

The desktop sends this ReadyTime request to OCS, providing the estimated time (in seconds) remaining until the agent will become Ready. ReadyTime Request contains more information.

ReadyTime Request

ReadyTime Agent Request	
Description	Provides the time in which the agent will become Ready.
OCS Action	Use this information in the predictive algorithm when calculating the number of outbound calls to be placed in the next seconds

The ReadyTime Attached Data table lists the attached data for the ReadyTime request.

ReadyTime Attached Data[a]

Data Key[b]	Type	Key Required	Value	Description
GSW_AGENT_REQ_TYPE	String	Yes	ReadyTime	Hard coded request name
GSW_READY_TIME	Int	Yes	<Expected time in seconds>	Expected time to go ready in seconds (N), where N >0
GSW_APPLICATION_ID	Int	Yes	<Unique ID of OCS>	Target OCS application DBID
GSW_RECORD_HANDLE[c]	Int	Yes	<Unique record handle>	Record handle for the record currently on the agent's desktop
GSW_REFERENCE_ID[d]	Int	No	<Reference ID>	Reference identifier for the request

[a] ReadyTime can only be applied to a record currently being processed by the agent.

[b] ReadyTime supports only those key-value pairs listed in this table. Any other pairs will be ignored by

OCS.

[c] The record handle is a mandatory attribute because it identifies the record currently being process by the agent for OCS.

[d] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

ReadyTimeAcknowledge

OCS sends this event to the desktop to acknowledge the `ReadyTime` request.or sends an error (see ReadyTime Error). ReadyTimeAcknowledge contains more information.

ReadyTimeAcknowledge

ReadyTimeAcknowledge User Event	
Description	OCS acknowledges receiving the event to the desktop.
Desktop Action	Ensure the record gets finalized and the agent goes Ready after the communicated period of time elapses.

The ReadyTimeAcknowledge Attributes table lists the attributes for the `ReadyTimeAcknowledge` event.

ReadyTimeAcknowledge Attributes

Data Key	Type	Key Required	Value	Description
GSW_USER_EVENT	String	Yes	`ReadyTimeAcknowledge`	Hard coded event
GSW_APPLICATION_ID	Int	Yes	<Unique ID of OCS>	Originator OCS application DBID
GSW_RECORD_HANDLE	Int	Yes	<Unique record handle>	Record handle value, as passed in the `ReadyTime` request

ReadyTime Error

If OCS is not able to properly process the `ReadyTime`, one of the errors in ReadyTime Error Codes is returned.

ReadyTime Error Codes

Error Code	Error Description	Returned When:
101	Invalid request	Campaign Group dialing mode is not Predictive (Predictive ASM)
102	Invalid request; attribute is not found	A mandatory attribute is missing from the request
103	Invalid request data; bad attribute value	Time to go ready is less than or equal to 0
104	Agent not found	This agent is unknown to OCS
112	No call found for the record handle	The record handle is invalid
120	Duplicate request is not allowed	The `ReadyTime` request is submitted more than once for the same record handle

Preview Record Request and Acknowledgment

The desktop can send a preview record request after receiving the `CampaignStarted` event with the additional key-value `GSW_CAMPAIGN_MODE` set to `Preview`. The desktop can then begin working in `Preview` dialing mode. OCS has the option of setting `PreviewDialingModeStart` as either `true` or `false`. When set to`true`, OCS waits for the `PreviewDialingModeStart` request from the desktop before allowing the agent to issue a `PreviewRecord` request. When set to `false`, the desktop can send a `PreviewRecord` request without sending the `PreviewDialingModeStart` request for receiving scheduled calls or preview records.

PreviewRecordRequest

The desktop sends this request to OCS to request preview records. PreviewRecordRequest contains more information.

PreviewRecordRequest

PreviewRecordRequest	
Description	Request to send preview record.

PreviewRecordRequest	
OCS Action	Conditionally sends acknowledgment, depending on setting of the `PreviewDialingModeStart` event. See PreviewDialingModeStart Request.

The PreviewRecordRequest Attached Data table lists the attached data for `PreviewRecordRequest`.

PreviewRecordRequest Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`PreviewRecordRequest`
GSW_APPLICATION_ID	Int	Yes	Unique ID of OCS
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_REFERENCE_ID[a]	Int	No	Reference identifier for the request.

[a] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

PreviewRecord

The following event is sent by OCS to the desktop in response to a request for records in the `Preview` dialing mode. PreviewRecord contains more information. See Reserved Keys and Enumeration Table for predefined attribute values.

PreviewRecord

PreviewRecord User Event	
Description	Preview record to dial.
Recommended Desktop Action	Perform “Call Work" (the agent performs work associated with the call, such as dialing or updating a record).

The PreviewRecord Attached Data table lists the attached data for the `PreviewRecord` event.

PreviewRecord Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`PreviewRecord`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_ATTEMPTS	Int	No	Number of attempts for the record. This key is used when a new record is added.
GSW_CALL_RESULT	Int	Yes	Call Result set by dialer or saved from previous call. (See the Enumeration Table.)
GSW_CALL_TIME	String	No	System time when record was called, in seconds from 1/1/70 (GMT).
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_CHAIN_ID	Int	Yes	Unique chain ID
GSW_CPN_DIGITS	String	Yes	CPN Digits as configured for the given record.
GSW_FROM	Int	Yes	GSW_FROM - GSW_UNTIL: Time frame when a record can be called, seconds from midnight.
GSW_PHONE	String	Yes	Phone number to dial.
GSW_PHONE_TYPE	Int	No	Customer phone type (See the Enumeration Table).
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.

Data Key	Type	Key Required	Description
GSW_TZ_OFFSET	Int	Yes	Offset (time difference) in seconds between UTC and a particular time zone. It may contain different values throughout the year if Daylight Savings Time (DST) is used for the specified time zone.
GSW_UNTIL	Int	No	Time until, seconds since midnight.
GSW_CONTACT_MEDIA_TYPE	String	Yes	Describes the media type used for contact.
GSW_CAMPAIGN _GROUP_NAME	String	Yes	The name of the Campaign Group.
GSW_CAMPAIGN_GROUP__ DESCRIPTION	String	Yes	The description of the Campaign Group. Value may be an empty string.
Custom fields	Any	No	Custom fields.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

No Records Available

OCS sends this event to the desktop when there are no more Preview records to send or if OCS has not filled the buffer yet. The desktop repeats its PreviewRecordRequest in a few seconds. No Records Available contains more information.

No Records Available

No Records Available User Event	
Description	No more records in the OCS internal buffer.
Recommended Desktop Action	Try to send a request later.

The No RecordsAvailable Attached Data table lists the attached data for the `No Records Available` event.

No RecordsAvailable Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`PreviewRecordRequest`
GSW_ERROR_NUMBER	Int	Yes	Error code. See Error Names and Codes.
GSW_ERROR	String	Yes	No Records Available.
GSW_APPLICATION_ID	Int	Yes	OCS Application DBID
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.

NoRunningPreviewCampaigns

OCS issues this message if the agent requests a record for a preview Campaign that is not currently running. NoRunningPreviewCampaigns contains more information.

> **Important**
> In release 7.2, this scenario resulted in a `NoActivePreviewCampaign` message.

NoRunningPreviewCampaigns

NoRunningPreviewCampaigns User Event	
Description	No Campaigns are running in Preview mode
Recommended Desktop Action	Try to send a request later.

The No Running Preview Campaign Error table lists the attached data for the `NoRunningPreviewCampaign` error.

No Running Preview Campaign Error

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`PreviewRecordRequest`
GSW_ERROR_NUMBER	Int	Yes	Error code. See Error Names and Codes.
GSW_ERROR	String	Yes	No Running Preview Campaign
GSW_APPLICATION_ID	Int	Yes	OCS Application DBID
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.

Updating Call Results and Custom Fields

The `UpdateCallCompletionStats` request updates Genesys modifiable mandatory fields and custom fields in a record to OCS.

For example, in Predictive dialing mode, this request can be used to overwrite the call result detected by call progress detection when needed. Or the desktop can overwrite a call result answer with the call result wrong party. (See the list of predefined call results on Call Result Types.)

This request can be sent multiple times before the `RecordProcessed` request is sent. Also, the record can still be canceled or rejected (using `RecordCancel` or `RecordReject`) before the final `RecordProcessed` request is sent. Use the `UpdateCallCompletionStats` when the record is still active on the agent desktop.

The `RecordProcessed` request signals the final transaction for the record. The request updates all fields (including call completion statistics and custom fields) in OCS and returns the record to the database.
After the request is sent, the record cannot be canceled or rejected. Use the `RecordProcessed` request when the agent finishes with a record and returns it to the database. Changes made to the database after the `RecordProcessed` request is used are final.

