



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

# Service Management UI Help

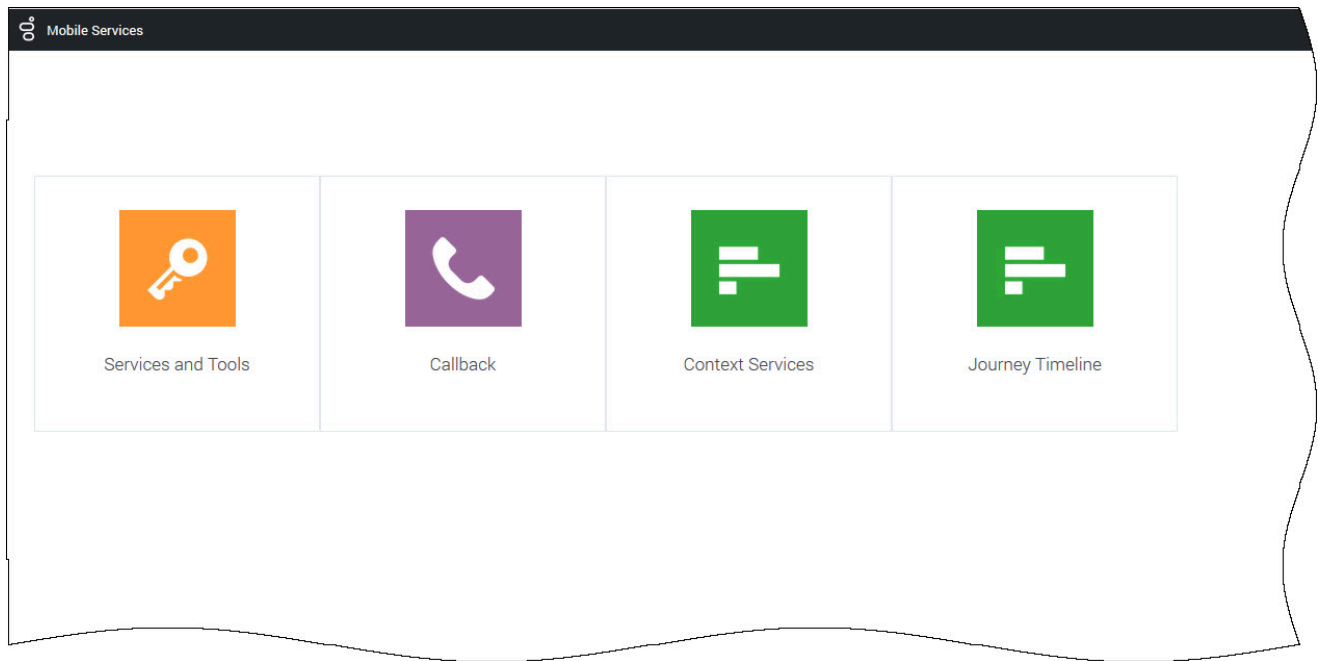
Genesys Mobile Engagement 8.5.2

11/14/2024

# Table of Contents

<b>Service Management Help</b>	<b>3</b>
<b>Login, Roles, and Permissions</b>	<b>12</b>
<b>Services and Tools UI</b>	<b>17</b>
Monitor Tab	18
Services Tab	20
Callback Service	29
Capacity Service	39
Office Hours Tab	48
Tools tab	64
Service Templates	71
<b>Callback Interface</b>	<b>74</b>
<b>Context Services Interface</b>	<b>89</b>
<b>Journey Timeline Interface</b>	<b>96</b>
<b>More about Built-in and ORS services</b>	<b>103</b>
Request-interaction	108
Get and Basic Get	115
Urs-stat	122
Match-interaction	126
Request-access	129
Request-chat	132
Capacity	135
Examples of Call Flows for Access Number Allocation	138
User Originated Immediate	143
User Originated Delayed	151
Chat Immediate	164
Chat Delayed	174
<b>Sample</b>	<b>193</b>

# Service Management Help



Genesys Mobile Services (GMS) includes a Service Management User Interface, where you can manage services and also access dedicated interfaces for Callback and Context Services.

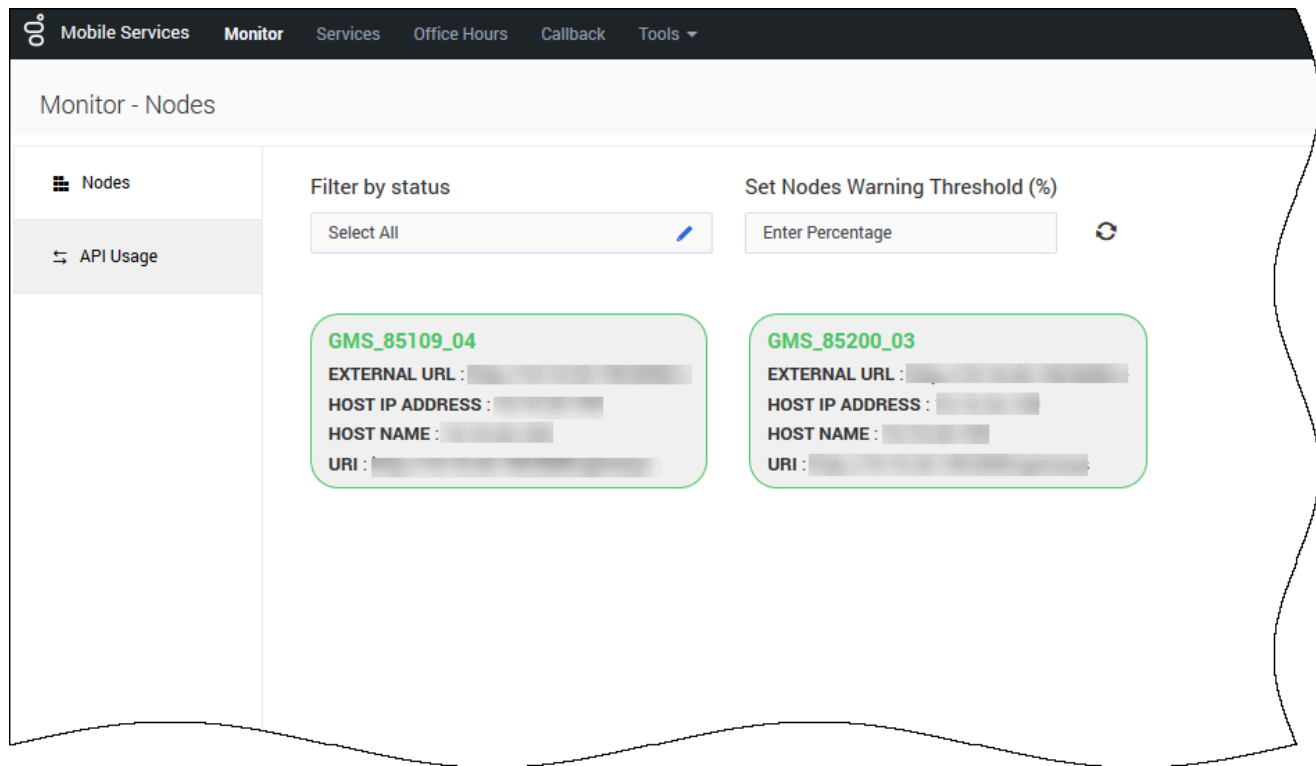
Before you can access this UI, first install GMS. See the deployment instructions [here](#) and configure the new panels in the [features](#) section of your GMS configuration.

Note that, to work properly, this UI requires access to the following URLs:

`http://<GMS Local Host>:8080/genesys/1/admin/*`

Make sure to enable this access through your firewall and security if needed.

## Monitor



The **Monitor** tab (former Admin UI) and the **Tools** menu give you access to an administrator console, where you can:

- **Monitor** your GMS nodes
- **Load and manage** service templates
- **Create resource groups and patterns**
- **Run reports**
- **Access samples**
- **Download DFM files**
- **Retrieve snippets** for your jetty-http.xml file
- Manage the **exception list** for Callback services

## Services

The screenshot displays the 'Services' tab in the Service Management UI. The left sidebar contains a list of services: 'Callback', 'Callback Delayed' (selected), 'Capacity', 'Get', 'Match Interaction', and 'Request Access'. The main area shows the 'Callback Delayed' service configuration. At the top, there is a search bar and a 'Select All' button. Below this is a table with columns 'Name', 'Value', and 'Description'. The table contains several rows, including '\_customer\_number', '\_service' (with value 'callback'), and '\_type' (with value 'ors'). There are also expandable sections for 'Chat (1)' and 'General (29)'. The bottom right corner of the interface shows the version 'Genesys Mobile Services 8.5.200.00.b.866'.

Name	Value	Description
_customer_number		Request Parameter - Customer's to match the call with service de set to USERORIGINATED. Also u connection with the customer w USERTERMINATED.This is a rec use in REST queries.
_service	callback	
_type	ors	

The **Services** tab is the user-friendly, web-based interface that is intended to be used by administrators and supervisors to:

- Add, delete, and modify a GMS service Agent Capacity

## Office Hours

Mobile Services Monitor Services **Office Hours** Callback Tools demo

Search Items

+ Create Delete

Office Hours

bh\_24x7

business-hours

bh\_24x7

The calendar is in read-only mode because the office timezone is not equal to the displayed time zone.

☐ Regular Office Hours February 18, 2018 - February 24, 2018 Today

☐ Day ☒ Week ☐ Month

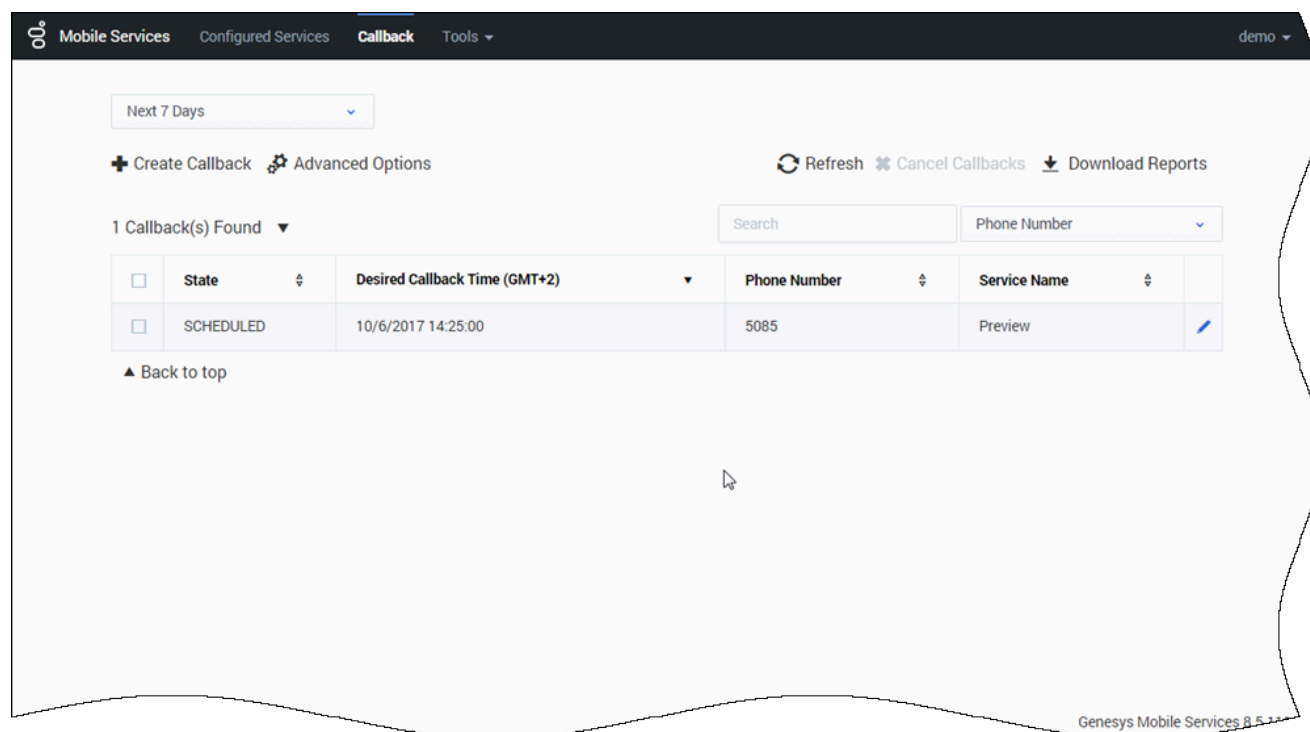
Time	Sun 02/18	Mon 02/19	Tue 02/20	Wed 02/21	Thu 02/22 *	Fri 02/23
All Day						
1 AM	Regular Office Hours 12:00 AM - 11:00 PM	Regular Office Hours 12:00 AM - 11:00 PM	Regular Office Hours 12:00 AM - 11:00 PM	Regular Office Hours 12:00 AM - 11:00 PM	Regular Office Hours 12:00 AM - 11:00 PM	Regular Office Hours 12:00 AM - 11:00 PM
2 AM						
3 AM						
4 AM						
5 AM						

Genesys Mobile Services 8.5.200.00.b.86

The **Office Hours** tab is the user-friendly, web-based interface that is intended to be used by administrators and supervisors to:

- Manage Call Center **Office Hours** and holiday schedules.

## Callback



If you **installed and configured** Callback, this interface enables you to:

- **Create** a Callback record
- Manage your callbacks

## Context Services

Phone Number 5125 HTTP Request History

Search Filter Sort by: Time Started Latest First

Services	States	Tasks
BlueSky Flight Status	BlueSky Flight Times	BlueSky LocDates Depart

**General Information**

ID	543-c37ed991-04fe-4a03-ba00-4f65f5704d82
Task Type	BlueSky LocDates Depart (2457)
Time Started	2017-10-05T10:01:24.838Z
Completed	<input type="button" value="Complete"/>

**Business Attributes**

Media type (Started)	any
----------------------	-----

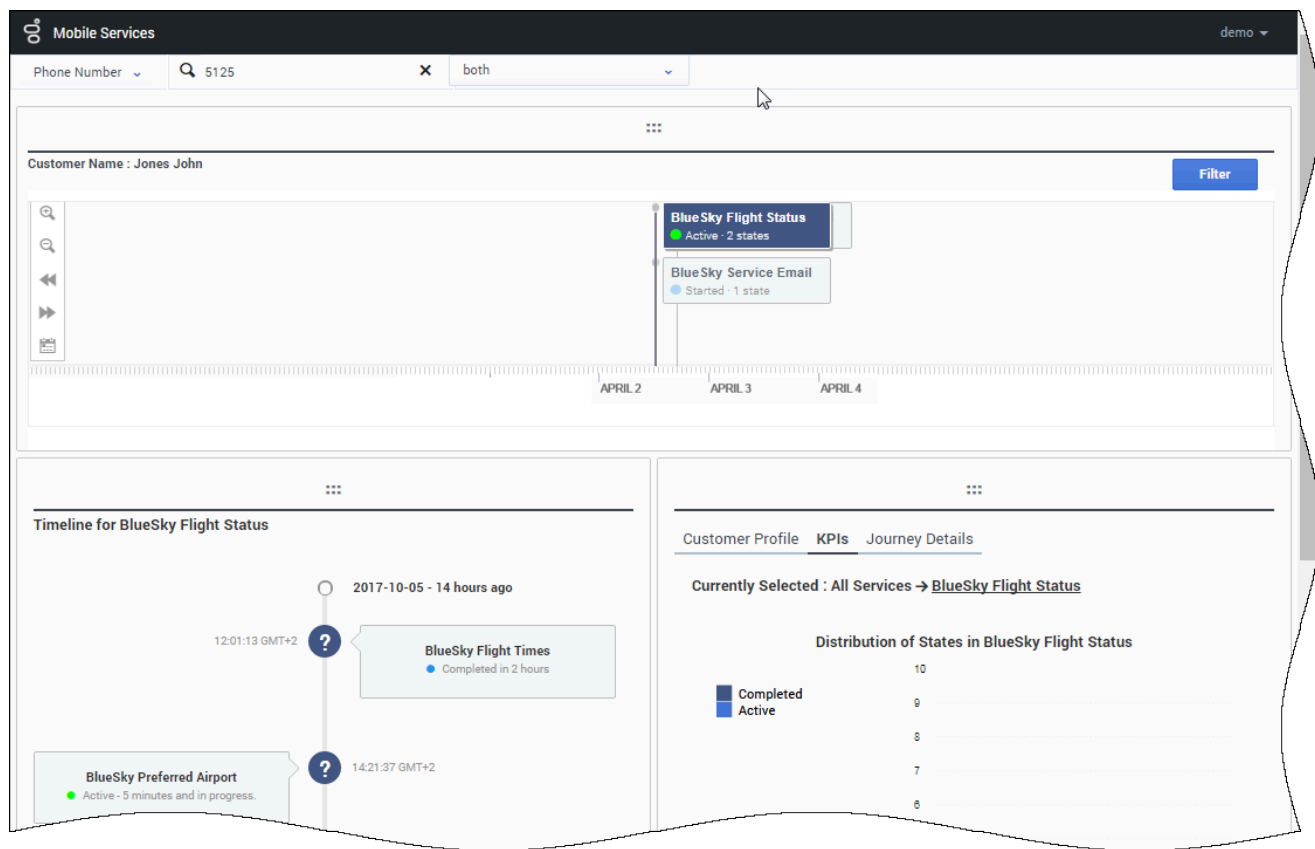
Genesys Mobile Services 8.5.111.1

If you **installed and enabled** Context Services, the Context Services interface enables you to:

- **Search** for services
- **Manage** your services
- **Create** a service, state, or task
- **Complete** a service, state, or task
- Delete a service



## Journey Timeline



If you **installed and enabled** Context Services, the Journey Timeline interface enables you to:

- **Search** and select a customer
- **Visualize** the customer's journey timeline
- Display **states and tasks**
- Display **details** related to service and state Selection

## Learn About Scenarios

GMS provides service templates and their **scenarios** that you can load in the Mobile Engagement UI, and then access through REST queries. All callback related scenarios are detailed in the **Callback Solution Guide**.