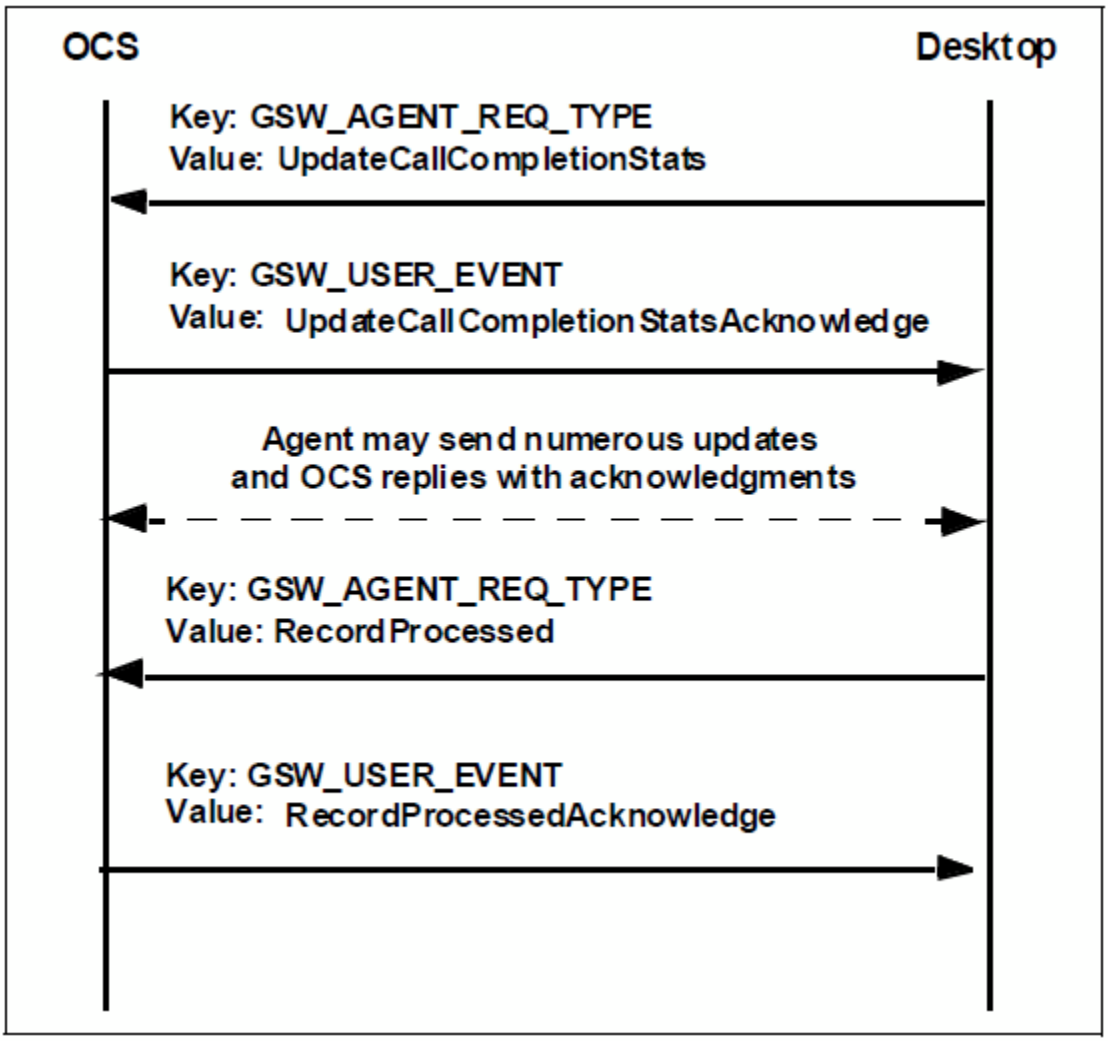
If you want OCS to apply a treatment to the call result entered in `UpdateCallCompletionStats` request, then the final `RecordProcessed` request for this record should contain an optional `GSW_TREATMENT` attribute, which has a possible value of `RecordTreatPersonal` or `RecordTreatCampaign`.

If the value of this attribute is `RecordTreatCampaign`, OCS will change the status of this record to `Campaign Rescheduled` and treat it as regular record rescheduled by treatment.

If the value of this attribute is `RecordTreatPersonal`, OCS will change the status of this record to `Personal Rescheduled` and treat it similarly to `Personal CallBack`.

If GSW_TREATMENT attribute is omitted in the RecordProcessed request, no treatment will be applied to the record.

Updating Call Results and Custom Fields Data Flow illustrates a typical data flow when updating Call Results and Custom Fields.



Updating Call Results and Custom Fields Data Flow

UpdateCallCompletionStats

The desktop sends this request to OCS to update a record on completion of a call.UpdateCallCompletionStats contains more information.

UpdateCallCompletionStats

UpdateCallCompletionStats Request	
Description	Desktop sends to update record details. Intermediate update.
OCS Action	Update record fields internally; wait for next requests.

The UpdateCallCompletionStats Attached Data table lists the attached data for the `UpdateCallCompletionStats` request.

UpdateCallCompletionStats Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`UpdateCallCompletionStats`
GSW_CALL_RESULT	Int	No	Call Result sent to change automatically detected call result. See Enumeration Table and Call Result Types.
GSW_FROM	Int	No	`GSW_FROM - GSW_UNTIL`: Time frame when a record can be called, seconds from midnight.
GSW_UNTIL	Int	No	Time until, seconds since midnight.
GSW_PHONE	String	No	Customer's phone number.
GSW_PHONE_TYPE	Int	No	Customer phone type. See Enumeration Table.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier. Do not change this value.
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group

Data Key	Type	Key Required	Description
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.
Custom Fields	Any	No	Custom Fields.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

UpdateCallCompletionStatsAcknowledge

OCS sends this event to the desktop to acknowledge a call completion notification. UpdateCallCompletionStatsAcknowledge contains more information.

UpdateCallCompletionStatsAcknowledge

UpdateCallCompletionStatsAcknowledge User Event	
Description	OCS accepts a desktop request to update a record's fields.
Recommended Desktop Action	Continue "Call Work" (the agent performs work associated with the call, such as dialing or updating a record).

The UpdateCallCompletionAcknowledge Attached Data table lists the attached data for the `UpdateCallCompletionStatsAcknowledge` event.

UpdateCallCompletionAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`UpdateCallCompletionStatsAcknowledge` or error.
GSW_APPLICATION_ID	Int	Yes	OCS configuration application

			database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier. Do not change this value.

RecordProcessed

The desktop sends this request to OCS to indicate that the agent has finished with a record and that it should be processed and sent to the database.

The `RecordProcessed` request is mandatory in `Preview` dialing mode and optional in the other dialing modes. When the `record_processed` option is set to `true`, it must be sent in all cases. [CommunicationProtocols#RecordProcessed|RecordProcessed]] contains more information.

RecordProcessed

RecordProcessed Request	
Description	Desktop sends event to indicate that record is processed. OCS should update record if it is provided.
OCS Action	Update a record and its chain in DB; use all changes made by previous requests regarding the records in the chain. If a `RecordProcessed` event has the GSW_TREATMENT field correctly specified, OCS applies a treatment to the record.

The RecordProcessed Attached Data table lists the attached data for the `RecordProcessed` request.

RecordProcessed Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`RecordProcessed`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.

Data Key	Type	Key Required	Description
GSW_CALL_RESULT	Int	No	Call Result sent to change automatically detected call result. See Enumeration Table and Call Result Types. **Note:** GSW_CALL_RESULT is an optional attribute in both UpdateCallCompletionStats and RecordProcessed requests.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_FROM	Int	No	GSW_FROM - GSW_UNTIL: Time frame when a record can be called, seconds from midnight.
GSW_UNTIL	Int	No	Time until, seconds since midnight.
GSW_PHONE	String	No	Customer's phone number.
GSW_PHONE_TYPE	Int	No	Customer phone type. See Enumeration Table.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.
GSW_TREATMENT	String	No	Specifies the treatment type that should be applied to a record chain when `RecordProcessed` event is processing. Possible values are `RecordTreatPersonal` or `RecordTreatCampaign` .
Custom Fields	Any	No	Custom Fields.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] GSW_REFERENCE_ID is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

RecordProcessedAcknowledge

OCS sends this event to the desktop to acknowledge a RecordProcessed notification. RecordProcessedAcknowledge contains more information.

RecordProcessedAcknowledge

RecordProcessAcknowledge User Event	
Description	OCS confirms that the record has been executed.
Recommended Desktop Action	Remove the record and the chain if requested.

The RecordProcessedAcknowledge Attached Data table lists the attached data for RecordProcessedAcknowledge event.

RecordProcessedAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	RecordProcessedAcknowledge
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.

Chained Records

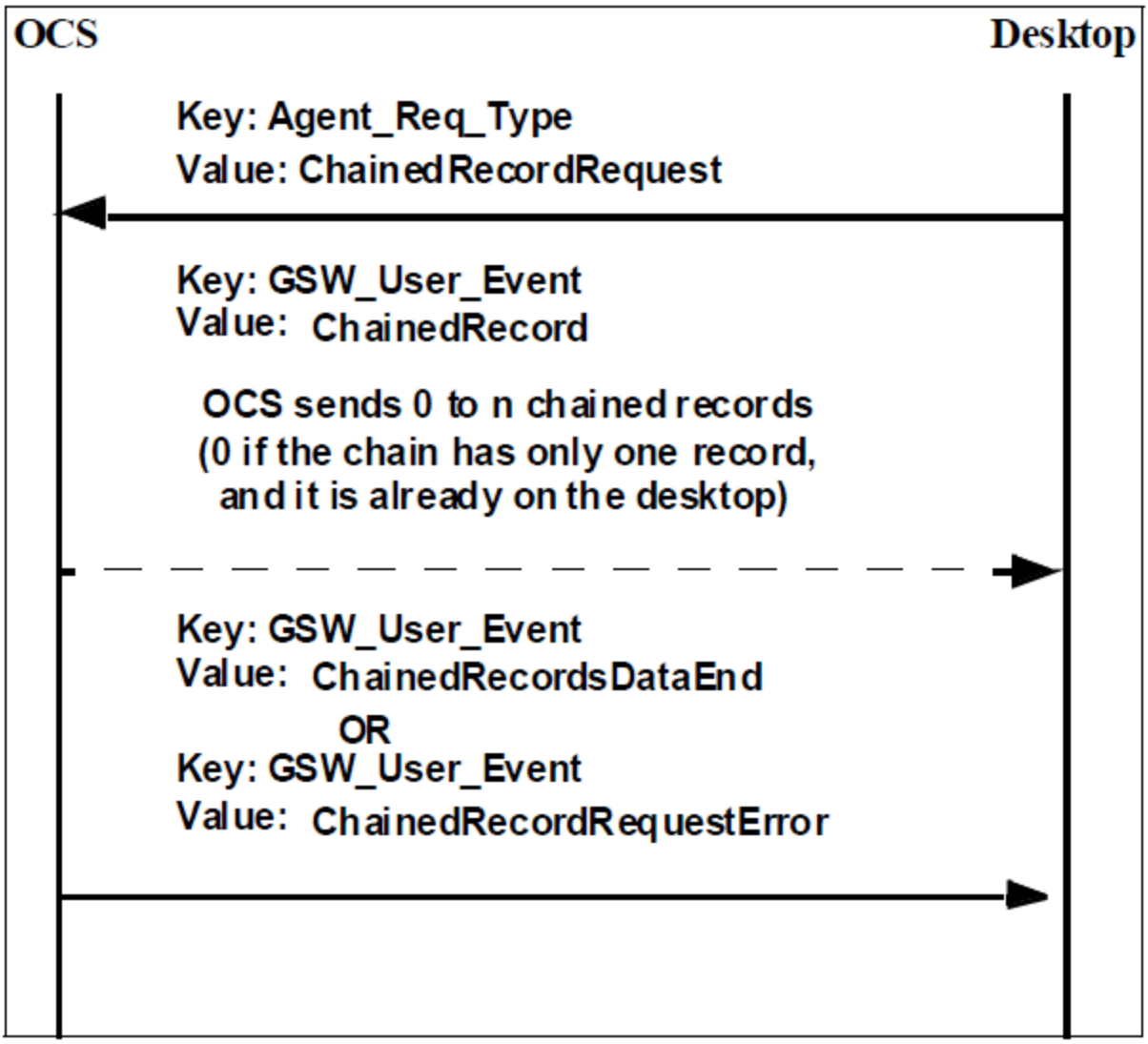
If a customer cannot be reached at the primary contact number (for example, Home Phone), the agent may try a second, or subsequent, record in a chain of contact numbers (for example, Business Phone). For the primary contact number, the chain_n field is represented by zero or any positive

number. When using the ChainedRecordRequest, the attached data of the request must include the initial record's GSW_RECORD_HANDLE.