# Enable Logging in the UI

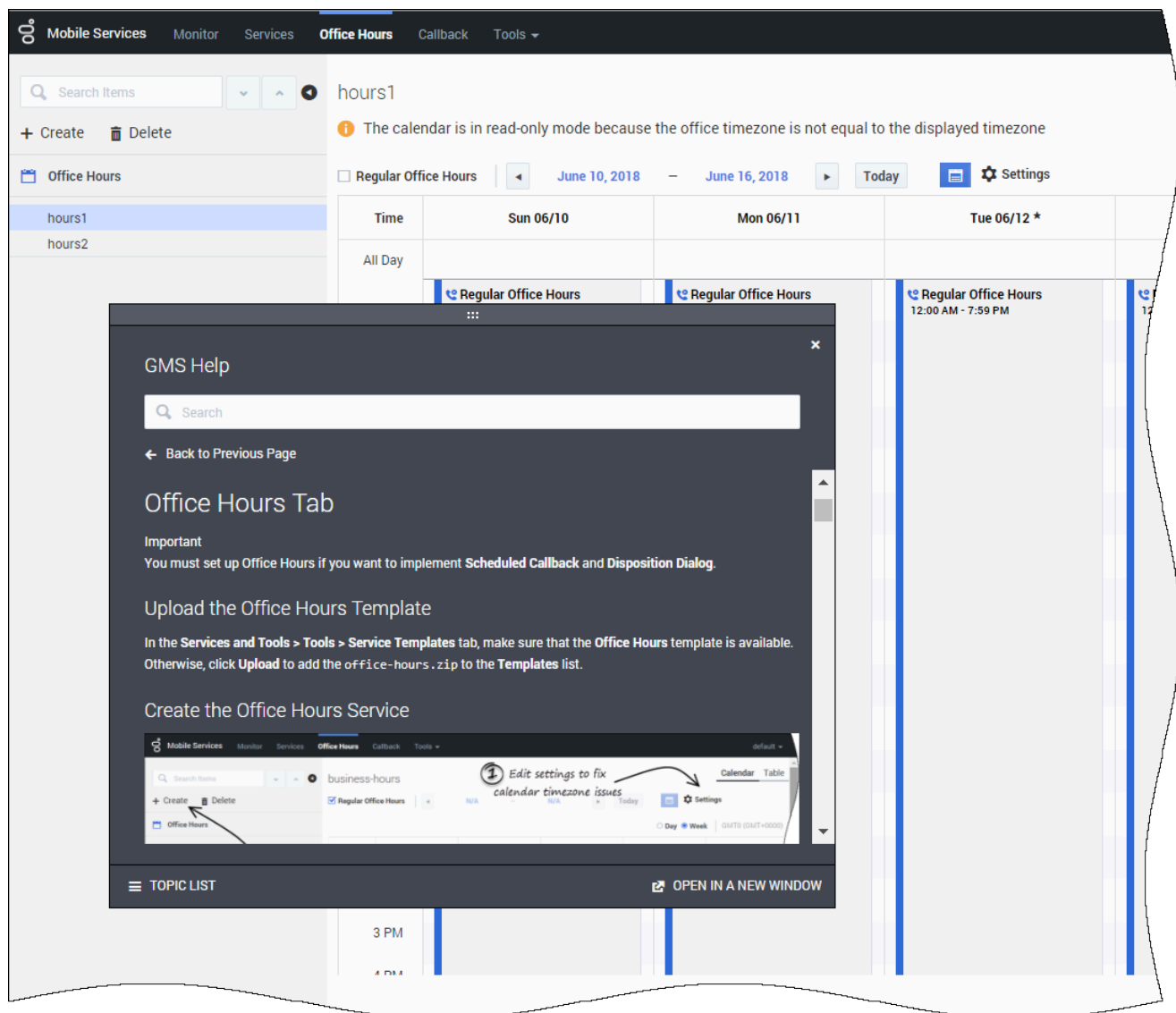
```
DEBUG: HTTP Request Fri Sep 29 2017 16:46:50 GMT-0400 (Eastern Daylight Time) log-service.js:119
Action: SUCCESS: Callbacks Cancelled Successfully
Data: {"data":{"action":"ConfirmationDialog","id":"118-487438c0-56cf-499f-819e-34ca4ee6ddc4"},"text":"Your service request is now cancelled.","ok_title":"OK","dialog_id":"0","desired_time":"2017-09-29T23:56:00.000Z"}, {"action":"ConfirmationDialog","id":"118-59ee99fa-5869-48ce-8429-408a5aa54899"},"text":"Your service request is now cancelled.","ok_title":"OK","dialog_id":"0","desired_time":"2017-09-29T23:56:00.000Z"}, {"action":"ConfirmationDialog","id":"118-6fa66986-e034-456b-ab16-ab7a6a4.... log-service.js:184
INFO: callback-controller->Refresh Callback Table log-service.js:184
INFO: callback-controller->Get End Of Day in Range for Fri Sep 29 2017 16:46:50 GMT-0400 (Eastern Daylight Time) log-service.js:184
INFO: callback-controller->Get Beginning Of Day in Range for Fri Sep 29 2017 16:46:50 GMT-0400 (Eastern Daylight Time) log-service.js:184
INFO: callback-controller->Set Custom Start Day: 2017-09-29T04:00:00.000Z log-service.js:184
INFO: callback-controller->Get Beginning Of Day in Range for Fri Sep 29 2017 00:00:00 GMT-0400 (Eastern Daylight Time) log-service.js:184
INFO: callback-controller->Set Custom End Day: 2017-09-30T03:59:59.999Z log-service.js:184
INFO: callback-controller->Get End Of Day in Range for Fri Sep 29 2017 23:59:59 GMT-0400 (Eastern Daylight Time) log-service.js:184
INFO: callback-controller->Query Callbacks log-service.js:184
INFO: callback-controller->Go To Callback Table Page 1 log-service.js:184
INFO: callback-controller->Reset Checkboxes in Callback Table log-service.js:184
INFO: callback-service->Get All Configured Services log-service.js:184
INFO: callback-service->Load URL Prefix log-service.js:184
INFO: callback-controller->Reset Checkboxes in Callback Table log-service.js:184
INFO: callback-controller->Refresh Visible Queue Info log-service.js:184
INFO: callback-controller->Set User Preferences: customDates log-service.js:184
INFO: preference-service->Set Preference log-service.js:110
DEBUG: HTTP Request Fri Sep 29 2017 16:46:50 GMT-0400 (Eastern Daylight Time) log-service.js:110
Action: SUCCESS: All Services Received Successfully
Data: {"services":{"temporary": {"title":"06400","url_prioritization_strategy":"WaitForTarget","agent_first_via_rp":"false","agent_transfer_confirm_timeout":"0","attach_data":{"single_json"},"agent_preview_via_rp":"false","wait_for_agent":"false","service":"callback","_lcn_createcall_timeout":"32","_plugin_on_dial_income_on_call_failed":"true","_agent_preview_allow_reject":"0","_treatment_waiting_for_agent":"","_media_type":"chat","_booking_expiration_timeout":"30","use_dmgw_push_certificate":... log-service.js:184
INFO: callback-controller->Initiate Getting Callbacks for Queues: temporary,temp,asc-producerts-web-callback,test,workspace-test,immediate-callback,test11,asc-web-callback,AutomatedLoadTestCService,newservice,temp2,svcask-pts-callback,test18,working-with- log-service.js:184
workspace,userOriginated,voice-scheduled-callback,callback_capacity,testnew,svcask-callback
```


The Service Management UI can provide detailed logs by configuring the following options in the GMS Configuration:

- enable-logger = `true` to activate DEBUG and INFO traces in the console.
- enable-logger-error = `true` to activate ERROR traces in the console.

## Help

### Introduced in 8.5.202

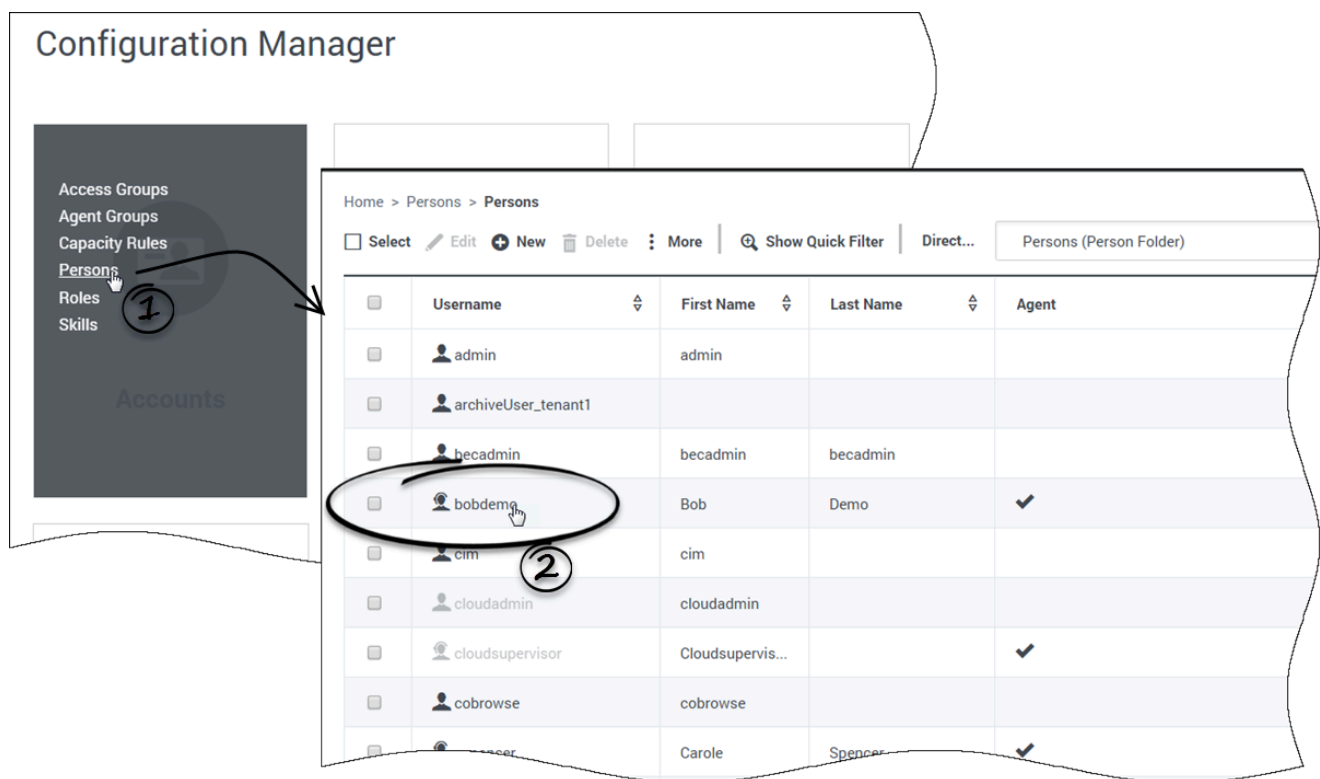


If you configure `enable-contextual-help= true`, the  icon of the Service Management UI opens a Contextual Help panel. This panel displays help pages, including videos and images, related to the active panel in the UI. It also includes search features and related topics.

# Login, Roles, and Permissions

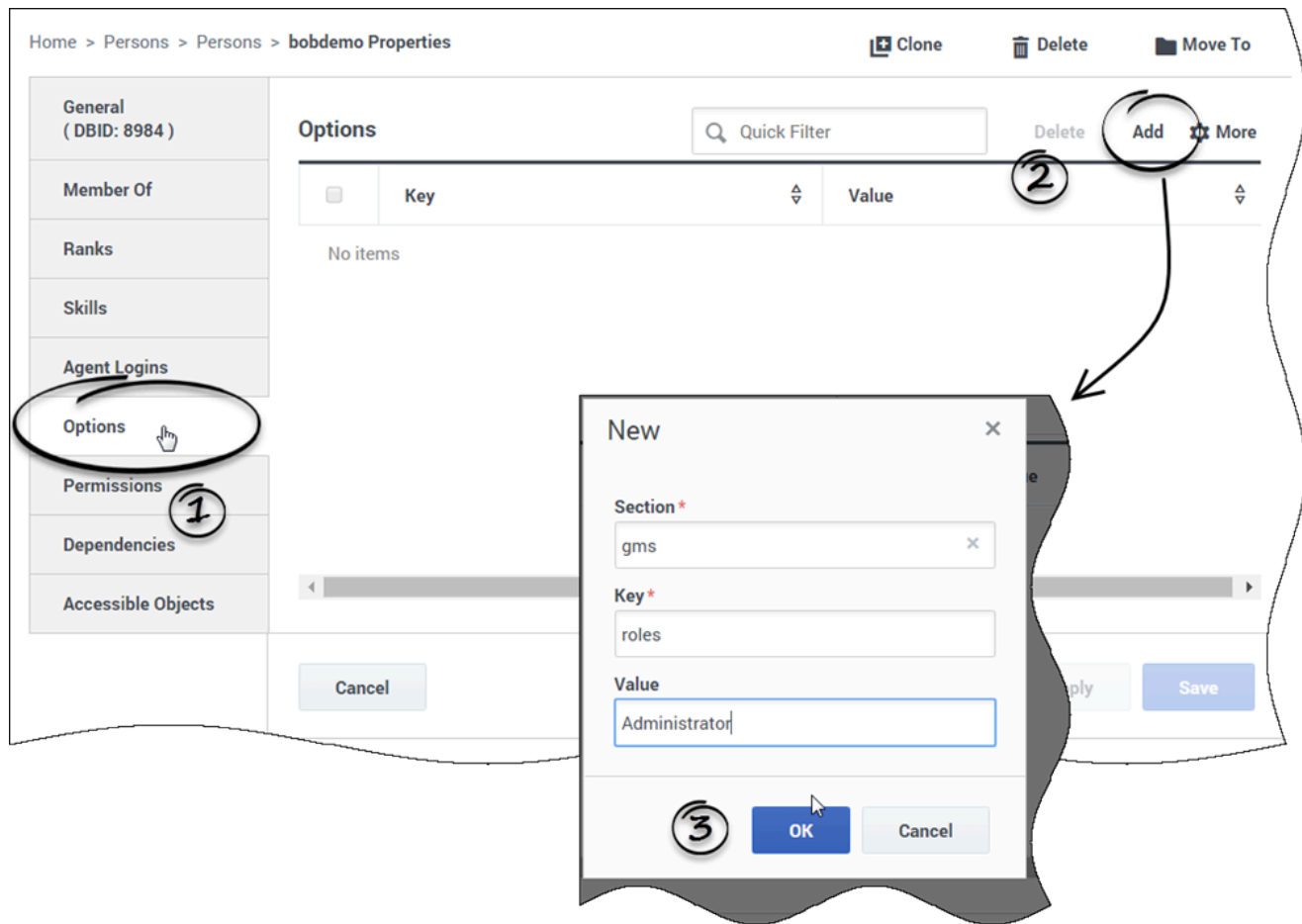
Set permissions for your Administrator

**Updated in 8.5.207**



Open GAX and select the **Configuration Manager** section. In the **Accounts** menu, select **Persons** to get the list of configured users.

Edit the person who will be logging into the Service Management UI. You are going to give this user the permissions to read/write data into Callback related configuration objects (for example, GMS Application, Business Attributes, Transaction Lists for Resources/Patterns, and so on).



In the **Options** tab, click **Add** to set the following options:

1. Add the gms/roles option:
  - Enter gms for **Section**,
  - Enter roles for **Key**,
  - Enter one of the following values:
    - Supervisor: Role used to monitor and configure Callbacks only.
    - Administrator: Role used to administer the creation of Callback Services. This role provides access to all panels and includes the **Supervisor** role.
    - CallbackReadOnly: Role used to provide read-only access. The user can see the Callback panel without Create, Update, or Delete capabilities. This role was introduced in 8.5.226.03.
2. (Optional) Add the gms/services option:
  - Enter gms for **Section**,
  - Enter services for **Key**,
  - For the value, you can enter:

- **Exact matching names**—Enter the comma-separated list of services that the administrator is allowed to monitor. For example, "callback-support, callback-sales, callback-blackfriday-support".

- **A virtual service group name**—Enter a virtual service group name. For example, 'support'. To add services to a given virtual group, add the **\_service\_groups** option to your services and enter a comma-separated list of group names.

For example, if you add the **\_service\_groups** = 'support' to the callback-support and callback-blackfriday-support services, these services will be displayed to the agent.

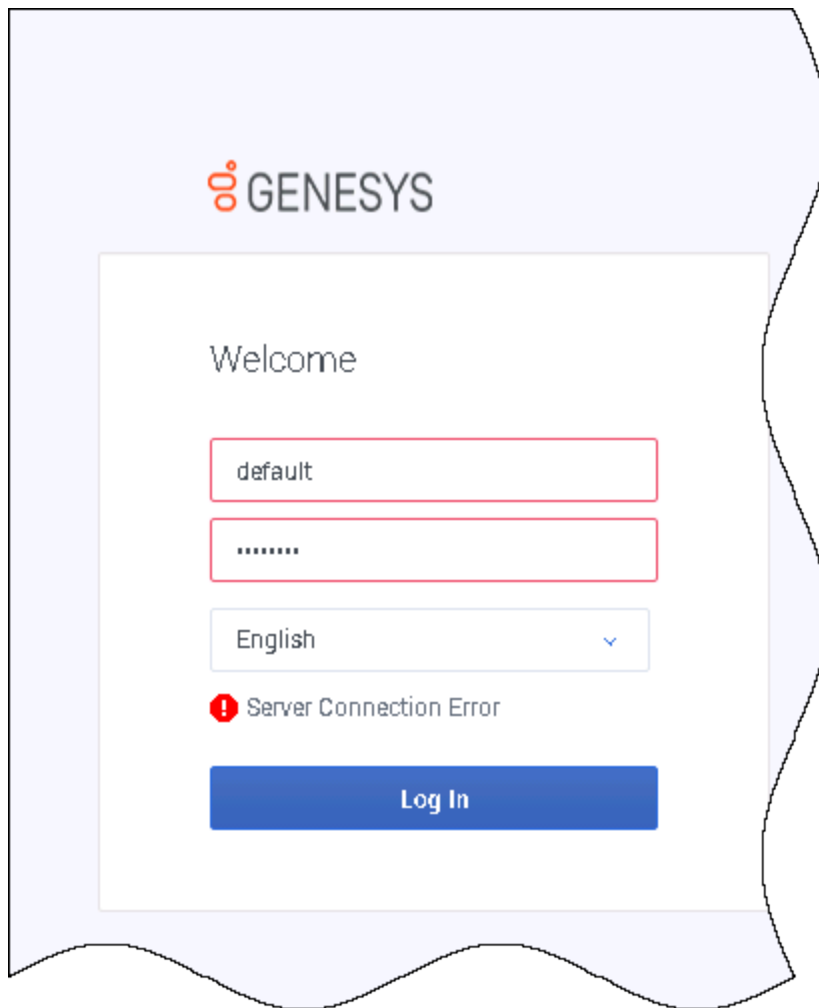
Note that if you defined several virtual groups for your service, you need to add only one virtual group name to your user permissions.

## Login



You can log into the UI hub at this URL: `http://<GMS Local Host>:8080/genesys`

Browser support is listed in the [Genesys Supported Operating Environment Reference Guide](#).

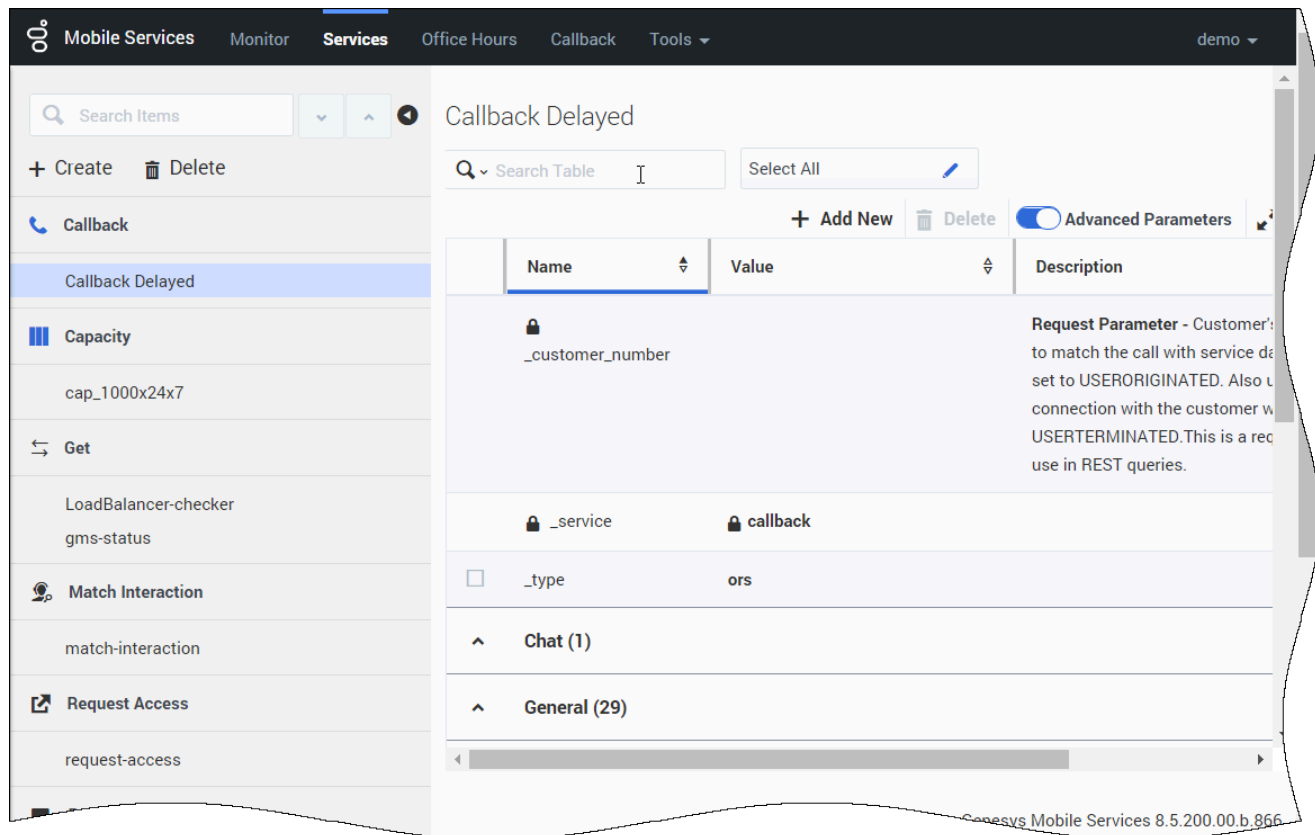


The screenshot shows the GENESYS login interface. At the top is the GENESYS logo. Below it is a 'Welcome' message. There are three input fields: the first contains 'default', the second contains masked characters '.....', and the third is a dropdown menu set to 'English'. Below these fields is a red error icon followed by the text 'Server Connection Error'. At the bottom is a blue 'Log In' button.

If no GMS is running, you get a **Server Connection Error**.



# Services and Tools UI



The **Services and Tools** Interface is a user-friendly, web-based interface for administrators and supervisors. Use this interface to manage and customize your Services, Office Hours, and Service templates. It provides functionality formerly available in the **Admin UI > Configured Services** tab.

To access this interface, you must **log in** as a user who owns the Administrator or Supervisor role. Then, select the **Services and Tools** icon and switch to the **Services** or **Tools** tab.

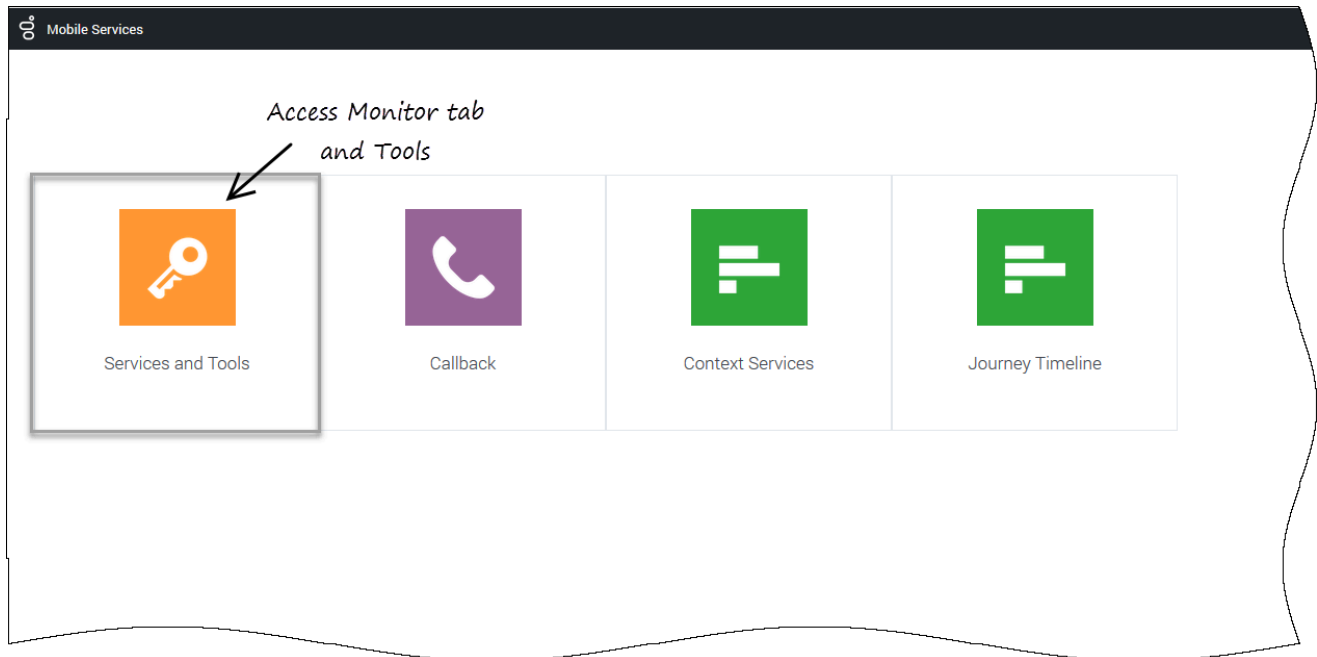
## How to Implement a Service

1. Check the list of templates available in the **Tools > Service Templates** tab. If your template is not available, upload it.
2. Create your service in the **Services** tab.
3. Configure your service.

You can now start to send requests to this service.

# Monitor Tab

## Access Monitor Tab

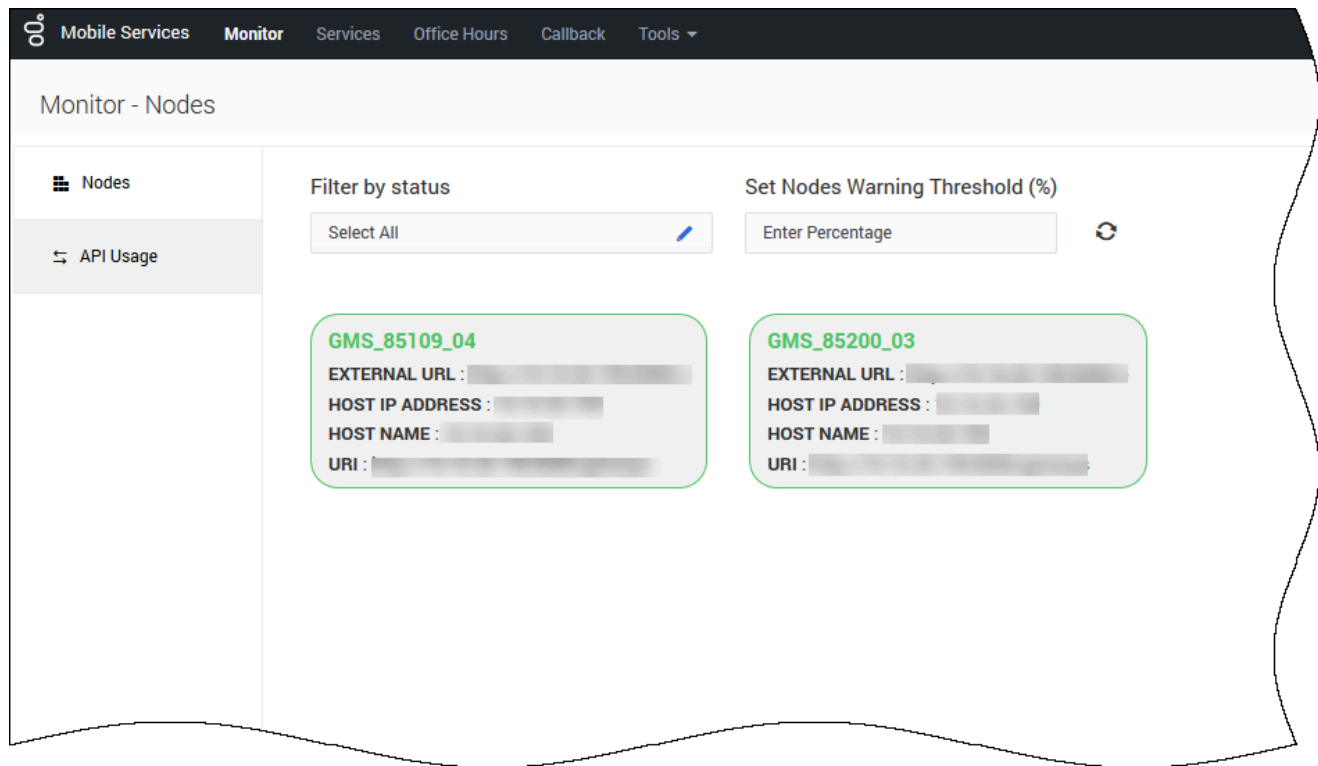


To access this interface, you must **log in** as a user who owns the Administrator or Supervisor role. Then, you can select the Admin UI icon.

### Important

To make sure that the UI displays the right data of the GMS nodes, you need to consider some use cases and configuration options in your GMS application. See the [options reference](#) for details.

## Monitor tab



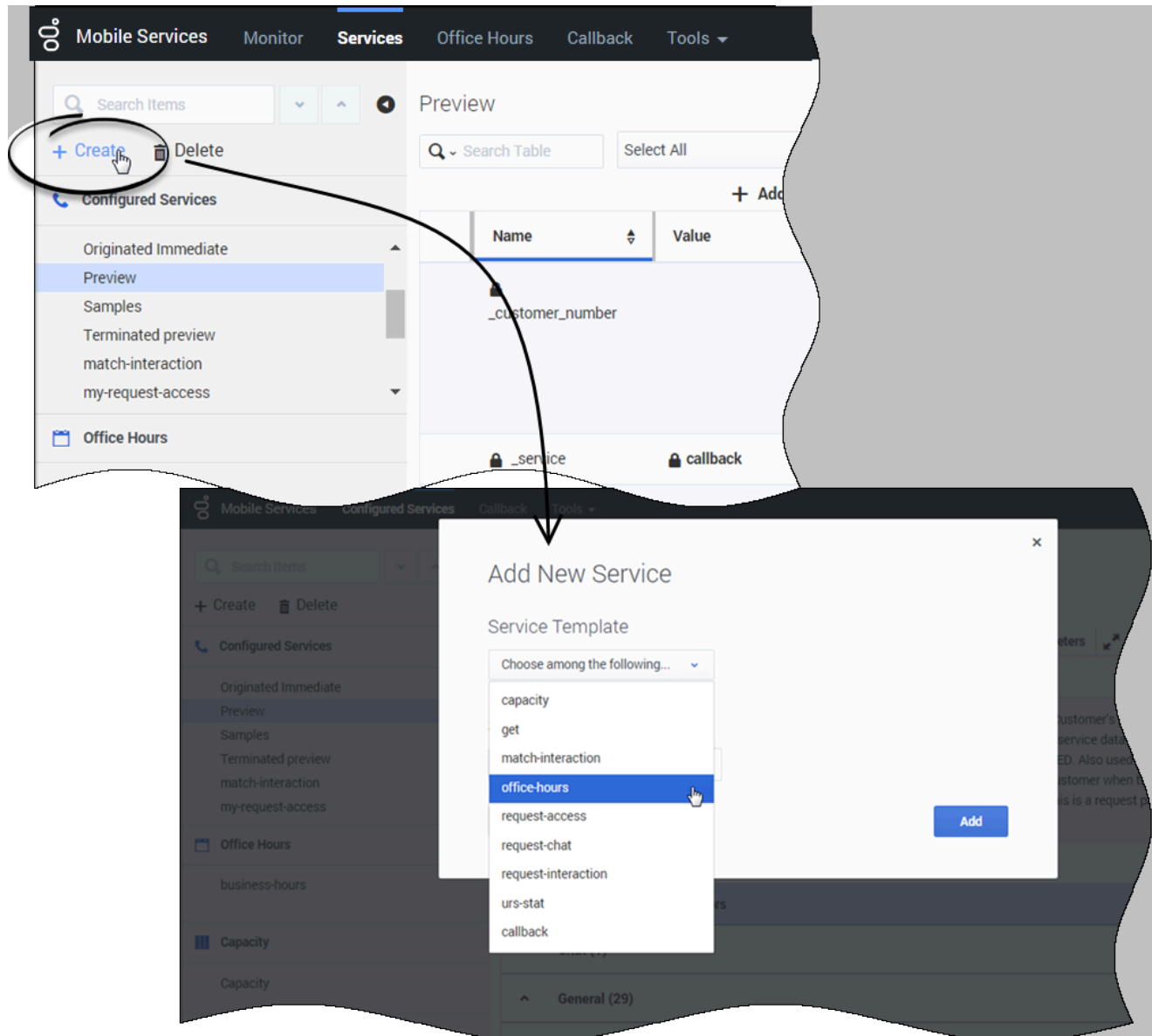
The **Monitor** tab displays the current health of the GMS nodes.

In this example (left), you can see several running GMS nodes. A green bar shows the system status for that node is up. A red bar means the system status for that node is down.

The *Monitor* screen refreshes every three minutes.

# Services Tab

## Create Services

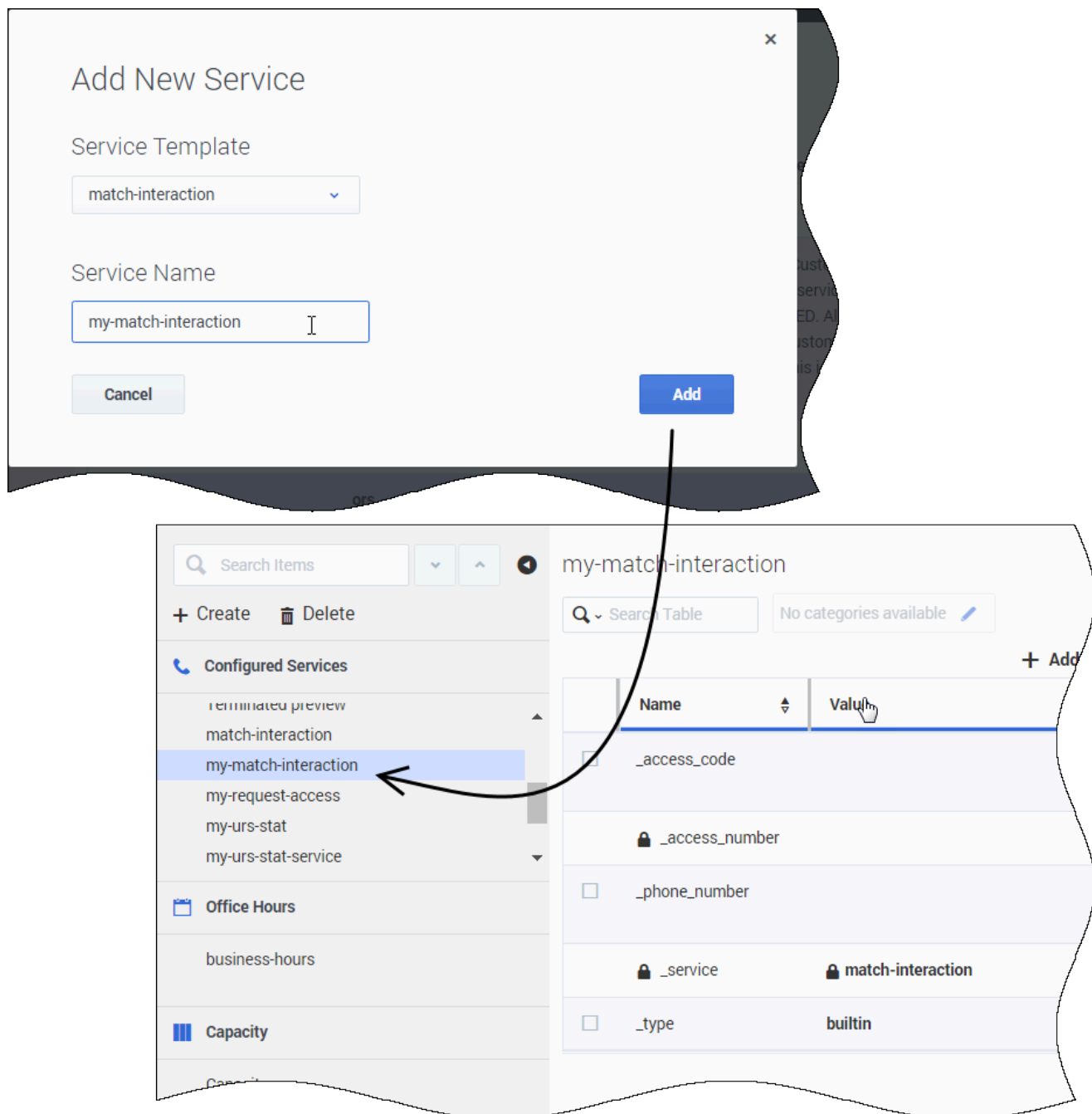


After you **load** the template, you can create a new service. The loaded service templates are available in the drop-down list on the creation form.

Select a template and fill in the form. Based on this information, the interface pre-populates the service parameters that match a scenario configuration and grant usage of GMS APIs.


### Important

Learn which template to use for given scenarios and APIs [here](#). Read more about builtin and ors services [here](#).



Click the **Create** button and fill in your service information. Select your template, then click **Save**.

An information message confirms the service creation.

 **Service Created** Services 8.5.104.01

The new service appears in the list of Configured Services. You can now configure your service.

---

The service is also created in the `service.{service-execution-name}` section of your GMS configuration. The URLs used by the Service API are dependent on the name of the service that you have just created. Services are available at the following URL:

```
http://host:port/genesys/1/service/{service-execution-name}
```

For instance, if you create a service named `match-interaction`, then `{service-execution-name}` is `match-interaction` and the service is available at:

```
http://host:port/genesys/1/service/match-interaction
```

### Important

To use a service, start by allocating resources to this service with a [create service](#) request. Note that for some builtin services, this may not be necessary.

## Configure your Service

Key parameters for the service are automatically populated with the appropriate default values.

### Important

For cluster configurations, all changes made in a service will be replicated into the entire GMS cluster.

The parameters have the following characteristics:

## Mandatory Parameters

Terminated preview

Q \_call x Select All

+ Add New Delete Advanced Parameters Expand All Refresh

Name	Value	Description
General (3)		
_call_direction	USERTERMINATED	This is a default value, automatically populated when using the predefined User-Terminated scenario. You do not need to change this value.* If this option is set to USERORIGINATED, the customer's device will initiate the call to get connected to the agent.* If this option is set to USERTERMINATED, the agent or the system will initiate the call to contact the customer.

*You cannot edit the option name*

Default Value List object defining the Callback

Mandatory parameters are identified with a icon; you cannot rename or remove them.

## Optional Parameters

Terminated preview

Q \_business\_hours\_service x Select All

+ Add New Delete Advanced Parameters Expand All Refresh

Name	Value	Description
General (1)		
_business_hours_service	business-hours	Name of the office hours service configured to provide the available time slots for Callback. The Request Desired Time is verified against the defined regular and specific calendar hours.

Scheduled Call (4)

Optional parameters are identified with a icon when hovering; you can rename, edit, and remove



them.

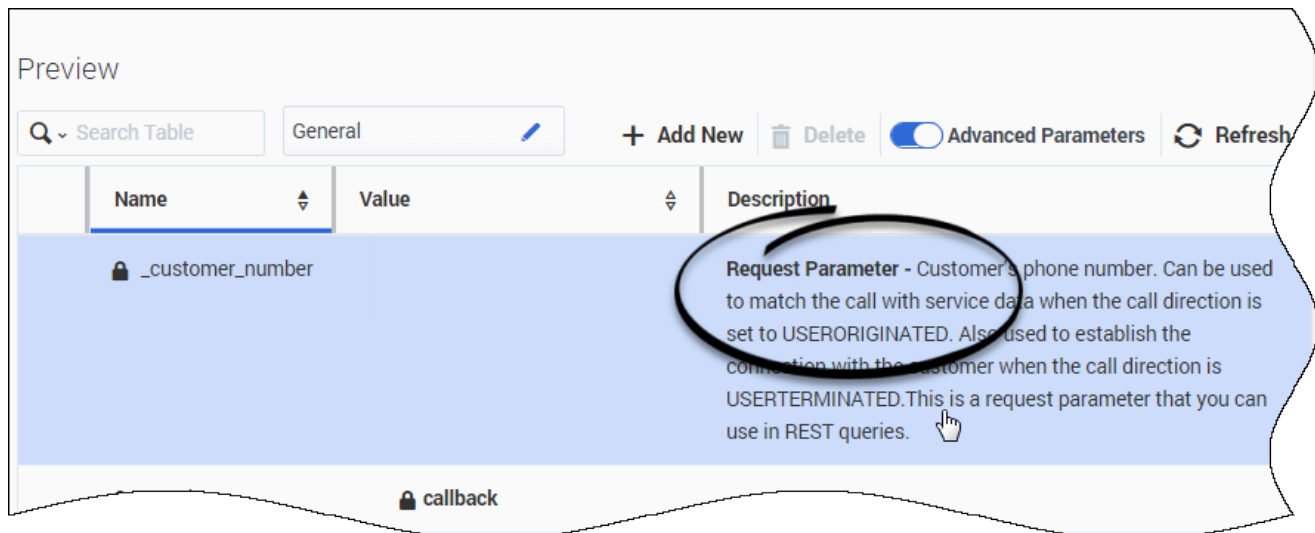
## Advanced Parameters

The screenshot shows the 'callback-PST' configuration page. At the top, there is a search bar and a 'Select All' button. Below this is a table with columns 'Name', 'Value', and 'Description'. The table is filtered to show 'Advanced Parameters'. The 'Advanced Parameters' toggle is enabled. The table lists several parameters, including '\_exceptions', '\_max\_ors\_submit\_att empts', and '\_max\_time\_to\_wait\_for\_agent\_on\_the\_call'. A callout box highlights the '\_bxn\_redirect\_confirm' parameter, which is set to 'true'. The callout also contains a handwritten note: 'Advanced parameter shows up'.

Name	Value	Description
<input type="checkbox"/> _exceptions		Specifies exception patterns that should be verified before processing this callback request. See Pattern configuration details.
<input type="checkbox"/> _max_ors_submit_att empts		
<input checked="" type="checkbox"/> _bxn_redirect_confirm	true	If set to false, on redirecting to the call to the agent application will not wait for confirmation of agent accepting the call. needs to be set to false in rare conditions where the switch doesn't send confirmation events (interaction.partystatechanged) after call redirection to an agent.
<input type="checkbox"/> _max_ors_submit_att empts	3	Maximum number of times request for execution will be submitted to ORS. After it is reached request is removed from persistent queue and discarded.
<input checked="" type="checkbox"/> _max_time_to_wait_for_agent_on_the_call	120	This is the maximum amount of time (seconds) to wait for agent to accept and answer the call after customer is

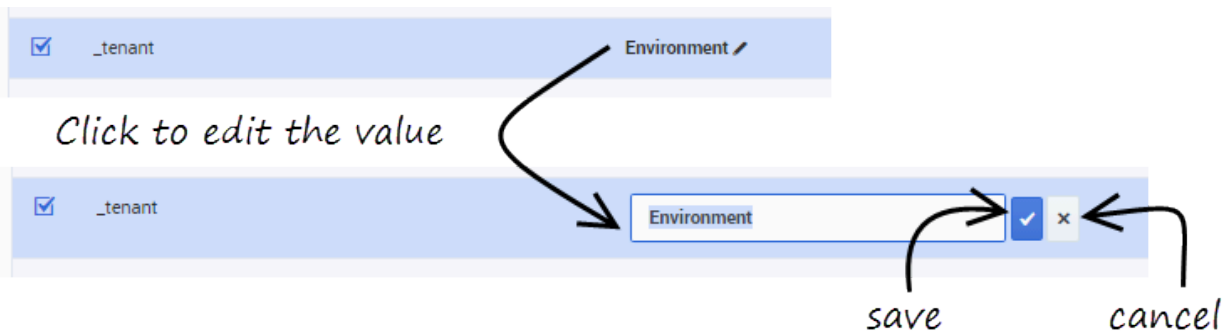
Advanced parameters are mandatory parameters used for advanced customization purposes. By default, they are hidden, but you can display them by enabling the **Advanced Parameters** selector.

## Request Parameters

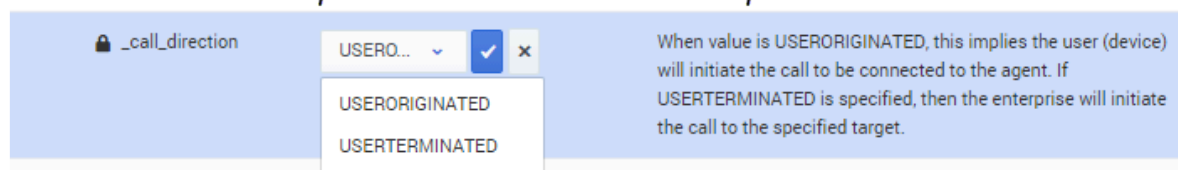


Request parameters are identified in the Description. You can use these parameters in your queries to the Callback Services API.