> **Important**
>
> All repeated requests having the same mandatory field values (such as GSW_RECORD_HANDLE) receive the Record Not Found response error if the record is already processed. A desktop can send the request only once for a chain; subsequent requests are ignored to avoid multiple delivery of the same records.

The ChainedRecordRequest can be used in the Preview or Predictive dialing mode. However, InPredictive dialing mode the user should use one of the following:

- The Next In Chain treatments, to let the dialer handle the chain record automatically.
- A ChainedRecordRequest to handle chain records manually. Never use both in the same Campaign. Chained Record Data Flow is an example of a typical chained record data flow.



Chained Record Data Flow

ChainedRecordRequest

The desktop sends this request to OCS to request a record chain. ChainedRecordRequest contains more information.

ChainedRecordRequest

ChainedRecordRequest	
Description	Request to send all records from the chain defined by

ChainedRecordRequest	
	RecordHandle.
OCS Action	Send rest of a chain to the desktop.

The ChainedRecordRequest Attached Data table lists the attached data for `ChainedRecordRequest`.

ChainedRecordRequest Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`ChainedRecordRequest`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group
GSW_CAMPAIGN_NAME	String	No	Name of the Campaign. **Note:** This value is optional in Outbound Contact releases 7.5 and higher. It was mandatory in previous releases.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

ChainedRecord

The following event is sent by OCS to the desktop in response to a `ChainedRecordRequest` event. Non-mandatory fields should be sent only if the `send_attribute` option is defined. ChainedRecord contains more information.

ChainedRecord

ChainedRecord User Event	
Description	Chain record delivered.
Recommended Desktop Action	Continue Call Work (the agent performs work associated with the call, such as dialing or updating a record).

The ChainedRecord Attached Data table lists the attached data for the `ChainedRecord` event.

ChainedRecord Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`ChainedRecord`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_ATTEMPTS	Int	No	Number of attempts for the record. This key is used when a new record is added.
GSW_CALL_TIME	String	No	System time when record was called, in seconds from 1/1/70 (GMT).
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CALL_RESULT	Int	Yes	Call Result set by dialer or saved from previous call. (See the Enumeration Table.)
GSW_CAMPAIGN_NAME	String	No	Name of the Campaign. **Note:** This value is optional in Outbound Contact releases 7.5 and higher. It was mandatory in previous releases.
GSW_CHAIN_ID	Int	Yes	Unique chain ID.
GSW_FROM	Int	No	GSW_FROM - GSW_UNTIL:

Data Key	Type	Key Required	Description
			Time frame when a record can be called, seconds from midnight.
GSW_PHONE	String	Yes	Customer's phone number.
GSW_PHONE_TYPE	Int	No	Customer phone type (See the Enumeration Table).
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_TZ_OFFSET	Int	No	Offset (time difference) in seconds between UTC and a particular time zone. It may contain different values throughout the year if Daylight Savings Time (DST) is used for the specified time zone.
GSW_UNTIL	Int	No	Time until, seconds since midnight.
GSW_CONTACT_MEDIA_TYPE	String	Yes	Describes the method of contact.
GSW_CAMPAIGN _GROUP_NAME	String	Yes	The name of the Campaign Group.
GSW_CAMPAIGN_GROUP__ DESCRIPTION	String	Yes	The description of the Campaign Group. Value may be an empty string.
Custom fields	Any	No	Custom Fields.

ChainedRecordsDataEnd

The following event is sent by OCS to the desktop when all records in a chain have been sent. ChainedRecordsDataEnd contains more information.

ChainedRecordsDataEnd

ChainedRecordsDataEnd User Event	
Description	All chain has been delivered.
Recommended Desktop Action	Continue “Call Work" (the agent performs work associated with the call, such as dialing or updating a record).

The ChainedRecordsDataEnd Attached Data table lists the attached data for the `ChainedRecordsDataEnd` event.

ChainedRecordsDataEnd Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`ChainedRecordsDataEnd`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_CHAIN_ID	Int	Yes	Unique chain ID.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.

Rejecting Records

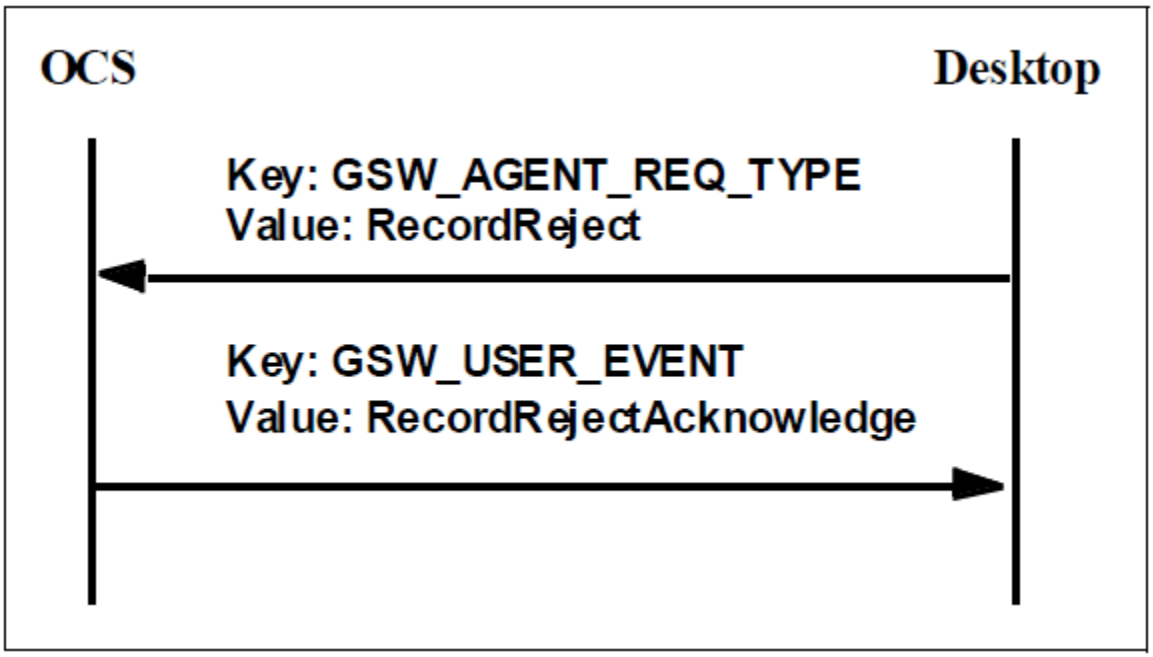
The term *reject* means that the agent does not want to call the record at this time.

For example, an agent might reject a record already delivered to the desktop before going on break or when leaving and logging out for the day. This is a good practice because it prevents OCS from updating these records as `Stale` when the `stale_clean_timeout` option has expired.

The rejected record is returned to the database with the following fields modified: `record_type` is reset to General, `record_status` is reset to Ready, `agent_id` is reset to the ID of the agent that rejected the record. It will be retrieved again with the next set of records from the database, for

distribution by OCS. The agent ID will be overwritten again when the next agent receives the record.

The RejectRecord Data Flow diagram shows a typical `RejectRecord` data flow.



RejectRecord Data Flow

RecordReject

The desktop sends this request to OCS to reject a record. When a record is rejected by an agent, the `Agent ID` field of the call record is updated to that agent's ID. RecordReject contains more information.

RecordReject

RecordReject Request	
Description	Desktop sends a request to indicate that preview record or scheduled call will not be dialed by this agent. Record should be re-sent to another agent. This is the final event for the record, which means the desktop does not need to send RecordProcessed after this request.
OCS Action	OCS marks this record, and the rest of the chain, as `general` and `ready`.

The RecordReject Attached Data table lists the attached data for the `RejectRecord` event.

RecordReject Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`RecordReject`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

RecordRejectAcknowledge

The following event is sent to the desktop by OCS to acknowledge a rejected record. RecordRejectAcknowledge contains more information.

RecordRejectAcknowledge

RecordRejectAcknowledge User Event	
Description	OCS accepts `RejectRecord` request.
Recommended Desktop Action	Kill the record and the chain.

The RecordRejectAcknowledge Attached Data table lists the attached data for the `RecordRejectAcknowledge` event.

RecordRejectAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`RecordRejectAcknowledge`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.

Canceling Records

The desktop can send a `RequestRecordCancel` event to notify OCS to cancel a record to be dialed by a Campaign. Agents able to send this type of request include:

- Outbound agents: Those who work only in outbound Campaigns. See Example 1.
- Blended agents: Those who work simultaneously in outbound and inbound Campaigns. See Example 2.
- Inbound agents: Those who work on inbound calls. See Example 3.

The following are three examples of record cancellations.

Example 1

1. An agent working on a Campaign has a record on the desktop.
2. After reviewing the contact history of the call record, the agent decides no outbound call is required.
3. The desktop then sends a `RequestRecordCancel` (with `GSW_RECORD_HANDLE`) to OCS.
4. OCS updates the record status to `cancelled`. This record will no longer be handled by the Campaign.

Example 2

1. An agent is working in a *blended* environment (inbound and outbound) and has outbound agent desktop at his disposal.

2. The agent accepts an inbound call and sees that there is no longer a need for an outbound call to the customer.
3. This agent then sends `RequestRecordCancel` (with the phone number `GSW_PHONE`, but without `GSW_RECORD_HANDLE`) to OCS by means of Outbound-Desktop protocol.
4. OCS attempts to find a record that has the matching phone number in OCS memory and in calling lists assigned to loaded Campaigns/Campaign groups.
5. If a match is found, OCS updates the record as `cancelled` in OCS memory (if applicable) and/or in calling lists.
6. If a match is found on other desktops within the Campaign Groups, OCS sends a `RecordCancel` notification to the desktop(s) where that record is located.
7. The agent deletes the record from the desktop application memory to ensure the record will not be dialed.

> **Tip**
>
> A blended agent who submits a `RequestRecordCancel` from an agent desktop must be a member of an Agent Group or Place Group assigned to the Campaign.

Example 3

1. An agent working on inbound calls only receives information that there is no need for an outbound call to a particular customer.
2. The agent sends a `CM_ReqCancelRecord` (with the phone number `GSW_PHONE`, but without `GSW_RECORD_HANDLE`) to OCS by means of Communication DN API. (See Record Cancellation from a Third-Party Application.)
3. OCS attempts to find a record that has the matching phone number in OCS memory and in calling lists assigned to loaded Campaigns/Campaign groups.
4. If a match is found, OCS updates the record as `cancelled` in OCS memory (if applicable) and/or in calling lists.
5. If a match is found on other desktops within the Campaign Groups, OCS sends a `RecordCancel` notification to the desktop(s) where that record is located.
6. The agent deletes the record from the desktop application memory to ensure the record will not be dialed.

> **Tip**
>
> An inbound agent who submits a `CM_ReqCancelRecord` from a third-party application does not have to be a member of an Agent or Place Group.

The remaining sections pertaining to record cancellation in this chapter are applicable to OCS-Desktop protocol. For information about record cancellation from third-party applications, see Communication DN API.

Record Cancel Requests

This section describes record cancel requests and acknowledgments.

RequestRecordCancel

The desktop sends this request to OCS for one of the following reasons:

- To cancel a record or a chain.
- To cancel a record for which the call has already been dialed, and its record displayed on the desktop.

In both cases, the record is marked as `Canceled` in the database. RequestRecordCancel contains more information.

RequestRecordCancel

RequestRecordCancel Request	
Description	Desktop sends a request to OCS to either: Cancel a record or a chain, in which case the preview record or scheduled call should not be dialed. or Cancel a record or chain for which the call has already been dialed, and the record displayed on the desktop. In both cases, the record should not be re-sent to another agent. It should be marked in the database as `canceled` .
OCS Action	Cancel record.

The RequestRecordCancel Attached Data table lists the attached data for the `RequestRecordCancel` request.

RequestRecordCancel Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`RequestRecordCancel`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance. Always required.
GSW_CALLING_LIST	String	No	Name of the calling list. Required only if `GSW_RECORD_HANDLE` is

Data Key	Type	Key Required	Description
			specified.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group
GSW_CAMPAIGN_NAME	String	No	Name of the Campaign. Required only if `GSW_RECORD_HANDLE` is specified.
GSW_CHAIN_ATTR	String	No	Flag determining whether to update the record chain or just the single record. Values are `AllChain` (default) or `RecordOnly` .
GSW_CUSTOMER_ID[b]	String	No	A user-defined field in the Calling List table that serves as a customer identifier.
GSW_PHONE[b]	String	No	Customer’s phone number.
GSW_RECORD_HANDLE[b]	Int	No	Unique Record Identifier.
GSW_REFERENCE_ID[c]	Int	No	Reference identifier for the request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] Record cancellation requests can identify sets of records by the record handle, phone number, and customer ID. If more than one record identifier is included in the same request, the identifiers are prioritized as follows: record handle (highest), phone (middle), and customer ID (lowest).

[c] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

Mandatory Fields

This statement covers two scenarios and the data key fields required for them. They vary, depending on what is specified in the event.

`GSW_APPLICATION_ID`

if (`GSW_RECORD_HANDLE` is specified)

```
        {
        GSW_CAMPAIGN_NAME
        GSW_CALLING_LIST
        }
    else
        {
        GSW_PHONE
        }
```

For example, if GSW_RECORD_HANDLE is specified, GSW_CAMPAIGN_NAME and GSW_CALLING_LIST must be specified.

If OCS receives RequestRecordCancel with the required fields for either of these two scenarios, OCS sends RecordCancelAcknowledge to the desktop. If any of the required fields for these scenarios are missing, OCS sends an error message to the desktop.

The field GSW_CHAIN_ATTR directs the update of chained records. If omitted or set with the AllChain value, all chained records are updated as Canceled; if the field has the RecordOnly value, the record with the requested GSW_PHONE is marked as Canceled, but other chained records are Updated.

Under particular conditions, records with the same chain_id are not all cancelled by RequestRecordCancel. For more information, see the Filters that Break a Chain of Records section in the *Outbound Contact 8.1 Deployment Guide.*

RecordCancelAcknowledge

OCS sends this event to the desktop to acknowledge a RequestRecordCancel event. RecordCancelAcknowledge contains more information.

RecordCancelAcknowledge

RecordCancelAcknowledge User Event	
Description	OCS accepts a desktop request to cancel a record.
Recommended Desktop Action	Remove the record and the chain from desktop.

The RecordCancelAcknowledge Attached Data table lists the attached data for the RecordCancelAcknowledge event.

RecordCancelAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`RecordCancelAcknowledge`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance. Always required.
GSW_CALLING_LIST	String	No	Name of the calling list. Required only if `GSW_RECORD_HANDLE` is specified.
GSW_CAMPAIGN_NAME	String	No	Name of the Campaign. Required only if `GSW_RECORD_HANDLE` is specified.
GSW_CHAIN_ATTR	String	No	Flag determining whether to update the record chain or just the single record. Values are `AllChain` (default) or `RecordOnly` . See also Record Cancel for `AllChain` when Chain is Broken in the *Outbound Contact 8.1 Deployment Guide*.
GSW_MESSAGE	String	No	OCS message (“Incomplete processing: record(s) on desktop") notifying the `RequestRecordCancel` requester (agent desktop or third party) about OCS’s inability to completely handle the cancellation request, because calls records are still active on an agent’s desktop. **Note:** This only affects cancellation by phone and customer ID. It does not affect `RequestRecordCancel` requests made by the record handle or `DoNotCall` requests.
GSW_PHONE	String	No	Customer’s phone number.
GSW_RECORD_HANDLE	Int	No	Unique Record Identifier.

> **Important**
>
> The mandatory fields for the`RequestRecordCancel` event depend on the scenario.
>
> - Scenario 1: If `GSW_RECORD_HANDLE` is present, then `GSW_CALLING_LIST` and `GSW_CAMPAIGN_NAME` become mandatory, in addition to `GSW_APPLICATION_ID`.
> - Scenario 2: If `GSW_PHONE` is present, then only `GSW_APPLICATION_ID` is mandatory.

RecordCancel Notification

OCS sends this unsolicited notification to the desktop to cancel a record. This occurs, for example, when an inbound agent sends a CM_ReqCancelRecord from a third-party application to OCS, and OCS finds a record with the same phone number (GSW_PHONE) or the same customer ID (GSW_CUSTOMER ID) on another desktop. When OCS sends a `RecordCancel` notification to the desktop, the agent should remove the record from the desktop. RecordCancel contains more information.

RecordCancel

RecordCancel User Event	
Description	OCS sends this event to the desktop to indicate that this record should not be dialed. Applicable for preview records and scheduled calls.
Recommended Desktop Action	Delete the record if `GSW_CHAIN_ATTR= RecordOnly` . Delete the chain if the `RecordCancel` contains `GSW_CHAIN_ATTR=AllChain` .

The RecordCancel Attached Data table lists the attached data for the `RecordCancel` event.

RecordCancel Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`RecordCancel`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	Yes	Name of the calling list.

Data Key	Type	Key Required	Description
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_CHAIN_ATTR	String	No	Flag determining whether to update the record chain or just the single record. Values are AllChain or RecordOnly. (Default = AllChain)
GSW_PHONE	String	Yes	Customer's phone number.
GSW_CUSTOMER_ID	Int	Yes	Customer's ID.

Canceled and DoNotCall Chained Records

The `GSW_CHAIN_ATTR` key applies only to cancelled and `DoNotCall` chained records. The value of the chained record attribute determines the next action when a record that is part of a chain is marked as `Cancel` or`DoNotCall`:

- When the value is set to `RecordOnly`, only that particular record in the chain is marked with `Cancel` or `DoNotCall`
- When the value is set to`AllChain` or is not specified, the entire chain is marked with the same `Cancel` or `DoNotCall` status as the first record.

OCS ignores the status of the GSW_CHAIN_ATTR key when processing `UpdateCallCompletionStats`, `RescheduleRecord`, and `RecordProcessed` requests.

If a chain of records is on an agent's desktop and a `Cancel` or `DoNotCall` by phone number or customer ID (AllChain) request is sent to OCS, OCS distributes the `RecordCancel` message to the desktop application.

Submitting DoNotCall Requests

The desktop can send a DoNotCall (DNC) request to OCS to prevent a record from being dialed by any Campaign. Agents able to send this type of request include:

- Outbound agents: Those who work only in outbound Campaigns. See Example 1.
- Blended agents: Those who work simultaneously in outbound Campaigns and on inbound calls. See Example 2.
- Inbound agents: Those who work on inbound calls. See Example 3.

The following are three examples of `DoNotCall` request handling.

Example 1

1. While an agent is working on an outbound Campaign, a called party asks the agent not to call him (or her) again and wants his (or her) name or phone number removed from the contact list.
2. To accomplish this, the Agent sends a DoNotCall request (with GSW_RECORD_HANDLE) to OCS.
3. Using the GSW_RECORD_HANDLE provided, OCS identifies the record and updates the record type as `NoCall`.
4. OCS enters the phone number or the customer ID of this record in the `gsw_donotcall_list` (table).

Example 2

1. An agent is working in a *blended* environment (inbound and outbound) and has an agent desktop at his disposal. The agent accepts an inbound call from a customer who requests no contact with him (or her) in the future.
2. The desktop sends a `DoNotCall` request with the phone number (`GSW_PHONE`) or the customer ID (`GSW_CUSTOMER_ID`) but without `GSW_RECORD_HANDLE` to OCS. OCS saves the phone number in the `gsw_donotcall_list` (table).
3. OCS attempts to find a record that has the matching phone number in OCS memory and in calling lists assigned to loaded Campaigns/Campaign groups.
4. If a match is found, OCS updates the record as `NoCall` in OCS memory (if applicable) and/or in calling lists.
5. If a match is found on other desktops within the Campaign Group, OCS sends a `RecordCancel` notification to the desktop(s) where that record is located.
6. The agent deletes the record from the desktop application memory to ensure the record will not be dialed.

> **Tip**
>
> A blended agent who submits a `DoNotCall` request from an agent desktop must be a member of an Agent Group or Place Group assigned to the Campaign.

Example 3

1. An agent working only on inbound calls receives a call from a customer who does not want to be contacted again.
2. The agent sends a `CM_ReqDoNotCall` request (with `GSW_PHONE` or `GSW_CUSTOMER_ID`) to OCS by means of Communication DN API. (See Communication DN API.)
3. OCS saves the phone number in the `gsw_donotcall_list` (table).
4. OCS attempts to find a record that has the matching phone number in OCS memory and in calling lists assigned to loaded Campaigns/Campaign groups.
5. If a match is found, OCS updates the record as `NoCall` in OCS memory (if applicable) and/or in calling lists.
6. If a match is found on other desktops within the Campaign Group, OCS sends a `RecordCancel`

notification to the desktop(s) where that record is located.