## Edit Values



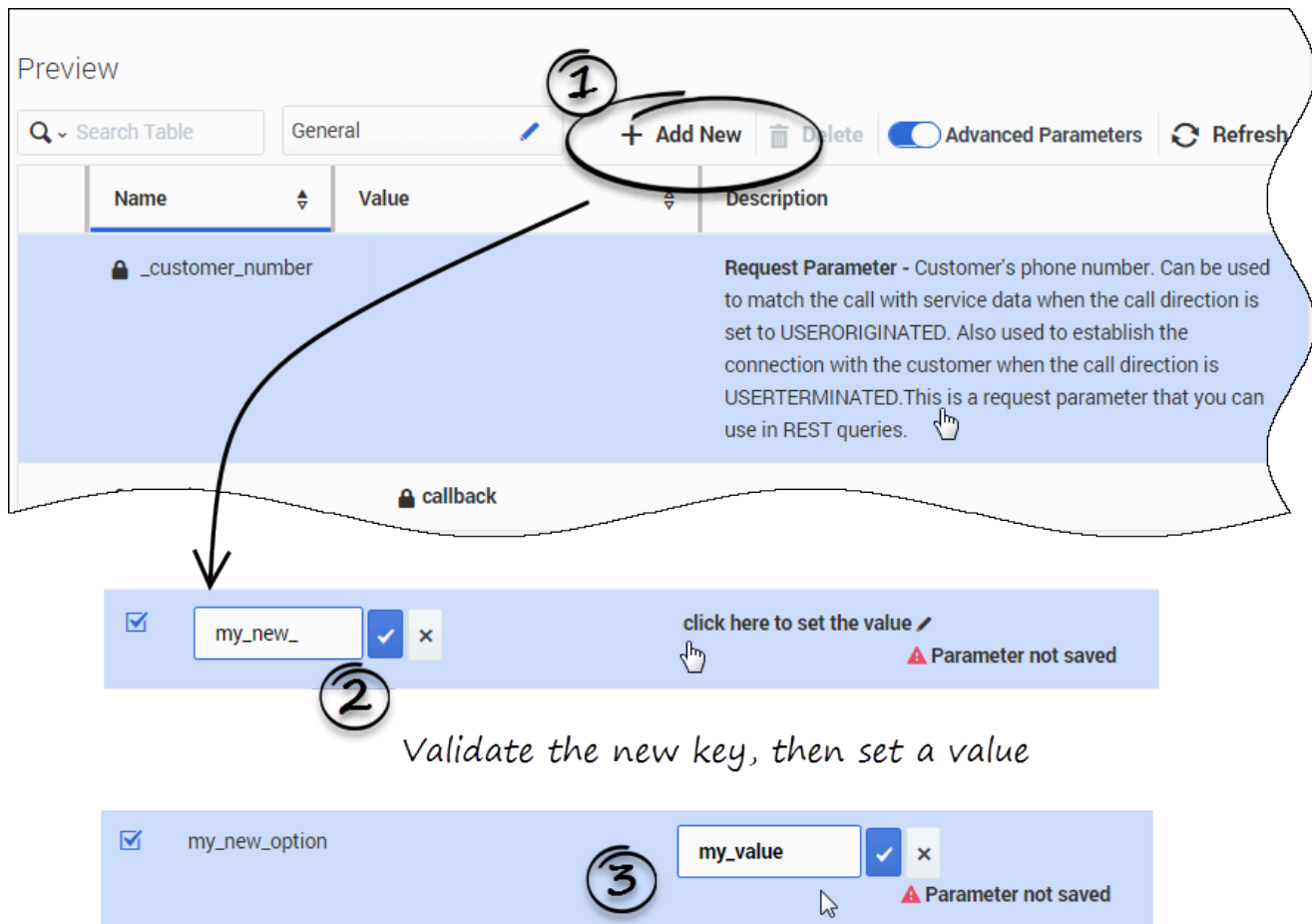
*Some parameters may allow predefined values only  
and provide accurate descriptions*



Editable values are identified with a  icon when hovering over them. Just click to edit the field.

The interface will display pre-defined values if they exist, and you can read the **Description** field for more information about the option.

## Add New Parameters





The screenshot shows the 'Preview' section of the 'Services and Tools UI' with a table of parameters. The table has columns for 'Name', 'Value', and 'Description'. The first row is for '\_customer\_number' with a description: 'Request Parameter - Customer's phone number. Can be used to match the call with service data when the call direction is set to USERORIGINATED. Also used to establish the connection with the customer when the call direction is USERTERMINATED. This is a request parameter that you can use in REST queries.' The second row is for 'callback'. A circled '1' highlights the '+ Add New' button. An arrow points from this button to a form below. The form has a checkbox, a text input field containing 'my\_new\_', a checkmark button, and an 'x' button. A circled '2' highlights the text input field. Below the form, the text 'Validate the new key, then set a value' is written. Another form below shows a checkbox, a text input field containing 'my\_new\_option', a text input field containing 'my\_value', a checkmark button, and an 'x' button. A circled '3' highlights the 'my\_value' input field. A red warning icon and the text 'Parameter not saved' are visible at the bottom right of the second form.


Preview

Search Table General **+ Add New** Delete Advanced Parameters Refresh

Name	Value	Description
_customer_number		Request Parameter - Customer's phone number. Can be used to match the call with service data when the call direction is set to USERORIGINATED. Also used to establish the connection with the customer when the call direction is USERTERMINATED. This is a request parameter that you can use in REST queries.
callback		

my\_new\_ ✓ x click here to set the value   Parameter not saved

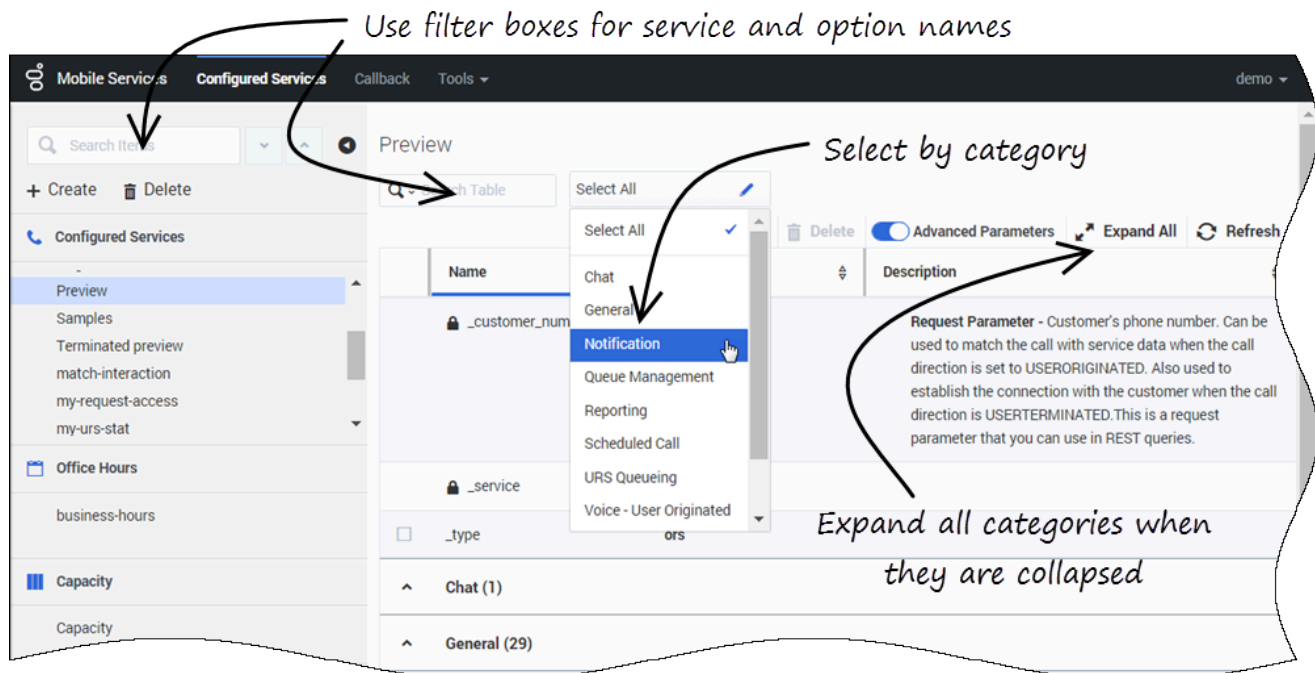
Validate the new key, then set a value


my\_new\_option my\_value ✓ x  Parameter not saved

In the service panel, click **Add New** to add a new parameter, fill in the form, and save the parameter. A popup message displays the operation result.

The parameter's name must be a valid ECMAScript variable name. This means that variable semantics that include elements like "." (for example, foo.foo) and "-" (for example, foo-foo) are not allowed.

## Search for Services and Options



The services can be filtered in the  **Search Items** box. You can also filter the parameters displayed for the selected service or display them by category.

# Callback Service

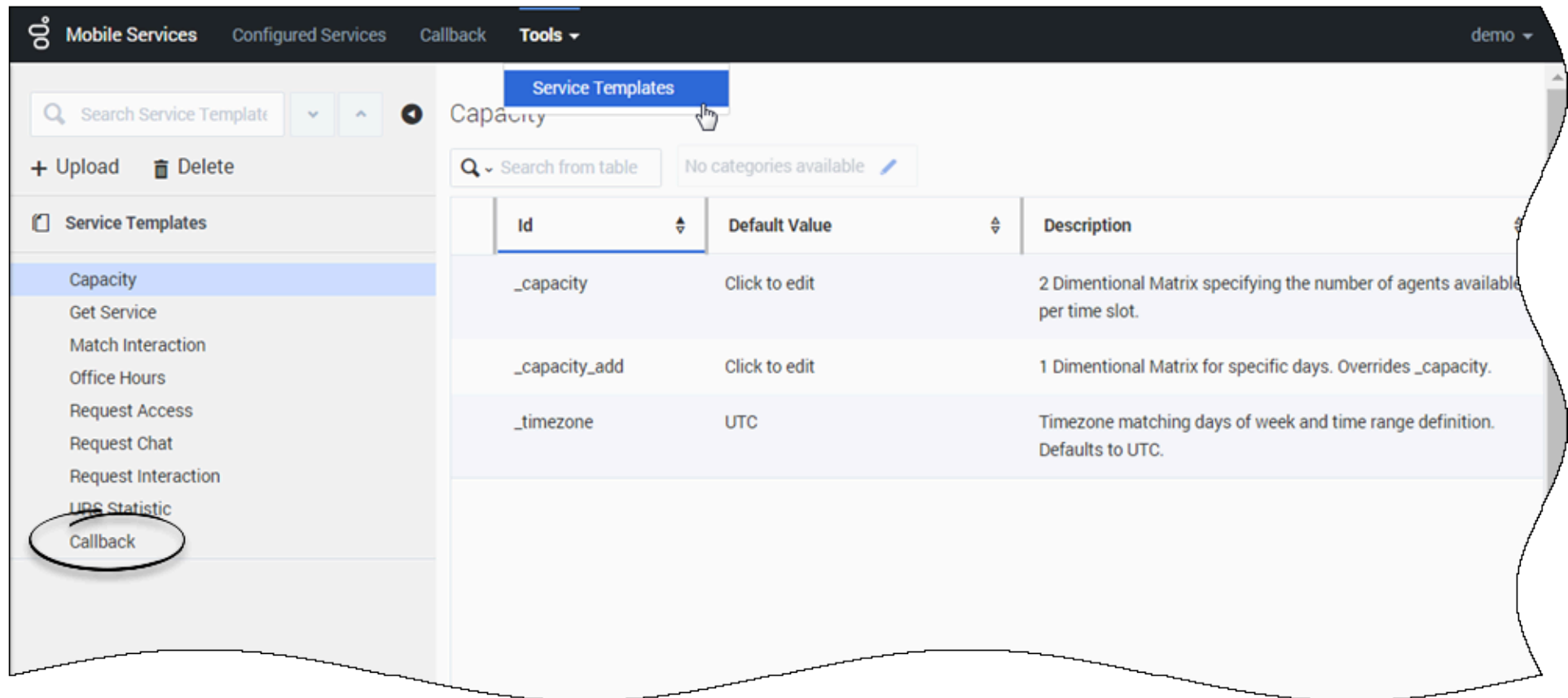
## Important

The Callback tab provides the Callback UI. You cannot use it to customize a Callback Service. To create and configure your Callback Service, use the **Services** tab.

After Callback is configured, you must create a Callback Service for each Callback scenario that you want to implement. Then, you can manage Callback interactions in the Callback UI.

- To create a Callback service, you need **Administrator permissions**.
- You must set up **Office Hours** if you want to implement **Scheduled Callback**.

## Load the Callback Service Template



The screenshot shows the Service Management UI. The top navigation bar includes 'Mobile Services', 'Configured Services', 'Callback', and 'Tools'. The 'Tools' dropdown menu is open, showing 'Service Templates'. The left sidebar lists various service templates, with 'Callback' circled. The main area displays a table of service templates. The 'Capacity' template is selected, showing its details in the right pane.

Id	Default Value	Description
_capacity	Click to edit	2 Dimensional Matrix specifying the number of agents available per time slot.
_capacity_add	Click to edit	1 Dimensional Matrix for specific days. Overrides _capacity.
_timezone	UTC	Timezone matching days of week and time range definition. Defaults to UTC.

Open the [Service Management UI](#), and navigate to **Services and Tools > Tools > Service Templates**. By default, **callback** should be part of the **Service Templates** list.

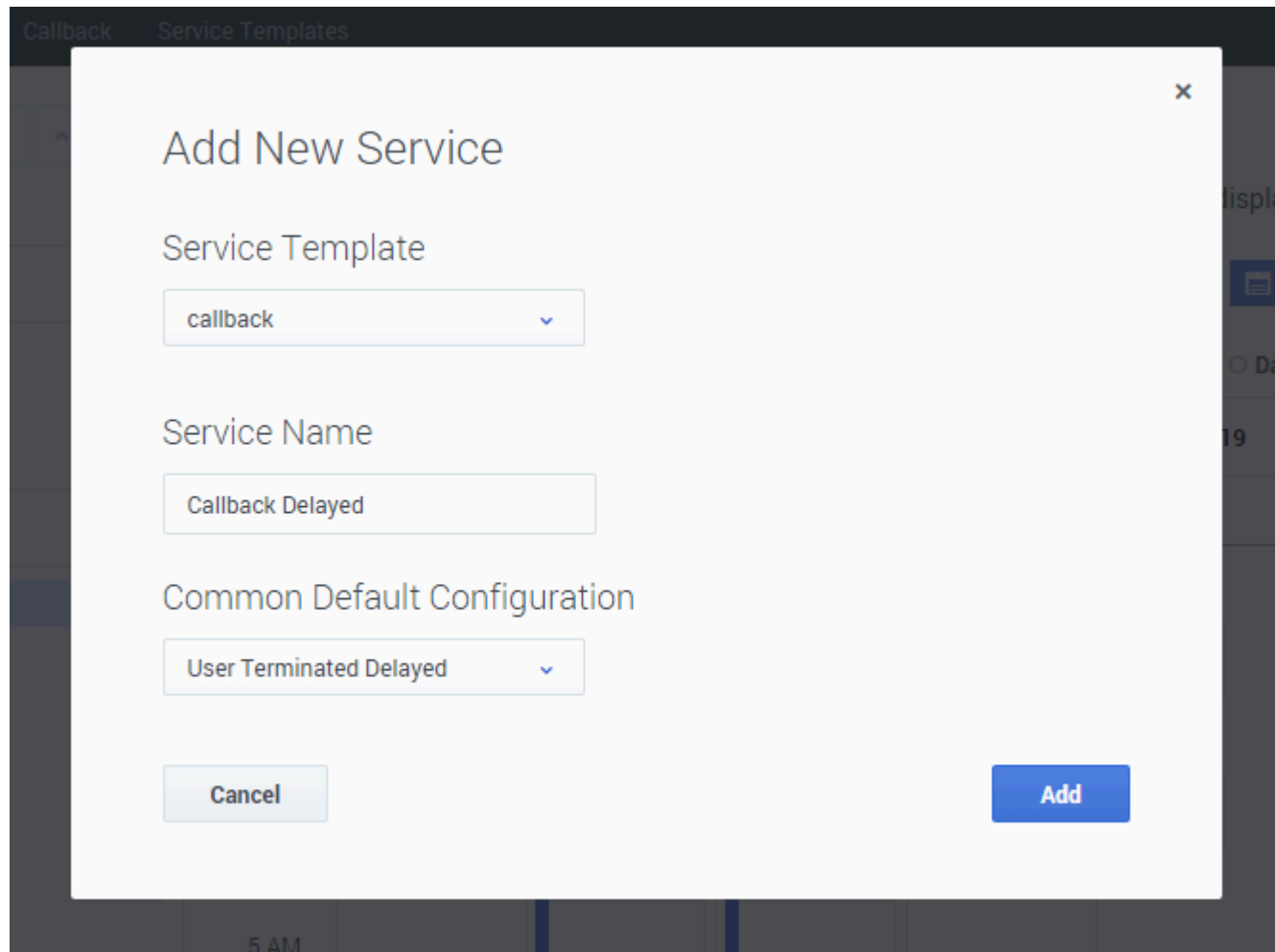
---

If not, you must load the Callback service template before you can create a Callback service. The `callback.zip` template is located in the *<GMS installation directory>/service\_templates* directory.

Once the callback template has been loaded, it is available in the filter drop-down list of the **Services** tab.



## Create a Callback Service



The screenshot shows a modal dialog box titled "Add New Service" with a close button (X) in the top right corner. The dialog is set against a dark background with tabs labeled "Callback" and "Service Templates".

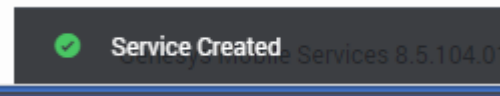
Inside the dialog, there are three sections:

- Service Template:** A dropdown menu currently showing "callback".
- Service Name:** A text input field containing "Callback Delayed".
- Common Default Configuration:** A dropdown menu currently showing "User Terminated Delayed".

At the bottom of the dialog, there are two buttons: a light blue "Cancel" button on the left and a blue "Add" button on the right.

Navigate to the **Services and Tools > Services** tab. There, you can manage your services based on the templates. The services and categories can be collapsed or expanded for easier viewing.

1. Click **Create**.
2. Enter a **Service Name**: This name will be used as the {callback-execution-name} parameter in your Callback queries.
3. Select your **Common Default Configuration**. These configuration scenarios are detailed in the [Callback Scenarios section](#) of this guide.



4. Click **Add**. An information message confirms the service creation.

The new Callback service appears in the *Configured Services* list.

### Important

The service is also created in the service.{callback-execution-name} section of your GMS configuration.

---

## Configured Callback Services

**Callback Delayed**

Search Items | + Create | Delete

Search Table | Select All | + Add New | Delete | Advanced Parameters | Expand All | Refresh

Name	Value	Description
<input type="checkbox"/> _max_ors_submit_attempts	3	Maximum number of times request for execution will be submitted to ORS. After it is reached request is removed from persistent queue and discarded.
<input checked="" type="checkbox"/> _max_time_to_wait_for_agent_on_the_call	3600	This is the maximum amount of time (seconds) to wait for the agent to accept and answer the call after customer is connected
<input checked="" type="checkbox"/> _max_transfer_to_agent_attempts		This is the max number of times to retry transfer of the call to the agent
<input checked="" type="checkbox"/> _media_type	voice	Media type of the interaction the service is expected to handle. This is required for URS to select agent with proper media capabilities.
<input type="checkbox"/> _orig_service_id		<b>Request Parameter</b> - Id of the service that originated callback service request. Example: IVR service, web session service, etc
<input checked="" type="checkbox"/> _snooze_duration	300	After agent availability notification is received, user can snooze the notification for the specified duration.

*Display Advanced Parameters*

*Optional*

*Mandatory*

*Request parameter for API queries*

Key parameters for the service are automatically populated with the appropriate default values. For cluster configurations, all changes made in a service will be replicated into the entire GMS cluster.

### Important

To configure your Callback service, refer to the configuration options described in the associated scenario page. See the [Callback scenarios](#) for further details.

The parameters have the following characteristics:

- Mandatory parameters - are identified with a lock icon; you cannot rename them or remove them.
- Optional parameters - you can rename them by hovering your cursor over the value field (you will see a pencil icon), click, and then enter the new value. You can delete optional parameters by clicking the *Delete* button.
- Advanced parameters - can be displayed by selecting the **Advanced** button in the upper right.
- Request parameters - are identified with an **Request Parameter** label in the Description.

### Important

Request parameters are usually provided within the request itself. Genesys recommends that you do not configure the Request parameters through this UI, otherwise, the parameter within the request will be overridden. If a value was entered through this UI and you wish to remove it at some later date, you can click the garbage can icon and the value becomes *not specified*.

## Adding your Service to Virtual Service Groups

### Introduced in 8.5.207

To add services to a given virtual group, add the **\_service\_groups** option to your service and enter a comma-separated list of group names.

For example, let's consider adding the 'support' service group by adding **\_service\_groups = 'support'** to the `callback-support` and `callback-blackfriday-support` services.

Then, you can use this virtual group to filter the services displayed to an agent. See [Setting Permissions](#) for further details.

## Accessing Callback Services and Records with the Callback API

The URLs used by the Callback API are dependent on the name of the Callback service that you have just created. Callback services are available at the following URL:

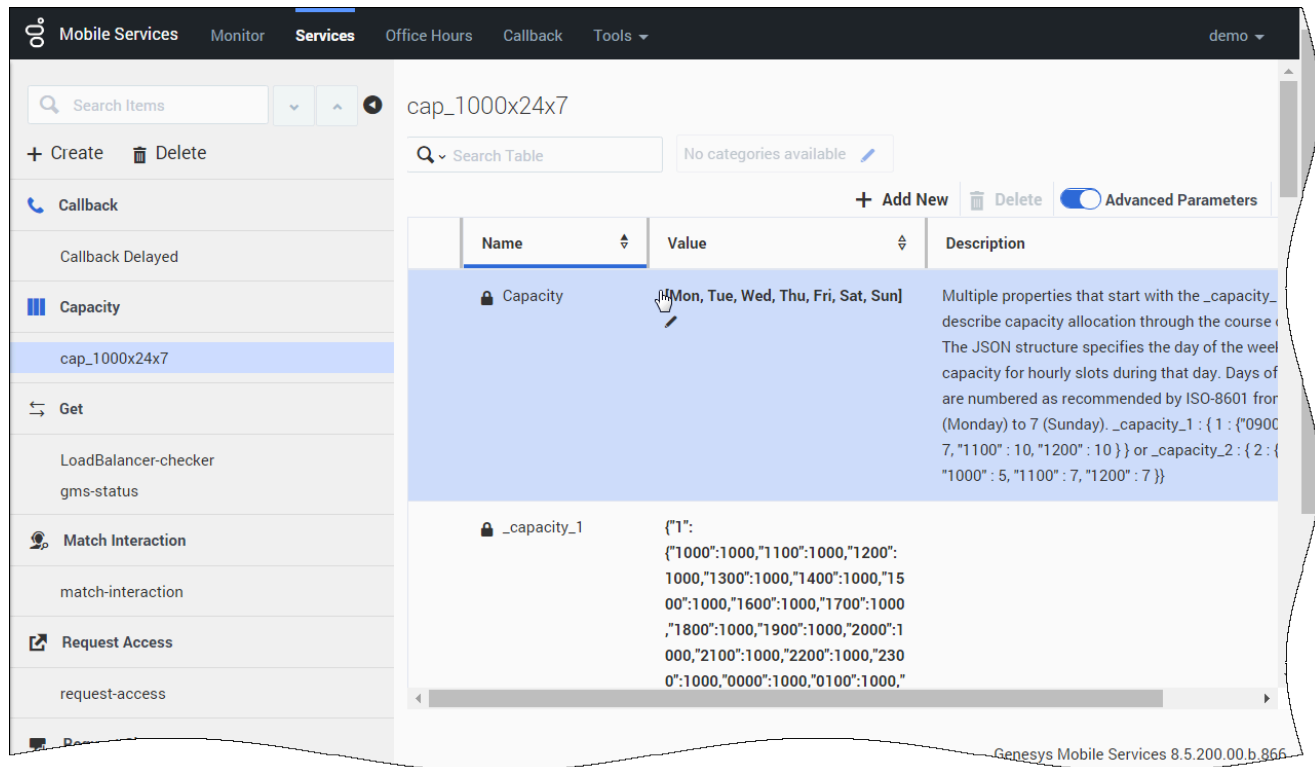
```
http://<host>:<port>/<base-web-application>/service/callback/{callback-execution-name}
```

For instance, if you create a callback service named `callback-for-mobile`, then `{callback-execution-name}` is `callback-for-mobile` and the callback service is available at:

```
http://<host>:<port>/<base-web-application>/service/callback/callback-for-mobile
```

For further details, see [Callback API](#).

# Capacity Service



The Capacity Service enables you to define the number of scheduled callbacks that are allowed for Callback for a given time slot in the week. Then, your Callback service refers to your Capacity service and to your Office Hours service to adjust the agent availability and the number of scheduled callbacks.

You can define exceptions for dates when fewer or more scheduled callbacks are available, and you can define as many Capacity services that you need to match your Callback services.

Make sure to update the existing calendar configuration to set the correct timezone for your Capacity service. For instance, if you configured "EST", or "PST" timezones with the configuration, your parameters must use the timezones defined for Java such as "America/Toronto", or "Europe/Paris". See [Wikipedia](#) to get the list of correct timezones.

## Create a Capacity Service

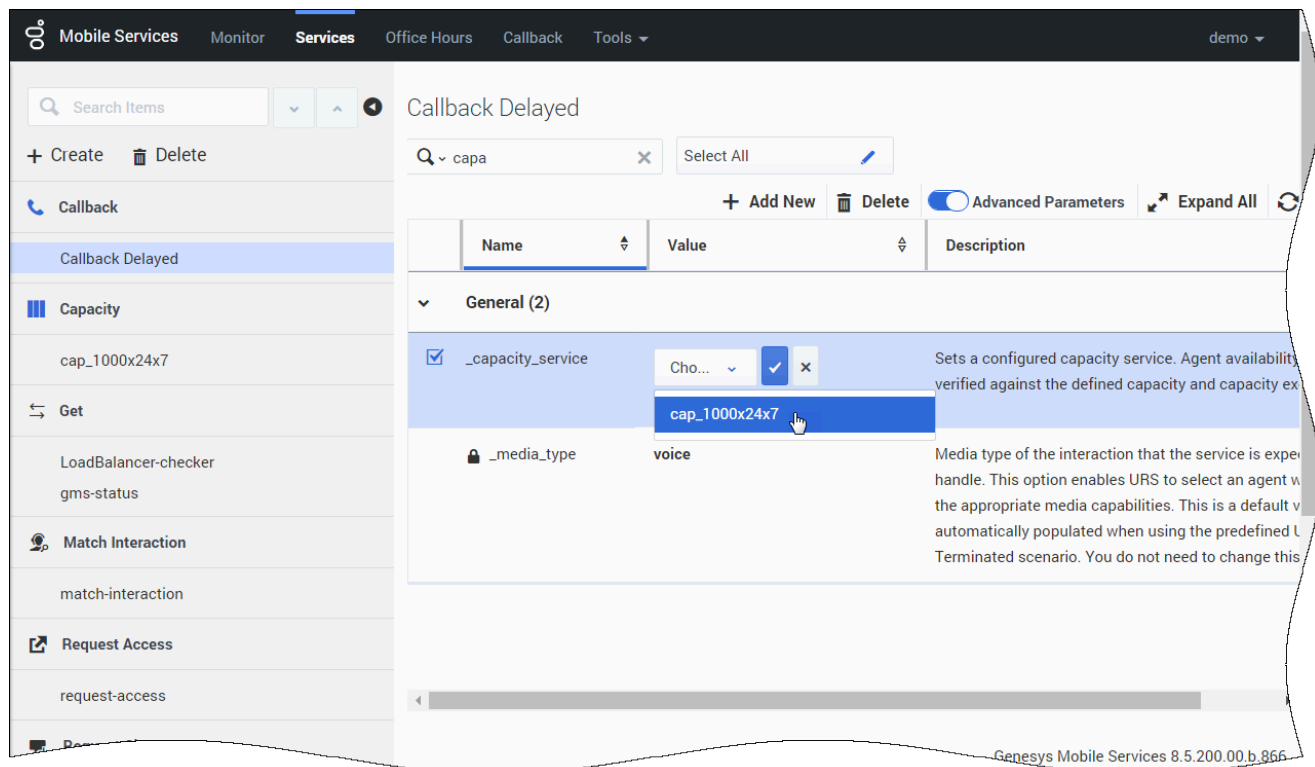
Create a new service and select **capacity** in the list of templates.

Once this service is created, you can use the [Capacity API](#).

## Important

You also need to create an Office Hours service.

## Link your Capacity to your Callback Service



If your Callback service needs variable capacity levels, you must map its `_capacity_service` parameter value with the name of the Capacity service that you have created.

## Important

Callback services that need fixed capacity levels can continue to use the `_max_request_by_time_bucket` option. But, if your Callback service includes both `_capacity_service` and `_max_request_by_time_bucket` options, then `_max_request_by_time_bucket` is ignored.




## Add Capacity

Capacity

Search Table No categories available

+ Add New Delete Advanced Parameters Ref

Name	Value	Description
Capacity		2 Dimentional Matrix specifying the number of agents available per time slot.
<input type="checkbox"/> Capacity Exception	{}	1 Dimentional Matrix for specific days. Overrides _capacity.

☐ \_service

☐ Service Timezone

☐ \_type

Capacity

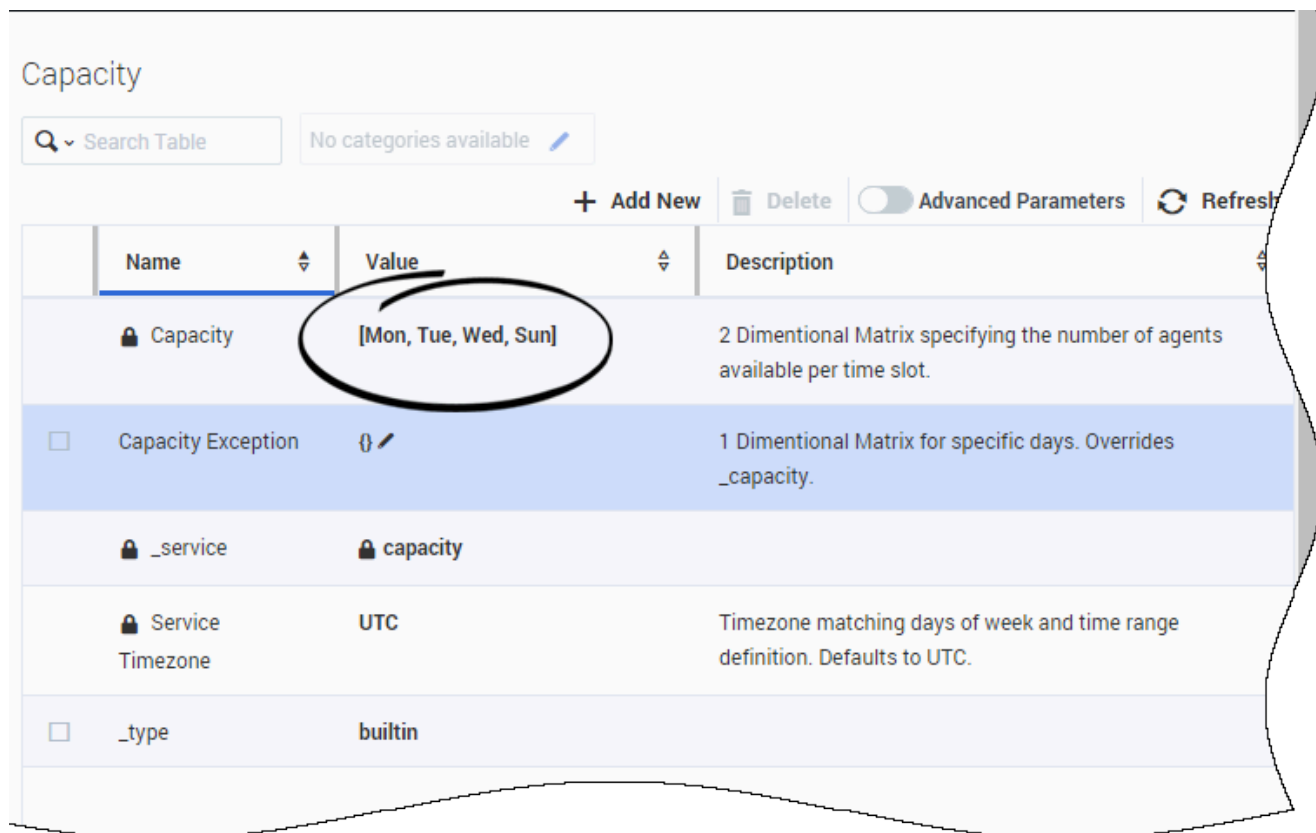
Timestamp	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Set Slot
00:00	0	0	0	0	0	0	0	
01:00	0	0	0	0	0	0	0	
02:00	0	0	0	0	0	0	0	
03:00	0	0	0	0	0	0	0	
04:00	0	0	0	0	0	0	0	
05:00	0	0	0	0	0	0	0	
06:00	0	0	0	0	0	0	0	
07:00	0	0	0	0	0	0	0	
08:00	0	0	0	0	0	0	0	
09:00	5	10	10	10	0	0	0	
10:00	5	10	10	10	0	0	0	
11:00	5	10	10	<input type="text" value="1"/>	0	0	0	
12:00	5	10	10	0	0	0	0	
13:00	5	10	10	0	0	0	0	
14:00	5	10	10	0	0	0	0	
15:00	5	10	10	0	0	0	0	
16:00	5	10	10	0	0	0	0	
17:00	5	10	10	0	0	0	0	
18:00	5	10	10	0	0	0	0	
19:00	0	0	0	0	0	0	0	
20:00	0	0	0	0	0	0	0	
21:00	0	0	0	0	0	0	0	
22:00	0	0	0	0	0	0	0	
23:00	0	0	0	0	0	0	0	
Set Day								

Cancel Reset Save

Edit the **Capacity** value to open the Capacity grid widget. Enter your capacity per Day or Hours, then **Save**.

### Important

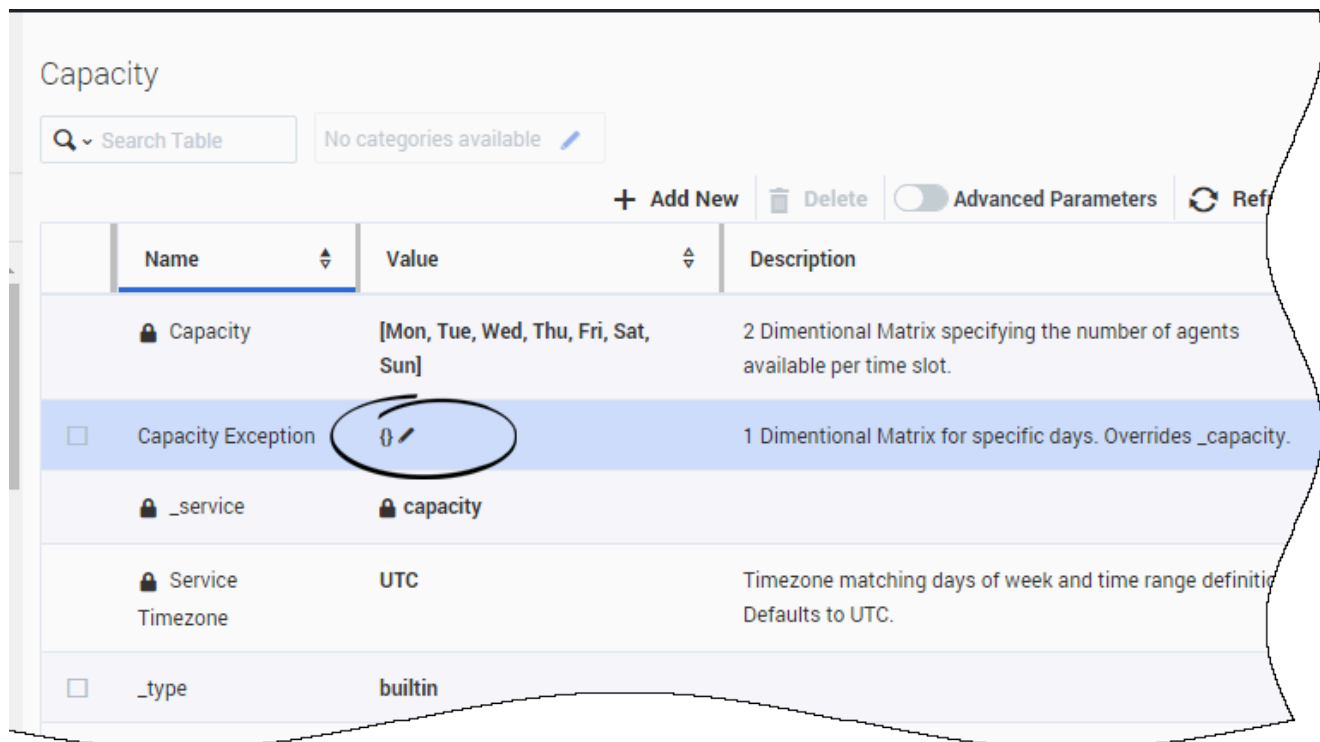
Values above 999 are accepted but may not display properly in the UI.



Name	Value	Description
Capacity	[Mon, Tue, Wed, Sun]	2 Dimensional Matrix specifying the number of agents available per time slot.
<input type="checkbox"/> Capacity Exception	{}	1 Dimensional Matrix for specific days. Overrides _capacity.
_service	capacity	
Service Timezone	UTC	Timezone matching days of week and time range definition. Defaults to UTC.
<input type="checkbox"/> _type	builtin	

You can see for which days of the week the Capacity service is defined.



## Add Exceptions



Capacity

Search Table No categories available

+ Add New Delete Advanced Parameters Ref

Name	Value	Description
Capacity	[Mon, Tue, Wed, Thu, Fri, Sat, Sun]	2 Dimensional Matrix specifying the number of agents available per time slot.
<input type="checkbox"/> Capacity Exception	 	1 Dimensional Matrix for specific days. Overrides _capacity.
<input type="checkbox"/> _service	capacity	
<input type="checkbox"/> Service Timezone	UTC	Timezone matching days of week and time range definition. Defaults to UTC.
<input type="checkbox"/> _type	builtin	

For more flexibility, you can set exceptions for the Capacity service. You can enter dates with different capacities for federal holidays, vacations, and so on.

Edit the **Capacity Exception** value to open the interface.

The screenshot displays the 'Capacity Exception' dialog box. On the left, a calendar for July 2016 is shown with the 4th of July selected. A circled '+' button next to the date is highlighted with an arrow pointing to the text: 'Click (+) to modify the capacity for this date'. Below the calendar, there is an 'Add Capacity Exception' section with a text input field and another circled '+' button. A note below this section states: 'You can add more exceptions here, or edit later the \_exception value'. The main part of the dialog is a table titled 'Capacity Exceptions' for the date '2016-07-04'. The table has columns for 'Timestamp' and 'Capacity'. The data is as follows:

Timestamp	Capacity
00:00	0
01:00	0
02:00	0
03:00	0
04:00	0
05:00	0
06:00	0
07:00	0
08:00	1
09:00	1
10:00	2
11:00	2

At the bottom of the dialog are 'Cancel' and 'Save' buttons.

You can add as many exceptions as you need. You can also even update later to modify your capacity.

### Capacity

No categories available

+ Add New 🗑 Delete 🔍 Advanced Parameters 🔄 Ref

	Name	Value	Description
🔒	Capacity	[Mon, Tue, Wed, Thu, Fri, Sat, Sun]	2 Dimentional Matrix specifying the number of agents available per time slot.
<input checked="" type="checkbox"/>	Capacity Exception	[2016-07-04]	1 Dimentional Matrix for specific days. Overrides _capacity.
🔒	_service	🔒 capacity	
🔒	Service Timezone	UTC	Timezone matching days of week and time range definiti Defaults to UTC.
<input type="checkbox"/>	_type	builtin	

Click **Save** to update your Capacity data. A popup message displays the operation result.

## Display Sub-capacities and Sub-exceptions

Capacity

Q Search Table No categories available

+ Add New Delete **Advanced Parameters** Refresh

Name	Value	Description
Capacity	[Mon, Tue, Wed, Sun]	2 Dimensional Matrix specifying the number of agents available per time slot.
_capacity_1	{ "1": { "1000":10,"1100":10,"1200":10, "1300":10,"1400":10,"1500":10, "1600":10,"1700":10,"1800":10, "0900":10}} }	
_capacity_2	{ "2": { "1000":10,"1100":10,"1200":10, "1300":10,"1400":10,"1500":10, "1600":10,"1700":10,"1800":10, "0900":10}} }	
_capacity_3	{ "3": { "1000":10,"0900":10}} }	
_capacity_7	{ "7": { "1000":5,"1100":5,"1200":5,"1300":5, "1400":5,"1500":5,"1600":5, "1700":5,"1800":5,"0900":5}} }	

To display the list of sub-capacities and sub-exceptions, enable **Advanced Parameters**.

# Office Hours Tab

## Important

- You must set up Office Hours if you want to implement **Scheduled Callback** and **Disposition Dialog**.
- Office Hours are used when requesting Callback API to create an immediate or a scheduled callback. See [Start or Schedule a Callback](#) for more information.

## Upload the Office Hours Template

In the **Services and Tools > Tools > Service Templates** tab, make sure that the **Office Hours** template is available. Otherwise, click **Upload** to add the office-hours.zip to the **Templates** list.

## Create the Office Hours Service

The screenshot shows the Genesys Mobile Services interface for configuring Office Hours. The sidebar on the left has a 'Create' button and a 'Delete' button. The main area displays a calendar for 'business-hours' with a table of hours for Monday through Friday. The table shows 'Regular Office Hours' from 8:00 AM to 12:00 PM for all days. Annotations include: 1. 'Edit settings to fix calendar timezone issues' pointing to the 'Settings' button. 2. 'Create Office Hours' pointing to the 'Create' button in the sidebar.