7. The agent deletes the record from the desktop application memory to ensure the record will not be dialed.

> **Tip**
>
> An inbound agent who submits a `CM_ReqDoNotCall` request from a third-party application does not have to be a member of an Agent or Place Group.

The remaining sections pertaining to `DoNotCall` requests in this chapter are applicable to OCS-Desktop protocol. For information about `DoNotCall` requests from third-party applications, see Communication DN API. OCS stores records marked as `NoCall` in the `gsw_donotcall_list` (one per tenant) and monitors them in the following way: When a tenant starts a dialing session for a Campaign, OCS retrieves all records that are ready to be dialed from a calling list and checks them against the `gsw_donotcall_list`. If a record retrieved from a calling list matches a record marked `NoCall` in the `gsw_donotcall_list`, OCS does not dial this record, but instead returns it to the calling list and changes its `record_type` to `NoCall`.

> **Important**
>
> If a manual update to this `gsw_donotcall_list` is required, OCS must either be restarted to acknowledge the changes or, alternatively, OCS will pick up these updates upon next reread of the Do Not Call list, if OCS is configured for such rereads. For a description of Do Not Call reread functionality, see the Rereading of the Do Not Call List section in the *Outbound Contact 8.1 Deployment Guide*. Most administrators choose to synchronize OCS with the updated DoNotCall table (`gsw_donotcall_list`) during off-hour periods, so that restarting the server or rereading the DoNotCall table does not disrupt calling activities.

DoNotCall (Request)

The desktop sends this request for OCS to mark a record `DoNotCall`. OCS maintains the DoNotCall table (gsw_donotcall_list), which agents can update during a Campaign by using this protocol. DoNotCall contains more information.

DoNotCall

DoNotCall Request	
Description	Agent requests the number or customer ID in a record not to be called again.
OCS Action	Update gsw_donotcall_list. Mark record `NoCall` .

The DoNotCall Attached Data table lists the attached data for the `DoNotCall` request.

DoNotCall Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`DoNotCall`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	No[a]	Name of the calling list.
GSW_Campaign_GROUP_NAME[b]	String	No	Name of the Campaign Group
GSW_CAMPAIGN_NAME	String	No[a]	Name of the Campaign.
GSW_CHAIN_ATTR	String	No[c]	Flag determining whether to update the record chain or just the single record. Values are AllChain or RecordOnly. (Default = AllChain)
GSW_MESSAGE	String	No	DoNotCall message. Message to be written in DNC log.
GSW_PHONE	String	No[b]	Customer's phone number.
GSW_CUSTOMER_ID	String	No[c]	A user-defined field in the Calling List table that serves as a customer identifier for DoNotCall requests.
GSW_RECORD_HANDLE	Int	No[a]	Unique Record Identifier.
GSW_REFERENCE_ID[d]	Int	No	Reference identifier for the request.

[a] If `GSW_RECORD_HANDLE` is specified, then `GSW_CALLING_LIST` and `GSW_CAMPAIGN_NAME` are required.

[b] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[c] If GSW_RECORD_HANDLE is not specified, then either GSW_PHONE or GSW_CUSTOMER_ID must be present. See Mandatory Fields.

If the GSW_RECORD_HANDLE attribute is specified, then the attribute GSW_CHAIN_ATTR = AllChain takes effect. In this case, OCS finds the chain to which the current record belongs and updates this chain in the calling list(s) as NoCall. Then, it inserts all of the phone numbers in the chain into the DoNotCall table.

If either the GSW_PHONE or GSW_CUSTOMER_ID attribute is specified, then OCS updates the calling list(s) and inserts only the phone number/Customer ID from the request into the DoNotCall table. It will not insert all of the other phone numbers/Customer IDs from the chain into the DoNotCall table.

If the GSW_CHAIN_ATTR = RecordOnly attribute is specified, then only the specified record is marked as DoNotCall. All other records in the chain can be considered for dialing.

[d] GSW_REFERENCE_ID is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

Mandatory Fields

This statement covers two scenarios and the data key fields required for them. These vary, depending on what is specified in the event.

```
GSW_APPLICATION_ID

if (GSW_RECORD_HANDLE is specified)

{
    GSW_CAMPAIGN_NAME

    GSW_CALLING_LIST

    }


else

{
    At least one from the following:

    GSW_PHONE

    GSW_CUSTOMER_ID

}
```

For example, if GSW_RECORD_HANDLE is specified, GSW_CAMPAIGN_NAME and GSW_CALLING_LIST must

be specified.

DoNotCallAcknowledge

This event acknowledges a `DoNotCall` request. DoNotCallAcknowledge contains more information.

DoNotCallAcknowledge

DoNotCallAcknowledge User Event	
Description	Confirmation that DoNotCall was accepted.
Recommended Desktop Action	Delete the record and the chain.

The DoNotCallAcknowledge Attached Data table lists the attached data for the `DoNotCallAcknowledge` event.

DoNotCallAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`DoNotCallAcknowledge`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	No[a]	Name of the calling list.
GSW_CAMPAIGN_NAME	String	No[a]	Name of the Campaign.
GSW_CHAIN_ATTR	String	No	Flag determining whether to update the record chain or just the single record. Values are `AllChain` or `RecordOnly`. (Default = `RecordOnly`)
GSW_PHONE	String	No[b]	Customer's phone number.
GSW_CUSTOMER_ID	String	No[b]	A user-defined field in the Calling List table that serves as a customer identifier for DoNotCall requests.

Data Key	Type	Key Required	Description
GSW_RECORD_HANDLE	Int	No[a]	Unique Record Identifier.
GSW_DURATION	Int	No	DNC duration, in seconds [c] Related Documentation: Do Not Call Duration

[a] If GSW_RECORD_HANDLE is specified, then GSW_CALLING_LIST and GSW_CAMPAIGN_NAME are required.

[b] If GSW_RECORD_HANDLE is not specified, then either GSW_PHONE or GSW_CUSTOMER_ID must be present. See Mandatory Fields.

[c] OCS adds this value to the current time and stores the result as the expiration date in the Do Not Call table.

Scheduling and Rescheduling Records

An agent can reschedule any record on the desktop. There are two methods for rescheduling records:

- Use a RecordReschedule event to reschedule a call.
- Use a ScheduledRecordReschedule event when a rescheduled call cannot be completed and must be set for another time.

A record is typically rescheduled during a call when a customer requests a callback at a certain time. The agent sends a RecordReschedule to OCS and receives a RecordRescheduleAcknowledge in return. In Outbound Desktop Protocol Version 6, there is no difference between RecordReschedule and ScheduledRecordReschedule.

If the time of the requested callback is out of the boundaries of the “daily from" - “daily till" for the record: When the call is dialed, OCS recalculates the callback time by adding an appropriate amount of time to the original value, so the callback time occurs within the boundaries.

Callbacks can be assigned to either an individual or a group. Individual or Campaign Group callbacks can be made in any dialing mode. In the Predictive mode, group callbacks can be dialed by OCS and are treated like any other outbound call. See the predictive_callback option in the *Outbound Contact 8.1 Deployment Guide* for more information.

If scheduling callbacks is activated on the desktop, the agent can be notified to make a scheduled call by receiving the UserEvent ScheduledCall. The agent can be either a specific agent following up on a previous call or an agent assigned to the call from a group. For example, an agent is logged in and participating in a Campaign. The database indicates that a customer should be called at a certain time. When this time comes, OCS retrieves the record and attempts to locate the agent scheduled to return that call.

The agent has the option of accepting, rescheduling, or rejecting the callback. If the agent rejects a scheduled call record, it is returned to OCS with its record_type marked General and its record_status

marked Ready. That is, this record is handled by OCS as a brand-new record, losing its scheduled call status. If rejecting a record is not desirable, use the `ScheduledRecordReschedule` request to reschedule the record with a different callback type or different callback time.

RecordReschedule

The desktop sends this request to OCS to reschedule a record. RecordReschedule contains more information.

> **Important**
> A callback is not scheduled at the time the request to reschedule a record is received and acknowledged by OCS. Instead, OCS waits for the explicit `RecordProcessed` event from the agent's desktop to finalize the callback scheduling.

RecordReschedule

RecordReschedule Request	
Description	Request reschedule of Preview Record, Predictive Call, or Scheduled Call.
OCS Action	Update a record chain and reschedule the record.

The RecordReschedule Attached Data table lists the attached data for a `RecordReschedule` event.

RecordReschedule Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`RecordReschedule`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLBACK_TYPE	String	Yes	Type of callback an agent wants to create, either Personal or Campaign.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group.

Data Key	Type	Key Required	Description
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_DATE_TIME	String	Yes	Date and time of scheduled call, in the record's Time Zone.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

RecordRescheduleAcknowledge

OCS sends this event to the desktop to acknowledge a rescheduled record.RecordRescheduleAcknowledge contains more information.

RecordRescheduleAcknowledge

RecordRescheduleAcknowledge User Event	
Description	Confirmation that record was rescheduled.
Recommended Desktop Action	Continue Call Work (the agent performs work associated with the call, such as dialing or updating a record).

The RecordRescheduleAcknowledge Attached Data table lists the attached data for a `RecordRescheduleAcknowledge` event.

RecordRescheduleAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`RecordRescheduleAcknowledge`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLBACK_TYPE	String	Yes	Type of callback an agent wants to create, either Personal or Campaign.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_DATE_TIME	String	Yes	Date and time of scheduled call, in the record's Time Zone.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.

ScheduledRecordReschedule

The desktop sends this event to OCS to reschedule a previously rescheduled record. ScheduleRecordReschedule contains more information.

ScheduleRecordReschedule

ScheduleRecordReschedule User Event	
Description	Request a reschedule of Preview Record, Predictive Call, or Scheduled Call when a rescheduled call cannot be completed and must be set for another time.
OCS Action	Update a record chain and reschedule the record.

The ScheduledRecordReschedule Attached Data table lists the attached data for a `ScheduledRecordReschedule` event.

ScheduledRecordReschedule Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`ScheduledRecordReschedule`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLBACK_TYPE	String	Yes	Type of callback an agent wants to create, either Personal or Campaign. By default, if the attribute is not specified, callback type should not be changed.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_DATE_TIME	String	Yes	Date and time of scheduled call, in the record's Time Zone.
GSW_PHONE	String	No	Customer's phone number.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the GSW_CAMPAIGN_NAME attribute.