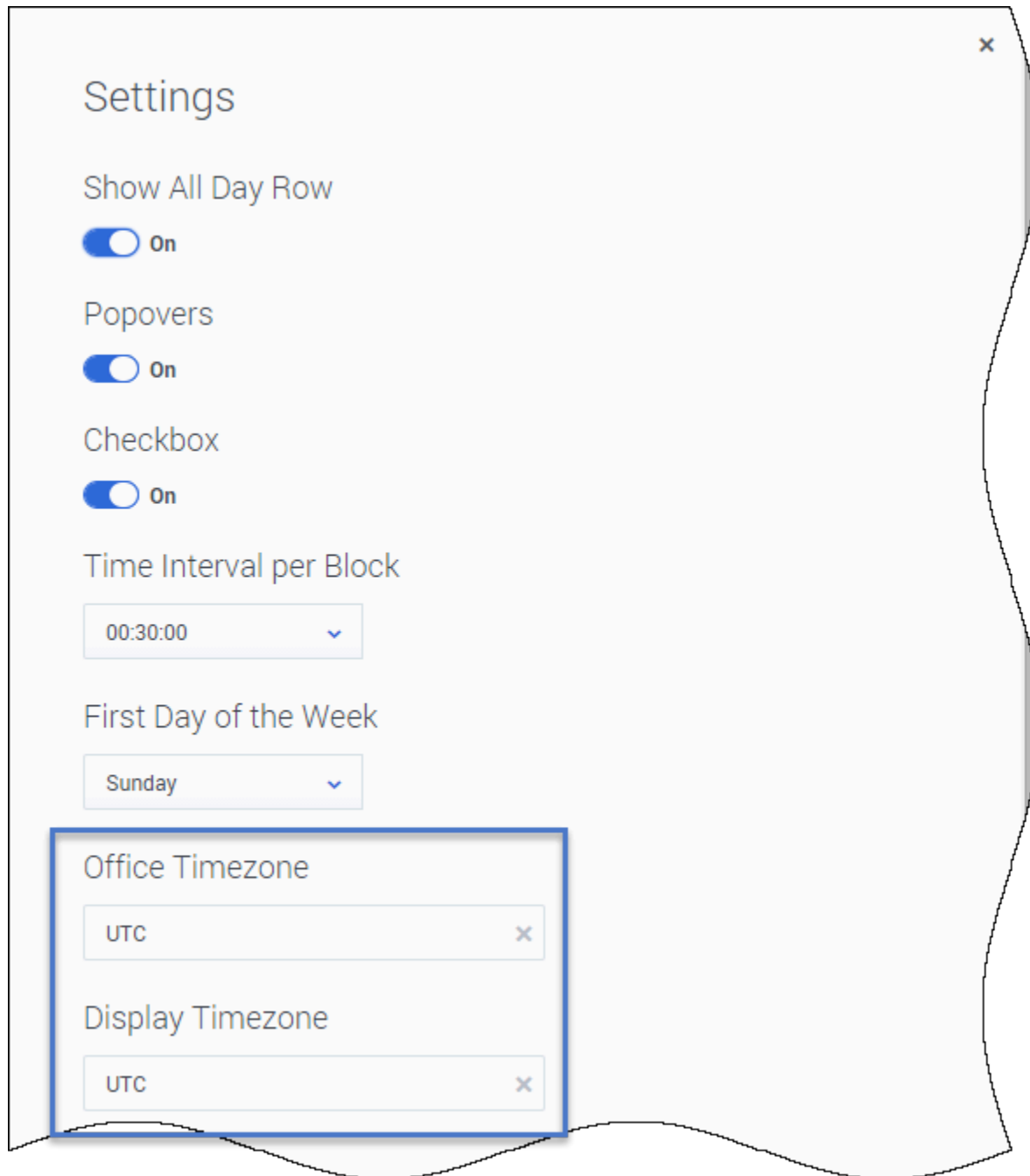
Time	Monday	Tuesday	Wednesday *	Thursday	Friday
All Day					
1 AM					
2 AM					
3 AM					
4 AM					
5 AM					
6 AM					
7 AM					
8 AM	Regular Office Hours 8:00 AM - 12:00 PM	Regular Office Hours 8:00 AM - 12:00 PM	Regular Office Hours 8:00 AM - 12:00 PM	Regular Office Hours 8:00 AM - 12:00 PM	Regular Office Hours 8:00 AM - 12:00 PM
9 AM					
10 AM					
11 AM					
12 PM					

Click **Create** in the **Office Hours** tab, select office-hours in the filter and configure the business-



hours service.

## Set your Calendar Timezone



The screenshot shows a 'Settings' dialog box with a close button (X) in the top right corner. The settings are as follows:

- Show All Day Row**: ☒ On
- Popovers**: ☒ On
- Checkbox**: ☒ On
- Time Interval per Block**: 00:30:00 (dropdown arrow)
- First Day of the Week**: Sunday (dropdown arrow)
- Office Timezone**: UTC (dropdown arrow)
- Display Timezone**: UTC (dropdown arrow)

A blue rectangular box highlights the 'Office Timezone' and 'Display Timezone' sections.

The **Display Timezone** is the timezone of your **Calendar** view and is set to the Browser timezone by default. The **Office Timezone** is bound to the `_timezone` parameter of the Office Hours service.

The **Calendar** view is in Read-Only mode if your Display Timezone and Office Timezone are different. In that case, the interface shows a warning message and does not allow you to edit the **Calendar** view.

### [+] Show me the message

 The calendar is in read-only mode because the office timezone is not equal to the displayed timezone

To fix this issue, click **Settings** and fix your **Office Timezone** and **Display Timezone** by setting identical timezones.

## Add Office Hours to your Callback Service

Callback Delayed

Search Table Select All

+ Add New Delete Advanced Parameters Expand All Refresh

Name	Value	Description
Chat (1)		
General (18)		
_attach_udata	single_json	Specifies the format in which the user data should be attached to the interaction prior to routing to agent. Select data_id to attach only the storage data_id (key: GMS_UserData). Select single_json will attach all user data as one json object (key: GMS_UserData). Select separate_keys to attach each user data as a separate key. Name of the key will be the same as the user data key.
<input checked="" type="checkbox"/> _business_hours_service	<div> <div>Choos...</div> <div>✓</div> <div>✕</div> </div> <div>Business-hours</div>	Specifies a configured office-hours service. Request Desired Time is verified against the defined regular and specific calendar hours.
_call_direction	USERTERMINATED	When value is USERORIGINATED, this implies the user (device) will initiate the call to be connected to the agent. If USERTERMINATED is specified, then the enterprise will initiate the call to the specified target.
<input type="checkbox"/> _capacity_service		Specifies a configured capacity service. Agent availability is defined capacity and capacity

© 2019 Genesys Mobile Services 8.5.104

Select your Callback Service and expand the **General** category. Find the `_business_hours_service` parameter and select your Office Hours instance in the drop down list.

## Create Regular Office Hours

The screenshot displays the 'Business-hours' configuration interface. At the top, the 'Regular Office Hours' checkbox is checked and circled with a '1'. The interface is in 'Calendar' view, showing a weekly grid from Monday to Friday. The time slots range from 1 AM to 7 PM. Office hours are configured for Monday (8:00 AM - 5:30 PM), Tuesday (8:00 AM - 5:30 PM), Thursday (8:00 AM - 6:00 PM), and Friday (8:00 AM - 6:00 PM). A callout box with a '2' and the text 'Select your Office Hours' points to the Wednesday slot, which shows a range of 'Wed-Wed 08.00.AM-06.00.PM'. An inset window at the bottom left shows the 'New Office Hours' dialog, which includes fields for 'Name', 'Start', 'End', 'Timezone', and 'Repeat', along with a 'Save' button.

Select your Office Hours service in the **Configured Service** tab.

In the **Calendar** view, make sure that **Regular Office Hours** is checked.

Select your Office Hours service in **Configured Services**. You can add Office Hours by selecting a timezone in your **Calendar** view; the Office Hours interface shows up. Or, you can switch to the **Table** view and edit options there.

## Switch Views to Check Office Hours

Business-hours *Switch Calendar Views*

☐ Regular Office Hours | May 1, 2016 – May 31, 2016 | Today | Settings

☐ Day ☐ Week ☒ Month | GMT+0000

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Regular Off	3 Regular Off	4	5	6	
8	9 Regular Off	10 Regular Off	11	12	13	
15	16 Regular Off	17 Regular Off	18 Holiday	19 Holiday	20	21
22	23 Regular Off	24 Regular Off	25	26	27	28
29	30 Regular Off	31 Regular Off	1	2	3	
5	6 Regular Off	7 Regular Off	8	9	10	

If you add Office Hours to one or more days in the week, the results apply to all months and weeks. Switch to the **Month** view to see the actual Office Hours of the month.

## Add Holidays and Exceptions

The screenshot shows the 'Business-hours' tab in the Office Hours UI. The 'Regular Office Hours' checkbox is unchecked, and the 'Calendar' view is selected. A calendar for Wednesday 05/11 is displayed. A 'New Office Hours' dialog box is open, showing options to add a Holiday or Exception, with a list of days for selection.

**Business-hours** *Uncheck* **Calendar** Table

☐ Regular Office Hours May 11, 2016 Today Settings

Day Week Month GMT+00

Time Wednesday 05/11

1 AM  
2 AM  
3 AM  
4 AM Wed-Wed 04.00.AM-05.00.AM  
5 AM  
6 AM  
7 AM  
8 AM  
9 AM  
10 AM  
11 AM  
12 PM  
1 PM  
2 PM  
3 PM  
4 PM  
5 PM  
6 PM

**New Office Hours**

Block Type

☒ Holiday (holiday) ☐ Exception (bh\_add)

☐ This is an Annual Event

Weeks Selected:

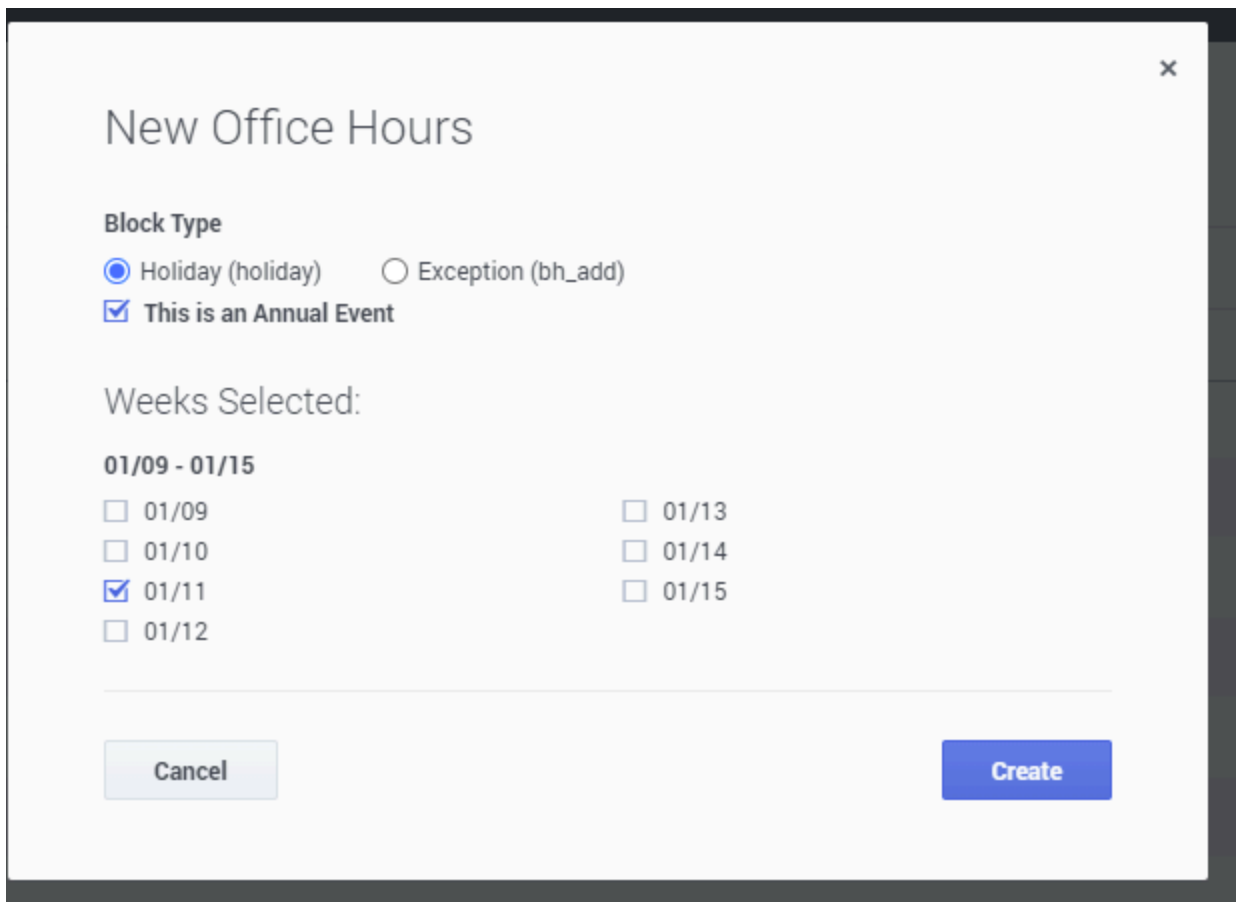
01/09/2023 - 01/15/2023

☐ 01/09 (Monday) ☐ 01/13 (Friday)  
☐ 01/10 (Tuesday) ☐ 01/14 (Saturday)  
☒ 01/11 (Wednesday) ☐ 01/15 (Sunday)  
☐ 01/12 (Thursday)

Cancel Create

You can set certain dates as Holidays so they will not be used for Callback and certain dates as Exceptions (or Special Office Hours) for days that require additional hours.

To add these special events, uncheck the **Regular Office Hours** parameter, then click in the **Calendar** view on the appropriate date to open the dialog box. By default, the special event is added to the current year.



A screenshot of a 'New Office Hours' dialog box. The dialog has a title bar with a close button (X) in the top right corner. The main content area is titled 'New Office Hours'. Below the title, there is a section labeled 'Block Type' with two radio buttons: 'Holiday (holiday)' (selected) and 'Exception (bh\_add)'. Below this, there is a checked checkbox labeled 'This is an Annual Event'. Underneath, the text 'Weeks Selected:' is followed by a date range '01/09 - 01/15'. Below this range, there are two columns of dates with checkboxes: 01/09, 01/10, 01/11 (checked), 01/12 in the first column, and 01/13, 01/14, 01/15 in the second column. At the bottom of the dialog, there are two buttons: 'Cancel' on the left and 'Create' on the right.

New Office Hours

Block Type

☒ Holiday (holiday) ☐ Exception (bh\_add)

☒ This is an Annual Event

Weeks Selected:

01/09 - 01/15

☐ 01/09 ☐ 01/13

☐ 01/10 ☐ 01/14

☒ 01/11 ☐ 01/15

☐ 01/12

Cancel Create

When you create the holiday or the exception, if you select the **This is an Annual Event** option, the holiday or exception is planned annually, not only for the current year.

## Exceptions Always Apply

Business-hours Calendar Table

☐ Regular Office Hours May 1, 2016 – May 31, 2016 Today Settings

Day Week Month GMT+0000

*No Callback on Holiday*

Monday	Tuesday	Wednesday	Thursday	Friday
2 Regular Office Hou 8:00 AM - 5:30 PM	3 Regular Office Hou	4 Regular Office Hou	5 Regular Office Hou	6 Regular Office Hou
9 Regular Office Hou	10 Regular Office Hou	11 Holiday Regular Office Hou	12 Regular Office Hou	13 Regular Office Hou
16 Regular Office Hou	17 Regular Office Hou	18 Regular Office Hou	19 Regular Office Hou	20 Regular Office Hou
23 Regular Office Hou	24 Regular Office Hou	25 Regular Office Hou	26 Special Office Hou Regular Office Hou	27 Regular Office Hou
30 Regular Office Hou	31 Regular Office Hou	1 Regular Office Hou	2 Regular Office Hou	3 Regular Office Hou
6 Regular Office Hou	7 Regular Office Hou	8 Regular Office Hou	9 Regular Office Hou	10 Regular Office Hou

*Special Office Hours (Exception)*

If you set a Holiday and an Exception on the same day, then the Exception applies. The office is opened during the hours configured in the Exception.

If Regular Hours, Holiday, and Exception are set on the same day, then Holiday blocks Regular Hours, but the Exception still applies and the office is opened during the Exception's hours.



## Add Holidays and Exceptions from the Table view

The screenshot shows the 'Business-hours' interface in 'Table' view. At the top, there are tabs for 'Calendar' and 'Table', with 'Table' being the active view. Below the tabs, there is a search bar labeled 'Search Table' and a 'Select All' button. To the right of these are several action buttons: 'Clone', 'Delete', 'All Parameters' (with a toggle switch), 'Expand All', and 'Refresh'. The main table has two columns: 'Value' and 'Description'. The 'Value' column contains a list of items, each with a checkbox. The first item is 'UTC' with a checkmark. Below it is a section titled 'Holidays (1)' which is expanded. This section contains a list of dates, each with a checkbox. The date '5/19/2016' is selected, and a calendar pop-up is visible showing the month of May 2016. The date '19' is highlighted in the calendar. Below the calendar, there is a section titled 'Special Office Hours (1)' which is also expanded. The 'Description' column contains text explaining the syntax for adding holidays and exceptions: 'Days when the office will be closed. Use syntax {yyyy-MM-dd}. For example \_holiday5='07-15''.

Value	Description
<input checked="" type="checkbox"/> UTC	Timezone matching days of week and time range definition. Defaults to UTC.
<b>Holidays (1)</b>	
<input type="checkbox"/> 5/11/2016	Days when the office will be closed. Use syntax {yyyy-MM-dd}. For example _holiday5='07-15'
<input checked="" type="checkbox"/> 5/19/2016	Days when the office will be closed. Use syntax {yyyy-MM-dd}. For example _holiday5='07-15'
<b>Special Office Hours (1)</b>	

You can also add Holidays and Exceptions by editing the associated options in the **Table** view. If you do not check the Annual Event option, the holiday or exception is added to the current year.

## Add Holidays and Exceptions from the Table view

The screenshot shows the 'Business-hours' interface in 'Table' view. At the top, there are tabs for 'Calendar' and 'Table', with 'Table' being the active tab. Below the tabs, there is a search bar labeled 'Search Table' and a 'Select All' button. To the right of these are several action buttons: 'Clone', 'Delete', 'All Parameters' (with a toggle switch), 'Expand All', and 'Refresh'. The main table has two columns: 'Value' and 'Description'. The first row is 'UTC' with a description: 'Timezone matching days of week and time range definition. Defaults to UTC.' Below this is a section for 'Holidays (1)' with a plus icon. The first row in this section is '5/11/2016' with a description: 'Days when the office will be closed. Use syntax [yyyy-MM-dd]. For example \_holiday5='07-15''. A second row is highlighted in blue, showing a date picker for '5/19/2016' and a description: 'Days when the office will be closed. Use syntax [yyyy-MM-dd]. For example \_holiday5='07-15''. A calendar popup is open, showing the month of May 2016, with the 19th selected. Below the calendar is a section for 'Special Office Hours (1)' with a plus icon.

You can also add Holidays and Exceptions by editing the associated options in the **Table** view.

## Import Rules in Office Hours

The **Import Rules** feature enables you to set up Regular Hours, Holidays, and Exceptions (Special Office Hours) that you want to apply to several Office Hours services. The imported content (options and setup) becomes part of the Office Hours service.

- Further changes to the imported services (Regular Hours, Holidays, Exceptions) instantly apply to all the Office Hours services that imported the rules.
- The **Import Rules** feature ignores the timezones defined in the imported service.

## Tip

The **Import Rules** feature allows you to create and manage a single Office Hours, Holidays, and Exceptions calendar that is applicable to multiple team calendars.

### Use Case: Import Holiday Rules

Let's consider that you have several offices in the United States, sharing the same federal holidays and vacations. In that scenario, you can create a dedicated Office Hours called **Federal USA Holidays**, and then import it in your U.S. offices, instead of manually adding the same holidays to your **Calendar** views for each service (Office New York and Office SFO in the example below).

### Use Case: Import Exception Rules

Let's consider that, every two weeks during spring, all of your offices are opened on Wednesday evenings from 6-9 p.m. for a special event called *Special Deal*. In that scenario, you can create an Office Hours service called **Special Deal Events** where you create the needed extra hours. Then, you can import this rule in each concerned office (Office New York, Office SFO, and Office Amsterdam in the example below).

Note that **Special Deal Events** will apply even if Regular Hours and Holiday are set for a given date, as explained [above](#).

### Set up Rules in a Dedicated Office Hours Service

The screenshot shows the 'Office Hours' management interface. On the left, a sidebar lists several services: 'All Offices', 'Federal USA Holidays', 'Office Amsterdam', 'Office New York', 'Office SFO', and 'Special Deal Events' (which is currently selected). The main area displays a calendar for May 2016. The calendar is set to 'Month' view and 'GMT+0200'. It shows a grid of days from Monday to Friday. Two specific events are highlighted with orange icons and labeled 'Special Office Hour': one on Wednesday, May 18, and another on Wednesday, May 25. The top of the interface includes a search bar, a 'Special Deal Events' header, and navigation controls for dates and settings.



To set up these rules, **create** a new Office Hours service. In this example, two services are created: Special Deal Events and Federal USA Holidays.

## Import Rules in Office Hours Service

Office SFO

Calendar Table

Search Table Select All

Clone Delete All Parameters Expand All Refresh

Value	Description
<input type="checkbox"/> America/Los_Angeles	Timezone matching days of week and time range definition. Default to UTC.
^ Holidays (0)	
▼ Imported Rule Calendars (2)	
<input checked="" type="checkbox"/> Federal USA Holidays	An option that specifies an existing office hour to import into the current office. Note: The timezone of the imported office will be disregarded.
<input type="checkbox"/> Special Deal Events	An option that specifies an existing office hour to import into the current office. Note: The timezone of the imported office will be disregarded.
^ Imported Schedule Calendars (0)	

*Click, then select the Office Hours to import*

Switch to **Table** view and expand **Imported Rule Calendars**. Click  to add a new rule line, then select the appropriate Office Hours service.

## View Imported Rules

Office SFO

Regular Office Hours

May 30, 2016 - June 5, 2016

Today

Settings

Day Week Month GMT-0700

Time

Mon 05/30

Tue 05/31

Wed 06/01

Thu 06/02

Fri 06/03

All Day

Holiday

Imported from Federal USA Holidays

Regular Office Hours 7:00 AM - 5:30 PM

Regular Office Hours 7:00 AM - 5:30 PM

Regular Office Hours 7:00 AM - 5:30 PM

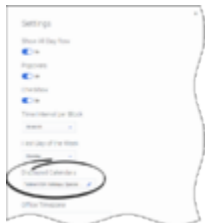
Regular Office Hours 7:00 AM - 5:30 PM

Regular Office Hours 7:00 AM - 5:30 PM

Special Office Hours 6:00 PM - 9:00 PM

Imported from Special Deal Events

Genesys Mobile Services 6.0.104.0



Switch to the **Calendar** view to display the results of the imports. In this example, you can see that the Special Deal Events and Federal USA Holidays are imported in the Office SFO service.

If you update an Office Hour service (for instance, Special Deal Events or Federal USA Holidays), you will see these updates replicated to the Office Hours services importing the modified calendars (here, Office SFO).

You can also click **Settings** and see the imported Offices Hours in the list of **Displayed Calendars**.

## Import Schedules in Office Hours

You can import **Schedules** from other Office Hours Services to combine working hours of multiple teams and shifts in the same Office Hours service. In this scenario, you can create a main Office Hours service (All Offices in the example below) into which you can import all the Office Hours schedules (Regular Hours, Holidays, Exceptions, and timezones). This results in the union of the imported Office Hours schedules within the timezone of the main Office Hours.


### Tip

The **Import Schedules** feature helps you to manage teams dispatched in different timezones.

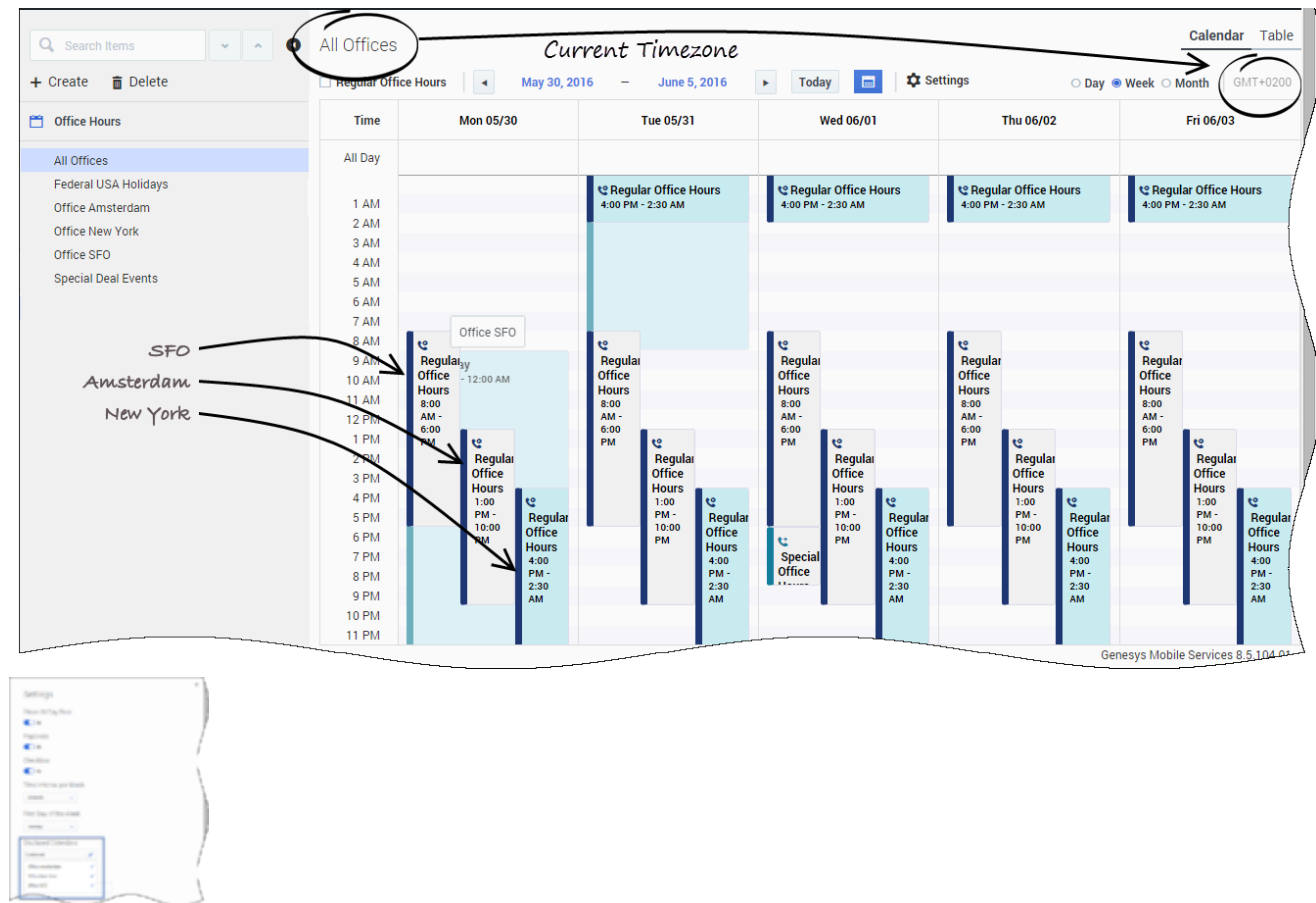
## Import Schedules in Office Hours Service

The screenshot shows the 'All Offices' table in 'Table' view. The table has columns 'Value' and 'Description'. The 'Imported Schedule Calendars (3)' section is expanded, showing three rows: 'Office Amsterdam', 'Office New York', and 'Office SFO'. A handwritten arrow points from a circled 'Add' icon (a square with a plus sign) to the 'Office Amsterdam' row. A handwritten note says 'Click, then select the Office Hours to import'.

Value	Description
<input type="checkbox"/> Europe/Paris	Timezone matching days of week and time range definition. Defaults to UTC.
^ Holidays (0)	
^ Imported Rule Calendars (0)	
▼ Imported Schedule Calendars (3)	
<input type="checkbox"/> Office Amsterdam	An option that specifies an existing office hour to import into the current office. Note: The timezone of the imported office will be considered.
<input type="checkbox"/> Office New York	An option that specifies an existing office hour to import into the current office. Note: The timezone of the imported office will be considered.
<input type="checkbox"/> Office SFO	An option that specifies an existing office hour to import into the current office. Note: The timezone of the imported office will be considered.

Switch to **Table** view and expand **Imported Schedule Calendars**. Click  to add a new rule line, then select the appropriate Office Hours service.

## Display Imported Schedules



Switch to the **Calendar** view to see the results of the imports.

In this example, the **All Offices** service combines the schedules of the **Office SFO**, **Office New York**, and **Office Amsterdam** services.

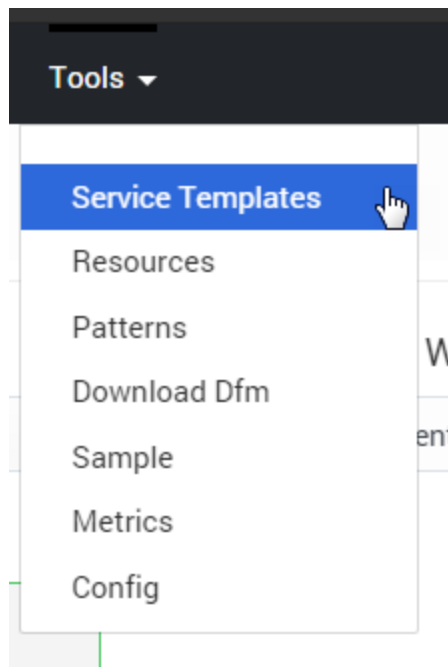
The timezones, Regular Hours, Holidays, and Exceptions are aggregated in the **Calendar** view that shows the callback coverage for the three offices.

You can also click **Settings** and see the imported Offices Hours in the list of **Displayed Calendars**.

## Office Hours Options Reference

For a list of Office Hours options, see the [Office Hours section](#) of the Genesys Mobile Engagement Options Reference Guide.

## Tools tab



The content of the **Services and Tools > Tools** menu depends on the options configured in the [features](#) section.

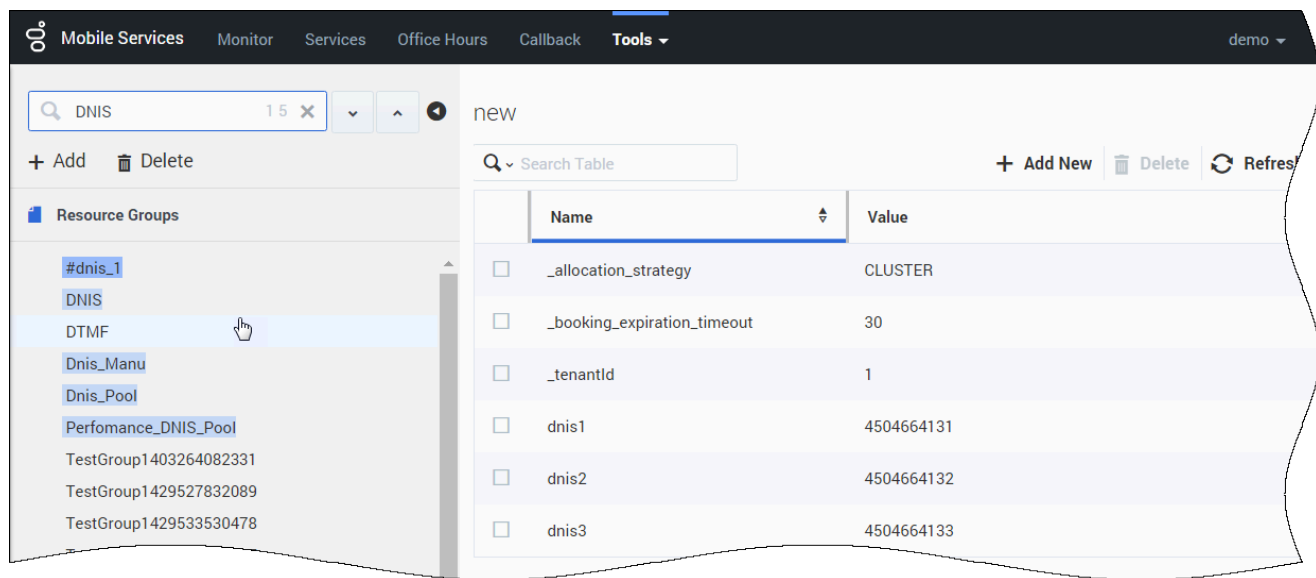
## Service Templates

The **Tools > Service Templates** panel illustrates how to import service templates. See [Service Templates](#) for details.

## Resources

To enable resources in the Service Management UI, configure `enable-resources = true` in your GMS configuration.

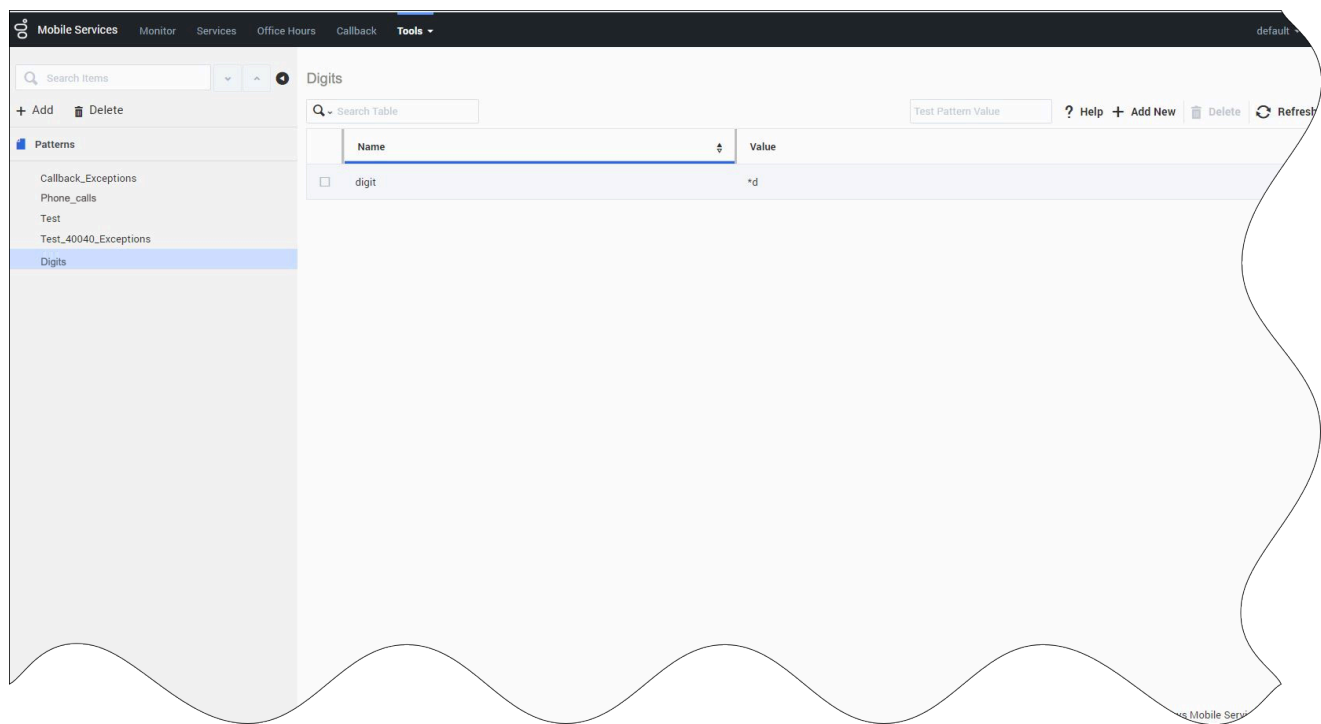




The *Resources* tab enables you to create new resource groups and add resources. It provides the same functionality as *Resources* (Configuration Database Objects) in [Configuration Manager](#), as well as displaying available and total resources.

## Patterns

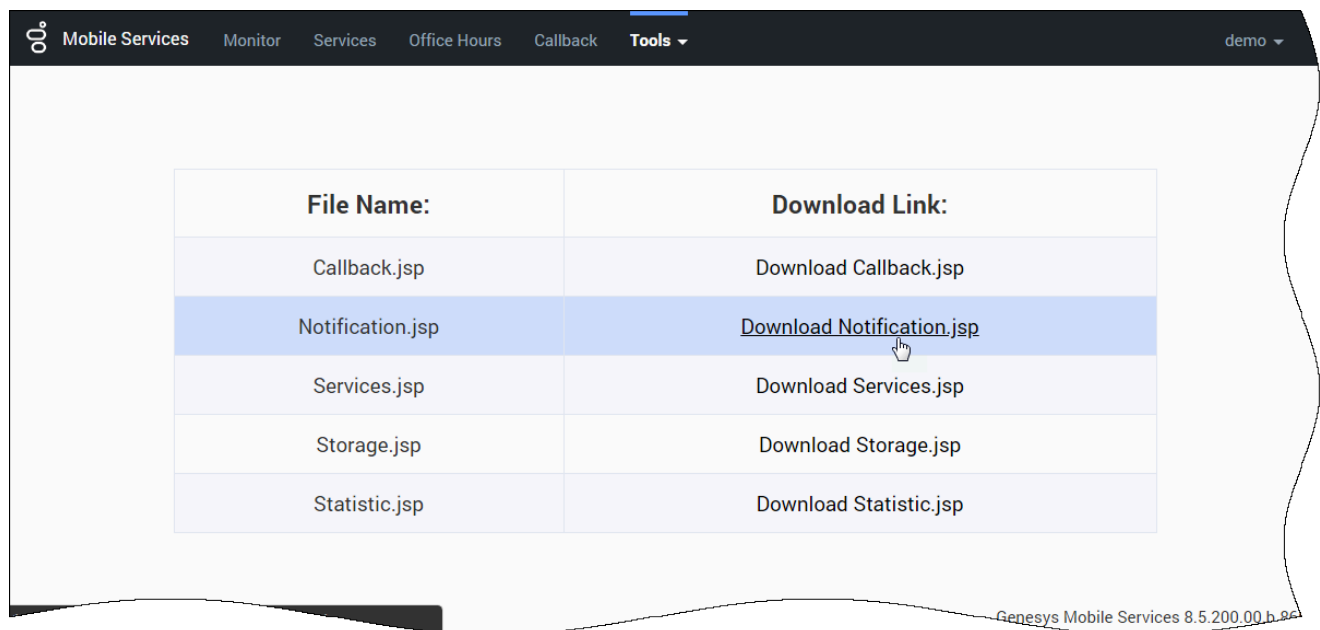
To enable patterns in the Service Management UI, configure `enable-patterns = true` in your GMS configuration.



The *Patterns* tab enables you to configure groups of exceptions; for example, phone numbers. The *Help* button displays the format for the expressions. Once you have defined some patterns, use the **Pattern Matcher API** queries to check the validity of your parameters. In the patterns group, you can test the value of a pattern against an entire group. Type a value in the input field, and if a match is found, the corresponding table row will be highlighted.

## Download DFMs

To enable DFMs in the Service Management UI, configure `enable-downloaddfm = true` in your GMS configuration.



The **Tools > Download Dfm** panel enables you to download special configuration files, called DFM.

- DFM files define Genesys Mobile Services-specific SCXML that are required for Orchestration Server-based services.
- You must **deploy these files** in your Orchestration Server application if you need to execute SCXML applications used within Orchestration Server-based Services.

Click one of the DFM file links and the download will start.

### Important

You must update the DFM files deployed locally with the latest version provided in the GMS Service Management UI.

## Sample

The **Tools > Sample** panel illustrates how to implement a Desktop/Mobile browser web application that communicates with GMS and performs supported contact scenarios. It is primarily meant to be used by developers as a reference to build a Javascript-based web application with GMS. See **Sample** for details.

## Metrics

To enable Metrics in the Service Management UI (known as Reporting in the former UI), configure `enable-metrics = true` in your GMS configuration.



The **Tools > Metrics** panel is a dashboard that displays current resource and service utilization. You can select pre-defined date and time ranges, and export the reports into CSV, PDF, or Excel file formats. You also have the ability to zoom into a selected area of the graph to view additional details.

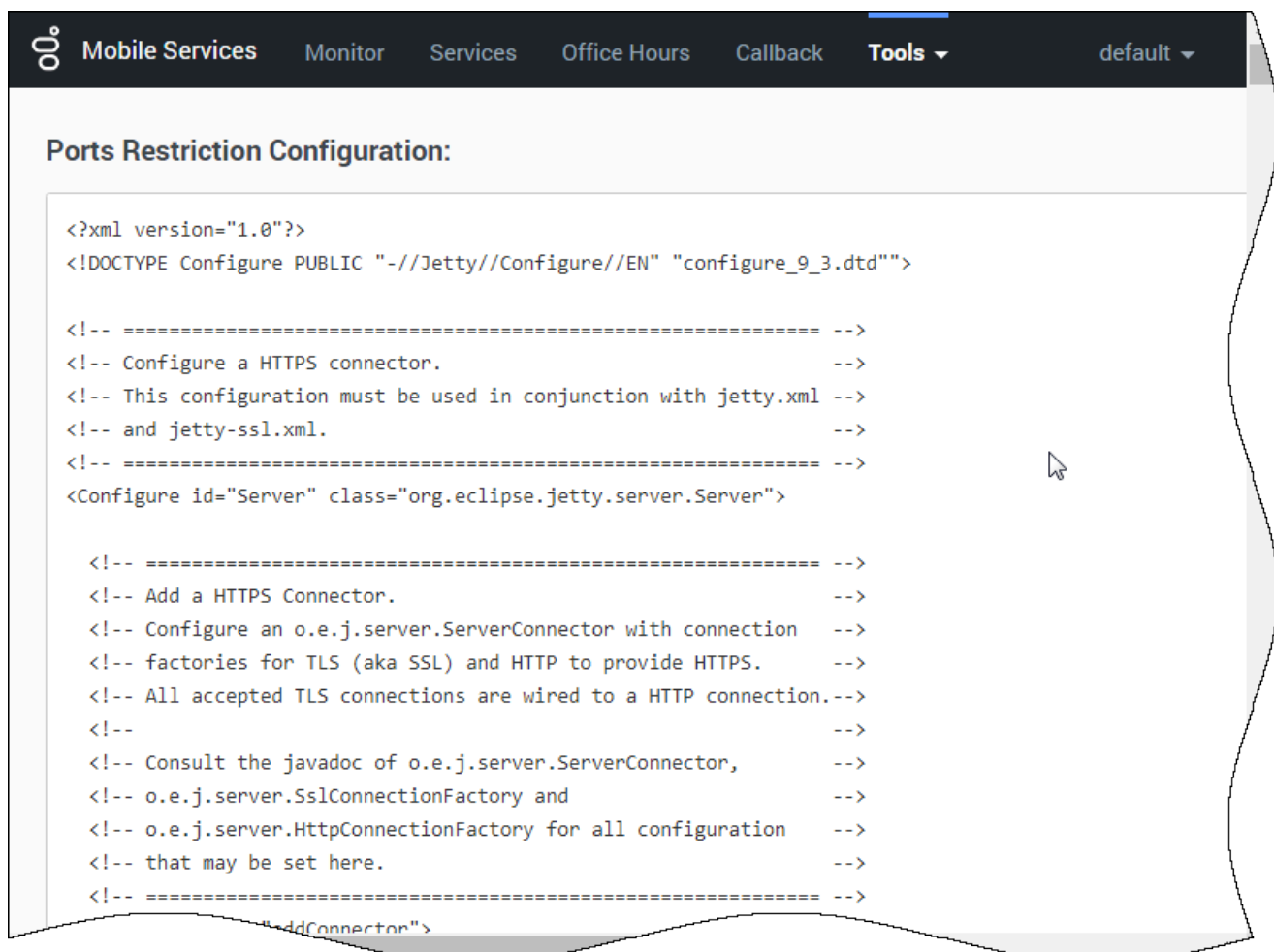
Four types of reports are available:

- Resources - Displays the usage history of the selected Resource group. **Note:** These are the Resource groups that were defined in the **Tools** menu.
- Services - Displays the aggregated total a service was accessed for a given time period.
- Callback - Displays Callback services data, if the Callback services are active.
  - Display Advanced Metrics - When this option is selected, you can choose between a metric type of Holdtime or Watermark.
    - Holdtime - You can set parameters for displaying the HoldTime statistics (media type, rollup-range, and time range).
    - Watermark - For Callbacks in the QUEUED state, you can display high, low, and average watermarks (AVG, MIN, MAX) over time periods of 15 minutes, 30 minutes, an hour, or a day. Note that the Watermark is computed every minute, so for example, running 20 Callbacks simultaneously within a one-minute period, then none for the rest of the same 15-minute period, will result in Min=0, Max=20, and Avg=1.
- Operational metrics - DNIS pool usage and availability.
  - DNA availability by pool - Determines, in real time, the number of outstanding service requests (or available resources) by resource pool.