[b] GSW_REFERENCE_ID is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

ScheduledRecordRescheduleAcknowledge

OCS sends this event to the desktop to acknowledge the rescheduling of a scheduled record. ScheduledRecordRescheduleAcknowledge contains more information.

ScheduledRecordRescheduleAcknowledge

ScheduleRecordRescheduleAcknowledge User Event	
Description	Confirmation that record was rescheduled.
Recommended Desktop Action	Continue “Call Work" (the agent performs work associated with the call, such as dialing or updating a record).

The ScheduledRecordRescheduleAcknowledge Attached Data table lists the attached data for a `ScheduledRecordRescheduleAcknowledge` event.

ScheduledRecordRescheduleAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`ScheduledRecordRescheduleAcknowledge`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLBACK_TYPE	String	Yes	Type of callback an agent wants to create, either Personal or Campaign.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_DATE_TIME	String	Yes	Date and time of scheduled call, in the record’s Time Zone.
GSW_PHONE	String	No	Customer’s phone number.
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.

OCS sends this event to notify the desktop that there is a scheduled call. Nonmandatory fields are sent only if the `send_attribute` option is defined. ScheduledCall contains more information.

ScheduledCall

ScheduleCall User Event	
Description	OCS sends to agent to indicate that scheduled call should be executed.
Recommended Desktop Action	Perform Call Work (the agent performs work associated with the call, such as dialing or updating a record).
Mandatory Fields	GSW_USER_EVENT GSW_APPLICATION_ID GSW_CAMPAIGN_NAME GSW_CALLING_LIST GSW_RECORD_HANDLE GSW_PHONE GSW_CALL_RESULT GSW_CALLBACK_TYPE
Additional Fields	Genesys and user-defined fields that have the `send_attribute` option configured.

The ScheduledCall Attached Data table lists the attached data for a `ScheduledCall` event.

ScheduledCall Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`ScheduledCall`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_ATTEMPTS	Int	No	Number of attempts for the record.
GSW_CALL_RESULT	Int	Yes	Call Result set by dialer or saved from previous call. (See the Enumeration Table.)
GSW_CALL_TIME	String	Yes	System time when record was called, in seconds from 1/1/70 (GMT).
GSW_CALLBACK_TYPE	String	Yes	Type of callback, either

Data Key	Type	Key Required	Description
			Personal or Campaign.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_CHAIN_ID	Int	Yes	Unique chain ID.
GSW_DATE_TIME	String	Yes	Date and time of scheduled call, in the record's Time Zone.
GSW_FROM	Int	No	GSW_FROM - GSW_UNTIL: Time frame when a record can be called, seconds from midnight.
GSW_PHONE	String	Yes	Customer's phone number.
GSW_PHONE_TYPE	Int	No	Customer phone type (See the Enumeration Table).
GSW_RECORD_HANDLE	Int	Yes	Unique Record Identifier.
GSW_TZ_OFFSET	Int	No	Offset (time difference) in seconds between UTC and a particular time zone. It may contain different values throughout the year if Daylight Savings Time (DST) is used for the specified time zone.
GSW_UNTIL	Int	No	Time until, seconds since midnight.
Custom fields	Any	No	Custom Fields.

Adding Records to a Calling List

When a Campaign/Campaign group is running or loaded, an agent can add both new records to the calling list and new chained records to an existing chain. The agent can add new records to a calling list if all the fields in the record are consistent with those defined in the calling list table. When adding

new record that is not a part of the existing chain to the calling list, you can set up this new record as one of the following types, provided the fields of the record are set up correctly for the type of the record: General, Campaign Callback, Personal Callback, Campaign Rescheduled or Personal Rescheduled.

AddRecord Request

The Agent sends the `AddRecord` request to OCS to add a new record to the database. The `AddRecord` request can be used only to add records to a running or loaded Campaign/Campaign group. Only those fields defined with the `send_attribute` option are updated using the `AddRecord` request. In addition, the agent who sends this request should belong to the Campaign Group that is assigned for the Campaign.

To add a new record or the next record in an existing chain to a Campaign's calling list, the requests UserData must include the mandatory fields (as defined in the Key Required column in AddRecord Attached Data). Note that when adding a new record, the GSW_RECORD_HANDLE is not a required key. Since the record is new, it has not yet been assigned a GSW_RECORD_HANDLE. Instead, GSW_PHONE is the required key in this request and is used as the identifier for the record.

When a record is added to the existing chain, it assumes the type of the chain, regardless of the type assigned to this record. Therefore, if a chain of records is on an agent desktop and new record of type Callback needs to be added, the agent should perform the following steps:

1. Add a record of type General to the existing chain.
2. Issue a RequestChainedRecords desktop request, to have OCS deliver the newly added record to the desktop.
3. Issue a RecordReschedule request using the handle of the newly added record.

If OCS receives an `AddRecord` request without the `GSW_CHAIN_ID` attribute, OCS assigns the next available `chain_id` and chain number (chain_n) with a value of `0`. This creates a new chain.

If an Agent wants to add a record to an existing chain, he or she must include the attribute `GSW_CHAIN_ID` (of the existing chain) in the request's UserData. In this case, OCS assigns the next available chain number (`chain_n`) when it adds the record to the chain.

If an Agent wants to assign a specific number to a record being added to a chain, the agent must include both attributes `GSW_CHAIN_ID` and `GSW_CHAIN_N` in the request's UserData.

> **Important**
>
> OCS processes an `AddRecord` request with the attribute `chain_n = 0` as a request to add a new record to a chain, which is also how OCS processes the request if the `chain_n` attribute is not specified. If an agent specifies the `chain_n` attribute as not equal to 0 in the request, OCS interprets this as a request to add a specific record with the `chain_id` and `chain_n` attributes as defined in the request. This type of request will fail if the record with the (`chain_id`, `chain_n`) pair is already present in the calling list.

AddRecord contains more information.

AddRecord

AddRecord Request	
Description	Request to add a new record to the database.
OCS Action	Verify data and create new record in the list.

The AddRecord Attached Data table lists the attached data for an `AddRecord` request.

AddRecord Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`AddRecord`
GSW_AGENT_ID	String	No	Login ID of last agent who worked with the record. Optional. (Default = 0)
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_ATTEMPTS	Int	No	Number of attempts for the record. This key is used when a new record is added. Optional. (Default = 0)
GSW_CALL_RESULT	Int	No	Call Result sent to change automatically detected call result. (See the “Genesys Enumeration Table" on Enumeration Table.)
GSW_CALL_TIME	String	No	System time when record was called, in seconds from 1/1/70 (GMT). Optional. (Default = 0)
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group
GSW_CAMPAIGN_NAME[b]	String	Yes	Name of the Campaign.

Data Key	Type	Key Required	Description
GSW_CHAIN_ID	Int	No	Unique chain identifier. Optional. If missing, it is assumed that a record forms a new chain.
GSW_DATE_TIME	String	No	Date and time of scheduled call. Optional, in the record's Time Zone. (Default = 0)
GSW_FROM	Int	No	GSW_FROM - GSW_UNTIL: Time frame when a record can be called, seconds from midnight. (Default = 28800, which represents 8 AM)
GSW_PHONE	String	Yes	Customer's phone number.
GSW_PHONE_TYPE	Int	No	Customer phone type (See the "Genesys Enumeration Table" on Enumeration Table). (Default = 2, DirectBusinessPhone)
GSW_RECORD_HANDLE[b]	Int	No	Unique Record Handle value for the record.
GSW_RECORD_STATUS	Int	No	Status of adding record sent from a desktop (See the "Genesys Enumeration Table" on Enumeration Table). Optional. (Default = 1, ready)
GSW_RECORD_TYPE	Int	No	Type of added record sent from a desktop. See the "Genesys Enumeration Table" on Enumeration Table. Optional. (Default = 2, general)
GSW_REFERENCE_ID[c]	Int	No	Reference identifier for the request.
GSW_TZ_NAME	String	Yes	Configuration Server Time Zone Name (usually standard three-letter abbreviation.
GSW_CHAIN_N	Int	No	Unique number in a chain. Optional. If missing, the next available number is assigned.

Data Key	Type	Key Required	Description
GSW_UNTIL	Int	No	GSW_FROM - GSW_UNTIL: Time frame when a record can be called, seconds from midnight. (Default = 64800, which represents 6 PM.)
Custom fields	Any	No	Custom Fields.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the GSW_CAMPAIGN_NAME attribute.

[b] To handle a scenario in which several dialing sessions are active or running for the same Campaign and ensure that a new record is added to an existing chain for the appropriate group, OCS places a higher priority on processing the GSW_RECORD_HANDLE attribute if present in the request over the GSW_CAMPAIGN_NAME attribute. The GSW_RECORD_HANDLE attribute provides information to identify the Campaign Group, and with GSW_CHAIN_ID, enables a new record to be added correctly. In addition, if the GSW_CHAIN_ID does not match the ID of the chain, OCS returns error code 103.

[c] GSW_REFERENCE_ID is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

AddRecordAcknowledge

OCS sends this event to the desktop to acknowledge an added record. AddRecordAcknowledge contains more information.

AddRecordAcknowledge

AddRecordAcknowledge User Event	
Description	OCS sent this insert request to database.
Recommended Desktop Action	Continue session.

The AddRecordAcknowledge Attached Data table lists the attached data for an AddRecordAcknowledge event.

AddRecordAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`AddRecordAcknowledge`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CALLING_LIST	String	Yes	Name of the calling list.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.

Unsolicited Notifications

Unsolicited notifications are messages that OCS sends to the agent desktop but not in response to agent requests. These are examples of unsolicited notifications:

- Scheduled record that OCS sends to the desktop without any prompting (request) from the agent.
- Notification about a cancelled record that OCS sends to a desktop other than the one that initially submitted the Cancel/DoNotCall request.
- Campaign Status and Agent Assignment notifications.

Agent Logout

Upon an agent `LogOut` request, the desktop performs the following cleanup tasks before executing the requests:

If there are existing preview records or scheduled calls, the desktop should send a `RecordReject` request to OCS, thus returning these records to the calling list table and freeing up these records for other agents to process. The `record_type` and `record_status` of the rejected records will be returned to General and Ready state.

If the agent does not perform a cleanup (reject records) before logging out, OCS, upon receiving an `LogOut` request from T-Server, returns the remaining records on the desktop to the calling list with status `updated`.

Smart Logout

The Smart Logout feature ensures that an agent is not logged out of a campaign until all outbound calls that OCS dialed based on the agent's availability are returned to the calling list or are completed

by the agent (refer to Agent Logout Protocol). After the completion of Smart Logout (after OCS sends the `LogOutAcknowledge` message—refer to LogOutAcknowledge), agents are assigned to the Inbound activity.

Agent Logout Protocol

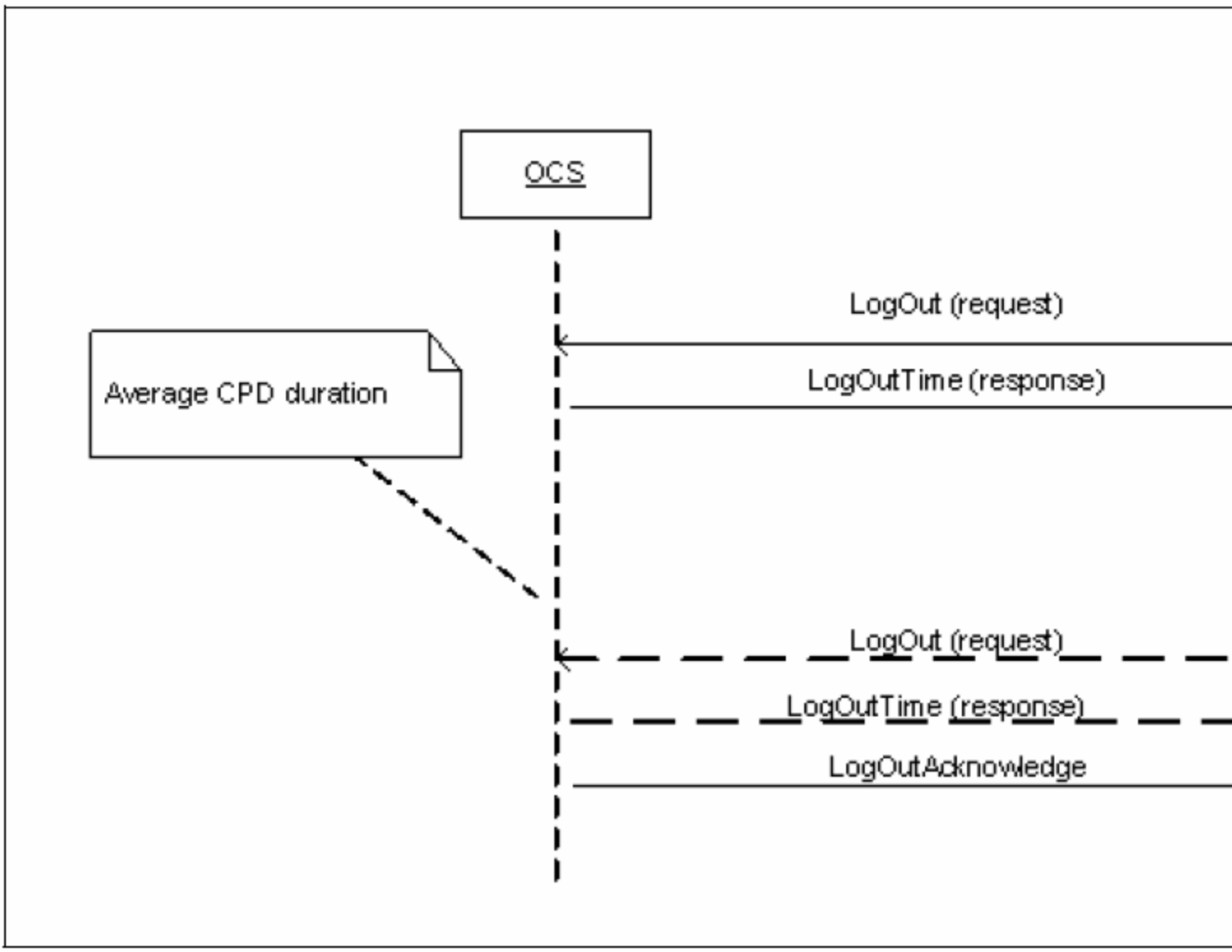
The extension of the Desktop Protocol (LogOut) addresses the issue of abandoned or dropped calls as a result of this combination of circumstances:

- A significant number of Agents in a dialing session for a Campaign group log out after OCS has already requested dialing of outbound calls.
- OCS is relying on the availability of these specific Agents to handle the calls dialed.

In this scenario, many of the answered calls would be abandoned or dropped due to Agent unavailability. A Desktop Protocol extension allows the Agent to notify OCS in advance about his or her intention to log out and to receive notification when log out is possible without a negative impact on outbound dialing. The protocol works like this:

- Instead of an actual logout, the agent sends a `LogOut` request to OCS to indicate his or her intention to log out. See LogOut. After receiving the initial `LogOut` request, OCS excludes the agent from the list of available agents and stops considering him or her for dialing prediction.
- A `LogOutTime` response from OCS provides an estimated time by which the agent will be able to log out. LogOutTime. In response to each of the agent's logout requests, OCS gives the agent an estimated logout time until that time expires. During this interval the agent may receive an outbound call. OCS recalculates the estimated time for each logout request.
- OCS notifies the desktop when logout is possible. The agent is able to log out when the estimated time expires or when the agent has processed the outbound call that OCS dialed in expectation of the agent's availability.

The Logout Negotiation between Agent Desktop and OCS diagram shows the Desktop-OCS user events (request and responses) for an agent logout.



Logout Negotiation between Agent Desktop and OCS

LogOut

LogOut provides information on this event.

LogOut

LogOut Request	
Description	Request to log out.
OCS Action	OCS excludes the agent from predictive dialing. If OCS has already requested a dialer for an outbound call for which the agent is regarded as available, OCS postpones the Logout for a period of time as specified in the `call_wait_connected_timeout` option for all agents regardless of the number of `Sent` or `Dialed` calls in progress. If there are no `Sent` , `Dialed` and `Queued` calls, OCS sends a LogOut time equal to `0`.

The LogOut Attached Data table lists the attached data for the `LogOut` event.

LogOut Attached Data

Data Key	Type	Key Required	Description
GSW_AGENT_REQ_TYPE	String	Yes	`LogOut`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CAMPAIGN_GROUP_NAME[a]	String	No	Name of the Campaign Group.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_REFERENCE_ID[b]	Int	No	Reference identifier for the request.

[a] Adding this attribute to the request enables the identification of the Campaign Group for environments where several groups are configured, active, and running for the same Campaign. This attribute has a higher priority than the `GSW_CAMPAIGN_NAME` attribute.

[b] `GSW_REFERENCE_ID` is an optional attribute in the message. When present, OCS guarantees to return this attribute (same key and same value) in the response to the desktop request, in both a positive response or an error.

LogOutTime

OCS sends this response to the desktop for the agent's `LogOut` request. LogOutTime contains more

information.

LogOutTime

LogOutTime User Event	
Description	Response to LogOut request
Desktop Action	Desktop displays the time remaining until it or the agent will be able to complete logout.

The LogOutTime Attached Data table lists the attached data for the LogOutTime event.

LogOutTime Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	LogOut
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.
GSW_LOGOUT _TIME	Int	Yes	The time remaining before the logout will be allowed.

LogOutAcknowledge

LogOutAcknowledge provides information on this event.

LogOutAcknowledge

LogOutAcknowledge User Event	
Description	Automatic logout acknowledgement
Desktop Action	Logs agent out. Displays agent's status change.

The LogOutAcknowledge Attached Data table lists the attached data for the LogOutAcknowledge

event.

LogOutAcknowledge Attached Data

Data Key	Type	Key Required	Description
GSW_USER_EVENT	String	Yes	`LogOutAcknowledge`
GSW_APPLICATION_ID	Int	Yes	OCS configuration application database ID. Unique identifier of the running OCS instance.
GSW_CAMPAIGN_NAME	String	Yes	Name of the Campaign.

Proactive Interaction Support

Proactive Interaction Attached Data provides information about additional data keys needed to enable proactive interaction functionality in the desktop. This feature is also known as `Push Preview` mode.

Proactive Interaction Attached Data

Data Key	Type	Description
GSW_AGENT_ID	String	AgentID of the agent assigned to the proactive interaction record.
GSW_SWITCH_DBID	Integer	DBID of the Switch.

The Media Type Business Attribute table provides information about identifying the media types that correspond to the `Media Type` business attribute. This defines how to contact the customer.

Media Type Business Attribute

Data Key	Type	contact_info_type Field	Description
GSW_CONTACT_MEDIA_TYPE	string	0	any (NoContactType)
		1	voice (HomePhone)

Data Key	Type	contact_info_type Field	Description
		2	voice (DirectBusinessPhone)
		3	voice (BusinessWithExt)
		4	voice (Mobile)
		5	voice (VacationPhone)
		8	voice (VoiceMail)
		10	email (E-mail)
		11	instant message

Caller ID Support

This feature enables OCS to distribute information required for Caller ID support to any telephony system.

Currently, this feature is supported:

- By the Alcatel A4400/OXE PBX and the Avaya PBX,
- When using CPD Server in ASM mode with a trunk-side ISDN connection to the PSTN, or
- When using Outbound Notification Manager and the Power GVP dialing mode.

> **Important**
>
> When using CPD Server in an ASM mode, set the `line-type` option to `isdn, isdn-dm3, cas-dm3,` or `sip-hmp-asm.`

The Caller ID support features include:

- Caller ID Per Campaign
  The Caller ID can now be specified per Campaign.

  This simplifies telemarketing regulation compliancy setup in certain cases, such as when a single site must transmit multiple, different Caller IDs, depending on the Outbound Campaign.

  OCS submits information if the option `CPNDigits` is configured in the corresponding Campaign/

Application Configuration Object.

- Caller ID Support for ISDN Connections
  The Caller ID is transmitted to PSTN when using CPD Server with an ISDN connection (ASM mode).

  In this case, CPD Server uses the value from `CPNDigits` and `CPNPresentation` received from OCS, instead of the value specified in the `calling-party-number` and `presentation-indicator` options in the ISDN section. For other parameters, CPD Server uses the values configured in the CPDServer Options/ISDN section.

- Caller ID Support for Avaya CTI
  This capability works with the Avaya green feature, enabling the Caller ID transmission through the CTI interface.

  OCS submits information that is required to provide the Caller ID in an outbound call in the Extensions TKVList in `TMakePredictiveCall` or `SMakePredictiveCall` functional calls.

  The CPD Server submits information received from OCS as specified in the Extensions TKVList in a `TMakeCall` request. It does this without checking the `SwitchingOffice` type to determine if it is Avaya.

The Caller ID options for each Campaign for CPN (Calling Party Number) are:

- CPNDigits
- CPNPlan
- CPNPresentation
- CPNScreening

Virtual Agent Support for Notifications

Genesys-integrated Interactive Voice Response (IVR) provides virtual agent support for IVR ports that are configured for a Campaign as “virtual agents". The virtual agent support for notifications feature includes Dialing for IVR and Blending for IVR.

This functionality simplifies the integration of Outbound Contact with IVR for outbound notifications. Outbound Contact requires that agents be in a Ready state to receive outbound calls.

Depending on specific implementation, IVR ports can be represented by any of the following:

- Places that include one DN with the type `Voice Treatment Port`
- Places that include one DN with type `ACD Position`
- Places that include two DNs with types `"ACD Position" and "Extension"`

OCS provides simplified resource availability management for IVR Groups. The IVR Group must be configured as a Group of Places with the option `ivr_group=true` in the Annex tab.

- Places in that Group may contain DNs with the type `"Position"`, `"Extension,"` or `"Voice Treatment Port"`.

When OCS is processing a Campaign with the IVR Group assigned, the following guidelines apply:

- OCS does not rely on agent state notifications (`Logged In`, `Logged Out`, `Ready`, `Not Ready`) for Places associated with IVR Groups that only contain DNs of type Voice Treatment Port. (To determine if Voice Treatment Port type DNs are supported on your switch, refer to the documentation for the T-Server being used for outbound dialing.)
- If the Place includes a DN with the type `ACD Position`, OCS expects `EventAgentLogin` on that DN to associate the Place with a Campaign.
- OCS considers `Place` available to receive an outbound Call, if there is no telephony activity in progress on the DNs included in that Place. For example, if an `EventReleased` was received on behalf of a previously established Call, and DNs (or Place) are enabled in Genesys Configuration.
- OCS considers the Place seized by a Call when any telephony activity is begun on at least one of the DNs included in that Place: For example, if `EventRinging` was received.
- OCS finalizes the `Record` processing immediately after release of a Call on DN.
- When a Place includes a DN with the type ACD Position, the OCS behavior on `EventReleased` is the following: OCS changes the agent's state to Ready and does not take into consideration the option `outbound_release_action`.
- The option `ivr_update_on_release` enables OCS to update the Calling List Record with values from Outbound Call UserData. If `ivr_update_on_release=true`, OCS updates Fields from Record with values from the corresponding `UserData KVPairs`, received in `EventReleased`. This is similar to the `UpdateCallCompletionStats` in UserEvent processing.
- OCS uses the same mechanism of “inbound call blending" as it uses for standard Campaigns.
- OCS does not process Desktop Protocol interactions related to Call processing on DNs associated with an IVR Group.
- OCS enables the transfer of calls from IVR Group to Places/Agents from regular (non-IVR) groups. Call records are not updated just after leaving an IVR Group. These records could be processed by agents according to Desktop Protocol.
- OCS treats an outbound call as being transferred to an Unknown DN if, while a campaign is running in IVR mode, after being diverted to an IVR port, the outbound call is transferred to an agent who is not participating in the IVR campaign.
- License control for an IVR Group is the same as for regular groups. The number of places assigned to an IVR Group is equal to the number of consumed licenses.
- A Group-Campaign with the option `ivr_group=true` is considered as an IVR on loading the Campaign/Campaign group. After this, OCS does not take dynamic changes of the option until unloading the Campaign/Campaign group.
- OCS enables the dynamic addition and removal of places to and from the IVR Group. Once a place with a logged in agent is removed from the group, it is no longer considered as IVR place. This place could be added to a regular group.
- OCS does not support `IVR Campaign_Group` in ASM dialing mode.

> ### Important
> Only “IVR behind the Switch" deployment is supported. Requirements for Outbound configuration and Call distribution are the same as for a standard Campaign with Agent or Place Group.

The options for the IVR features are:

- ivr_group
- ivr_update_on_release

Personalized Ring Tone Support

CPD Server utilizes the event flow patterns specific for personalized ring tone services to correctly detect the call results when dialing to the numbers that use these services. When using this feature, the dialer hears a custom music or voice message instead of a ring tone or busy signal.

This provides robust call progress detection for the numbers using personalized ring tone services.

The options for setting this feature are:

- cpd-if-established
- pre-connect-cpd-priority
- post-connect-cpd-priority

Outbound Contact Library

The following section describes:

- Error names and codes.
- All events and event type protocols.

Error Names and Codes

The Error Names and Codes table displays error names and their corresponding codes for error conditions that occur while using communication protocols.

Error Names and Codes

GSW_ERROR	GSW_ ERROR_ NUMBER	Description
Invalid Request	101	Received request has the wrong request type.[a]
Attribute Not Found	102	Mandatory attribute cannot be found.

GSW_ERROR	GSW_ ERROR_ NUMBER	Description
Invalid Attribute Value	103	Attribute has the wrong value
Agent Not Found	104	OCS cannot find an appropriate agent to process the request
Campaign Group Not Found	105	Specified Campaign Group was not found.
No Active Campaigns	106	Cannot execute request—no Campaign was loaded.
No Running Preview Campaigns	107	Cannot execute preview record request—no preview Campaign was started.
No Records Available	108	All lists are empty, all records have been processed, or the internal buffer is empty. OCS is waiting for a new selection of records.
Record Not Found	109	OCS received a request for a record that does not exist or that has already been processed.
Invalid Time	110	Received time does not meet the request conditions (for example, reschedule in the past).
Invalid Time Format	111	OCS cannot convert the string to a time (for example, 25/45/00).
No call found for the record handle	112	Received request refers to a record that has already been processed.
DB Error	113	Cannot execute the request due to database error.
Chained Records not found	114	Received request refers to an absent chain of records.
Record Already Exists	115	Attempted to add a record that already exists.
Add Record Error	116	Cannot add the record.
Scheduled record not found	117	Cannot reschedule a record.

GSW_ERROR	GSW_ ERROR_ NUMBER	Description
Preview mode has already been started	118	Preview mode has already been started.
Preview mode has not been started	119	Preview mode has not been started.

[a] When GSW_ERROR_NUMBER = 101, the GSW_ERROR message can refer to three different messages:

- PreviewDialingModeStart is required means that an agent must send a PreviewDialingModeStart request before issuing a desktop request if the agent_preview_mode_start option is set to true.
- There is no 'Auto' campaign started means that an agent is trying to perform a smart logout when there are no auto (Predictive mode or Progressive mode) Campaigns started.
- Agent smartly logged out means that an agent is sending requests after performing a smart logout, but there is a record currently on the desktop.

All Genesys Events and Event Type Protocols

The All Desktop Protocol Events and Event Type Protocols table represents all Genesys event and event type protocols.

> **Important**
>
> Starting with release 7.5, only version 6 of the desktop protocol is supported.

Key:
O > D denotes sending a message from OCS to desktop.
D > O denotes sending a message from desktop to OCS.

All Desktop Protocol Events and Event Type Protocols

Messages	From > To	Descriptions and Actions
1. Notifications		
CampaignStarted	O > D	Should be sent when Campaign dialing is started or resumed, or as a response to event agent login if a dialing session for the Campaign is started.
CampaignStopped	O > D	Should be sent when dialing for Campaign is stopped or paused. All lists in Campaign deactivated.

Messages	From > To	Descriptions and Actions
CampaignModeChanged	O > D	Should be sent when mode of running Campaign is changed.
CampaignLoaded	O > D	Should be sent when Campaign is loaded.
CampaignUnloaded	O > D	Should be sent when Campaign is unloaded.
CampaignGroupAssigned	O > D	Should be sent when the agent has been assigned to a Campaign Group.
CampaignStatusRequest	D > O	Request for information on active/running dialing session/Campaign Group(s) statuses.
2. Preview		
PreviewRecordRequest	D > O	Request to send preview record.
PreviewDialingModeStart	D > O	Request to activate preview session for the agent. Needed if the `agent_preview_mode_start` option is set to `true`.
PreviewRecord	O > D	Preview record to dial.
NoRecordsAvailable	O > D	No more records available.
3. Common		
UpdateCallCompletionStats	D > O	Desktop sends this event to update record details. Intermediate update.
UpdateCallCompletionStatsAcknowledge	O > D	OCS sends this event to confirm operation.
ReadyTime	D > O	Desktop sends this request to OCS, providing the number of seconds before the agent will go `Ready`.
ReadyTimeAcknowledge	O > D	OCS sends this event to the desktop to acknowledge the `ReadyTime` request.
RecordProcessed	D > O	Desktop sends this event to indicate that record is processed. OCS should update record if it is provided.

Messages	From > To	Descriptions and Actions
RecordProcessedAcknowledge	O > D	OCS confirms that record has been executed.
RecordReject	D > O	Desktop sends this request to indicate that the preview record or scheduled call will not be dialed by this agent. This record should be re-sent to another agent.
RecordRejectAcknowledge	O > D	OCS accepts RejectRecord request.
RecordCancelAcknowledge	O > D	Desktop sends a request to OCS to cancel a record or a chain.
RequestRecordCancel	D > O	Desktop sends this request to indicate that the preview record or scheduled call should not be dialed. Record should not be re-sent to another agent. It should be marked in the database as `canceled`.
RecordReschedule	D > O	Request a reschedule of preview record, predictive call, or scheduled call.
RecordRescheduleAcknowledge	O > D	Confirmation that record was rescheduled.
ScheduledCall	O > D	OCS sends this event to an agent to indicate that scheduled call should be executed.
ScheduledRecordReschedule	D > O	Request a reschedule of Preview Record, Predictive Call, or Scheduled Call when a rescheduled call cannot be completed and must be set for another time.
4. Chained Records		
ChainedRecordRequest	D > O	Request to send all records from the chain defined by Record Handle (Unique Record Identifier).
ChainedRecord	O > D	Request to send all records from the chain defined by RecordHandle.
ChainedRecordsDataEnd	O > D	All chain has been delivered.
5. DoNotCall		
DoNotCall	D > O	Agent requests the number or customer ID in a record not to be called again.

Messages	From > To	Descriptions and Actions
DoNotCallAcknowledge	O > D	Confirmation that DoNotCall was accepted.
6. Record Cancel from OCS to Desktop		
RecordCancel	O > D	OCS sends this to the desktop to indicate that this record should not be dialed. Applicable for preview records and scheduled calls.
7. Request add record from Desktop		
AddRecord	D > O	Request to add a new record to the database.
AddRecordAcknowledge	O > D	Phone number can be used to relate request and response.
8. Request LogOut		
LogOut	D > O	Agent’s request to log out
LogOutTime	O > D	OCS response to LogOut request
LogOutAcknowledge	O > D	Automatic logout acknowledgement