- Average Handle Time (AHT) by resource pool – Reports historical AHT, in seconds, by resource pool summarized by 15 minutes, 30 minutes, an hour, a day, or over a range of periods such as today, yesterday, last week, last month, or a range of dates. Timeouts do not impact the calculation.
- Service Exiting Reporting — Reports on historical service terminations (match or timeout) by resource pool summarized by 15 minutes, 30 minutes, an hour, a day, or over a range of periods such as today, yesterday, last week, last month, or a range of dates.

## Config: Jetty XML Snippet

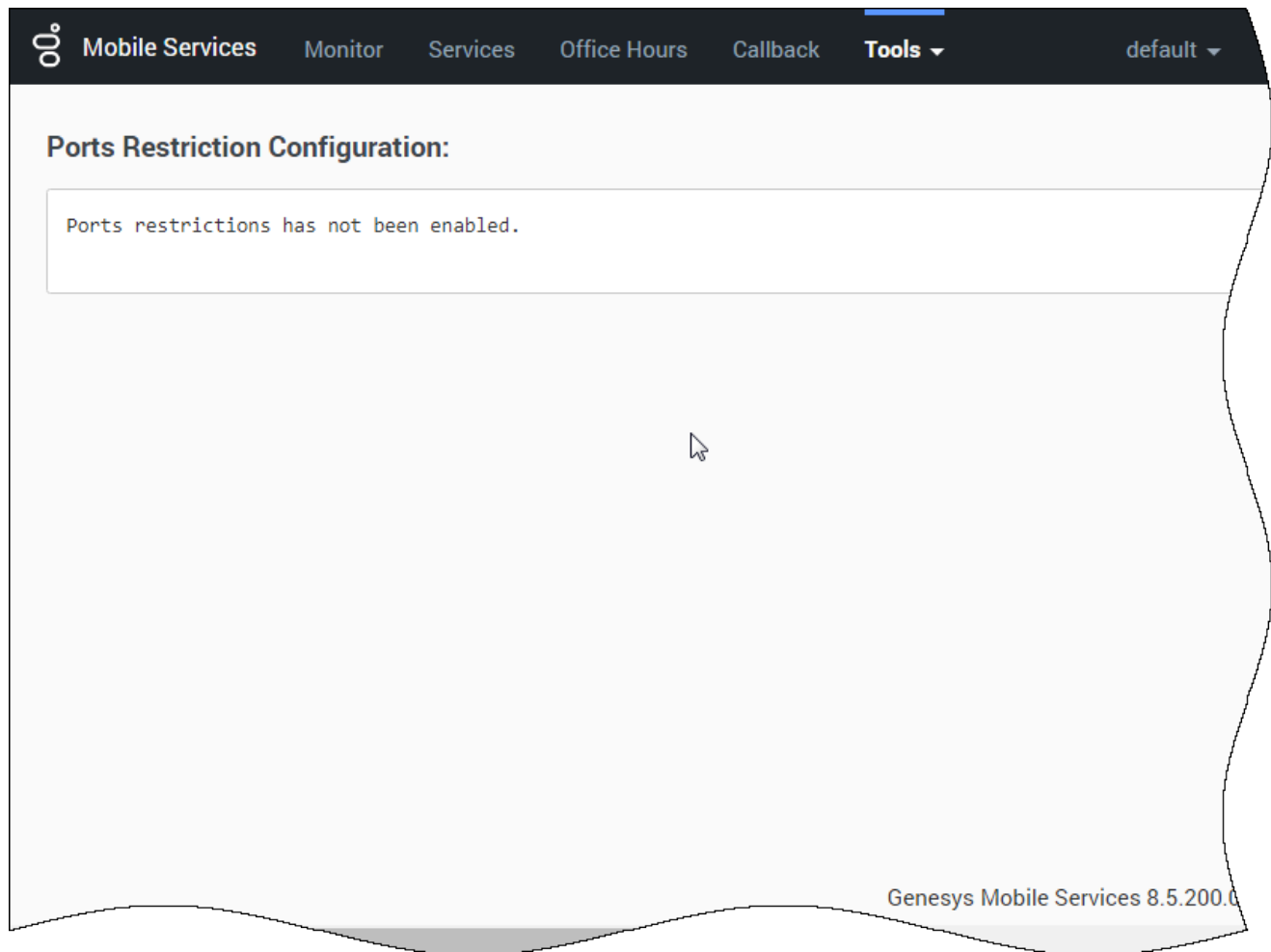
To enable **Config** in the Service Management UI, configure `enable-config = true`



The *Config* tab provides you with a code snippet that you must add to the `jetty-http.xml` file for port number control. The code snippet is available when port restrictions have been enabled in your GMS Configuration. See [Restricting Ports](#) for more information about using this feature.

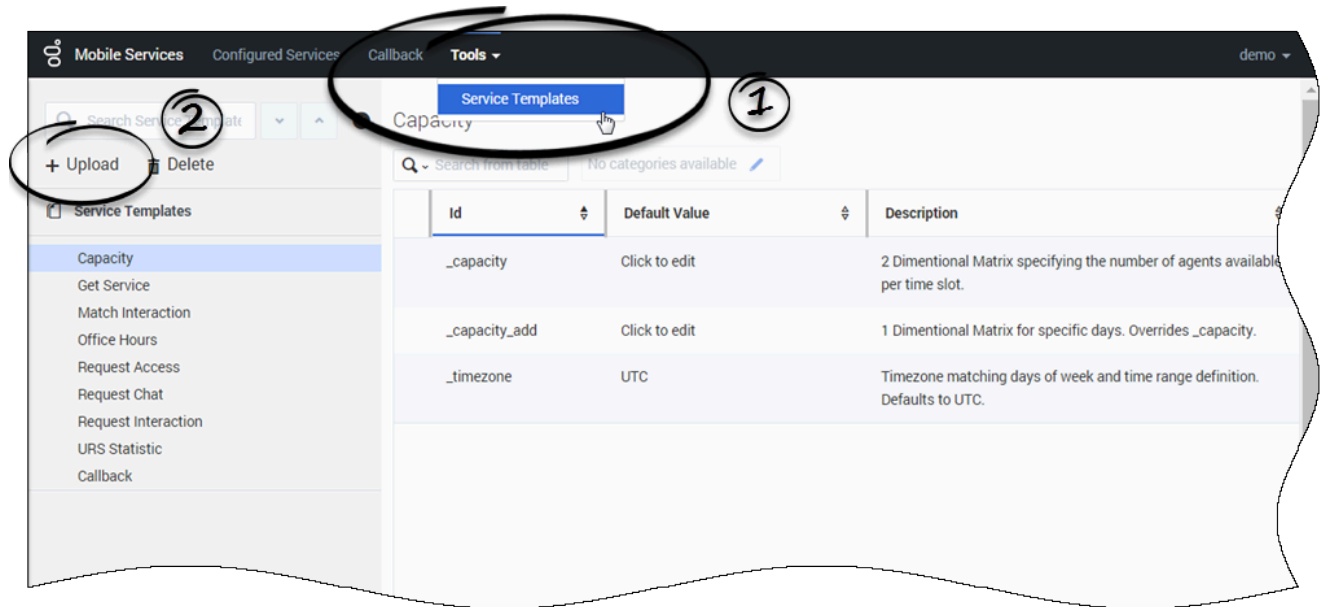
By default, restrictions are disabled and the **Config** Tab displays a default message.

## [+] See default message



# Service Templates

## Upload Service Templates

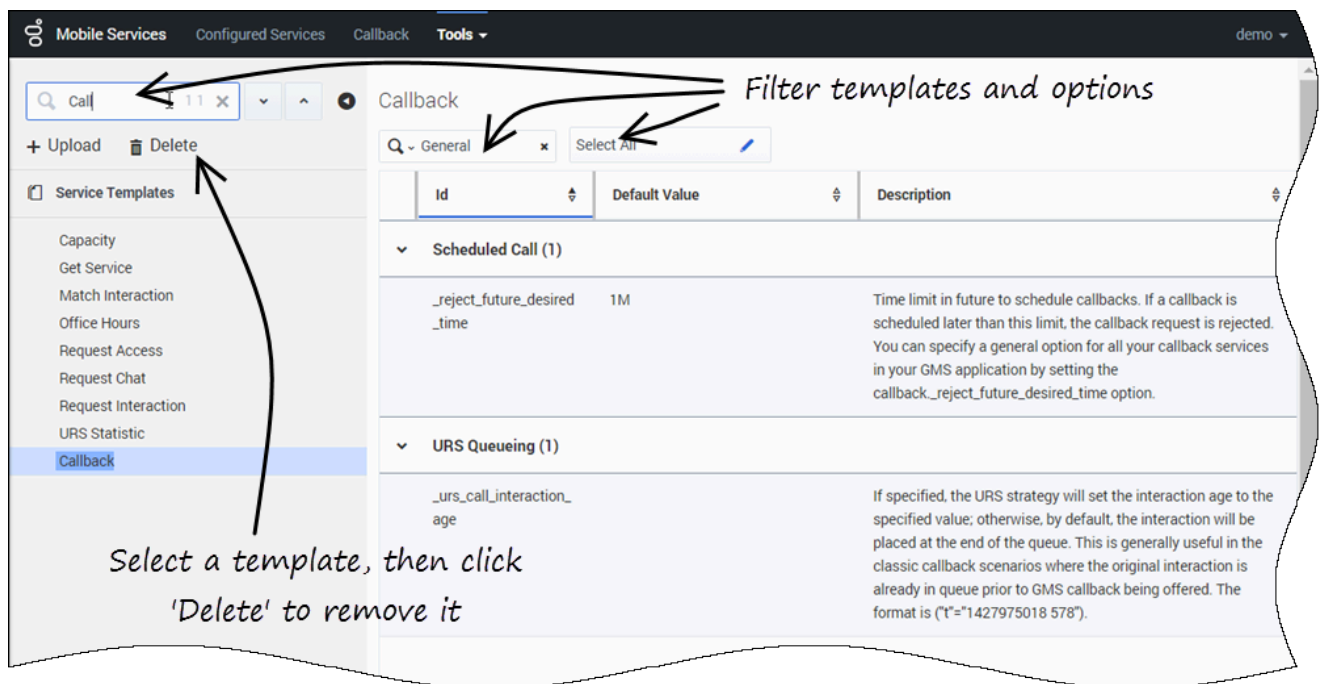


Before you can start creating services, you must load the template associated with these services.

- The template lists options related to your services.
- Each template includes one or more **scenarios** detailed in this Help, except for the Callback template scenarios, which are detailed in the **Callback Solution Guide**.

To add a template, select **Service Templates** in the **Tools** menu bar and click **Upload** to browse your template. The template is added to the list.

## Manage Service Templates



The Service Templates tab enables you to upload and delete templates. Added features include:

- A Filter box to focus on specific services.
- A Search box to filter the displayed template's options based on an entered keyword.
- A Selector to display the options of a selected section.

## Learn about Templates, Scenarios, and APIs

To understand the relationship between services, scenarios, templates, and APIs, you should read the chapter [about Built-in and ORS services](#).

Available templates, scenarios, and APIs

Template Name	Detailed Built-in	Related API(s)
Get Service (get.zip)	<a href="#">Get and Basic Get Services</a>	<a href="#">Node API</a> to check GMS nodes health and manage your nodes: start, suspend, stop.
Match Interaction (match-interaction.zip)	<a href="#">Match interaction</a>	<ul style="list-style-type: none"> <li>• <a href="#">Service API</a> to check that a voice call with an existing GMS service is associated</li> </ul>



Template Name	Detailed Built-in	Related API(s)
		<p>with the access number.</p> <ul style="list-style-type: none"> <li>• <b>Storage API</b> to allow users to temporarily store arbitrary data. Data may consist of key/value pairs of strings or binary objects.</li> </ul>
Office Hours	Office-hours	<b>Calendar Service API</b> to create and manage office hours, special events, and more.
Request Access	Request-access	<b>Service API</b> to request resources.
Request Chat		Create a chat session in the Chat Server using the <b>Chat API v1</b> .
Request Interaction	Simple Voice Inbound-Immediate Call	See the <b>scenario</b> page.
URS Statistic (urs-stat.zip)		<b>Stat Service API</b> to query URS Stat.
Callback (callback.zip)	User Originated Immediate	Query to create an inbound immediate service.
	User Originated Delayed	Query to create an inbound delay service.
	Chat Immediate	Chat APIs
	Chat Delayed	Chat APIs
	User Terminated Immediate	Callback Services API
	User Terminated Delayed	Callback Services API
	User Terminated Scheduled	Callback Services API.
Capacity (capacity.zip)	User Terminated Delayed Agent Preview	Callback Services API
	Capacity	<b>Capacity API</b> to manage Agent availability.

---

# Callback Interface

## Link to video

The **Callback** UI displays the list of Callbacks that are still alive. After the Callback due date (which is the `_desired_time` parameter), the service record will appear in the UI for the amount of time configured in the `_ttl` parameter (in seconds).

Callback records can have the following states:

- **SCHEDULED** - Request is handled by Callback Management service (there are no sessions started in ORS). While in this state, the request will be handled by Management when the specified `_desired_time` is upcoming.
- **QUEUED** - Callbacks actively waiting for an agent in ORS/URS; the agent not assigned yet.
- **ROUTING** - Agent is reserved but the call is not yet routed to the agent.
- **PROCESSING** - Callback being handled by assigned agents.
- **COMPLETED** - Callback was completed with `_callback_reason`, for example, timed-out, cancelled, and so on.
- **PAUSED** - Callback was paused. See [Pausing Callback](#) for details.

### Important

You must have the appropriate **Supervisor role** in order to use the Callback UI.

## Callback UI Overview

The screenshot shows the 'Callback' section of the Genesys Mobile Services interface. At the top, there's a navigation bar with 'Mobile Services', 'Monitor', 'Services', 'Office Hours', 'Callback', and 'Tools'. Below this, a 'Next 7 Days' dropdown is on the left, and '+ Create Callback' and 'Advanced Options' are in the center. On the right, there are 'Refresh' and 'Cancel Callbacks' buttons. A search box contains the text '551', and a dropdown next to it is set to 'Phone Number'. A handwritten note 'String to search on selected field' with an arrow points from the search box to the dropdown. Below the search area, a table displays callback information. The table has columns for 'State', 'Desired Callback Time (GMT+2)', 'Phone Number', and 'Service Name'. Two rows are visible, both with 'SCHEDULED' state and '5510' as the phone number. The first row's time is '7/5/2017 11:10:00' and the second is '7/6/2017 10:10:00'. A 'Back to top' link is at the bottom left. The version 'Genesys Mobile Services 8.5.110.07' is at the bottom right.

	State	Desired Callback Time (GMT+2)	Phone Number	Service Name
<input type="checkbox"/>	SCHEDULED	7/5/2017 11:10:00	5510	Preview
<input type="checkbox"/>	SCHEDULED	7/6/2017 10:10:00	5510	Preview

The following features are available:

- The drop-down at the top left gives you the option to display Callbacks using a pre-defined range for the past day, week, or month; or for the next day, week, or month.
- Refresh - You can force the interface to refresh the list of Callbacks.
- Search Box - You can select a column field in the drop-down at the right of the Search Box. Then, the interface filters the results dynamically as you type.

## Limitations of the Interface

- The total number of callbacks that the table can display is 100000.
- Callbacks are displayed in pages of 100 items for Internet Explorer and 250 for other browsers.
- There is a dropdown which you can select to get pre-defined ranges or set a custom range.

×

## Advanced Options

### Configure Columns

+

Add Column Field

Column Name

Alias (Optional)

×

### Configure Custom Date Range

+

Add Custom Date Range

Range Name

Days

Days

Range Name

Offset

Offset

×

### Filter Table by States and Service

States

Services

☐ SCHEDULED

☐ Callback Delayed

☐ QUEUED

☐ ROUTING

☐ PROCESSING

☐ COMPLETED

Close

Save

**Advanced Options** - Opens a new window where you can customize how the Callback Management table displays:

- **Add Column Field** - You can add your own custom column field to display in the table. This option can be useful when you have created your own properties that you want to display in the table. You can add more than one field, which will display in the same column. In this case, to enhance readability in the single column, you can use the Alias option, and create a short name to display.  
To enable new Column Fields, configure `disable-additional-columns-from-callbacks = true` in your GMS application.
- **Filter Table by States and Service** - You can include one or more states to display in the table, and/or you can select a service to display in the table. Note: You can only select one service at a time to display.

- Max # of Callbacks per Service - Default is 500.

## Filtering Callbacks by User

Introduced in 8.5.207

If you configure a list of services in the **services** option, in the **gms** section of the Agent's configuration options, the Callback UI filters the callbacks that the administrator can see based on this configured list. See also [Adding your Service to Virtual Service Groups](#).

## Create or Schedule a Callback

**Add New Callback**

Callback type

Immediate

Service Name

scheduled

Callback Parameters

Customer Number

Your Callback Number

Urs Virtual Queue

Optional

Request Queue Time Stat

Optional

Additional Properties

\_email

Parameter Value

foo

Parameter Value

bar

Parameter Value

Cancel

Continue

(SUBMIT\_FAILED)

You can submit or schedule a callback request by clicking **Create Callback**. A new dialog opens and you can add a new Callback to be displayed. You can select the **Callback Type** and **Service Name**, add your own properties to the Callback, and enter the following Callback Parameters:

- `_customer_number` - Your Callback number.
- `_urs_virtual_queue` - Queue to use for this Callback if several virtual queues are used for Callback with identical configuration. If you are defining the `_urs_virtual_queue` here, you must then remove this option from the Callback Service (through Genesys Administrator), because it cannot be defined in both places.
- `_request_queue_time_stat` - Queue statistics. For example, "ExpectedWaitTime;Queue;8999@SIP\_Server;Environment".

## Important

Make sure to set `_wait_for_user_confirm` to `false` in the selected service.

## Edit a Callback

The screenshot shows the Genesys Mobile Services interface with the 'Callback' tab selected. At the top, there are date range filters (7/4/2017 to 7/11/2017) and a 'Submit' button. Below this are links for 'Create Callback' and 'Advanced Options', along with 'Refresh' and 'Cancel Callbacks' buttons. A search bar and a 'Phone Number' dropdown are also present. The main table displays 7 callback(s) found. The first row is highlighted in blue and has a blue pencil icon in the last column, which is circled with a black arrow pointing to the 'Edit Callback' modal. The modal shows 'Current Callback Information' with 'Callback Time' 7/4/2017 11:44:01 and 'Callback Number' 5110. At the bottom of the modal, the 'Cancel Callback' button is circled with a black arrow, and there are 'Back' and 'Continue' buttons.

	State	Desired Callback Time (GMT+2)	Phone Number	Service Name	
<input checked="" type="checkbox"/>	QUEUED	7/4/2017 11:44:01	5110	Preview	
<input type="checkbox"/>	SCHEDULED	7/4/2017 13:40:00	5114	Preview	
<input type="checkbox"/>	SCHEDULED				
<input type="checkbox"/>	SCHEDULED				

In the Callback table, for Callbacks that can be edited, a blue pencil displays in the last column. Clicking this pencil displays the edit options for that Callback.

- You can choose to reschedule the Callback (only for SCHEDULED Callbacks).
- You can choose to cancel the Callback.

## Reschedule a Completed Callback

6 Callback(s) Found ▼

<input type="checkbox"/>	Service ID	State	Desired Callback Time (GMT-5)	Phone Number	_foo	
<input type="checkbox"/>	118-dc527ec0-4df1-4c28-b4d9-898f78092e6c	SCHEDULED	2/21/2018 18:10:00	8887	Not Specified	
<input type="checkbox"/>	118-b8feda9f-c731-412d-8412-7a554f19d809	SCHEDULED	2/23/2018 00:00:00	80808080	Not Specified	
<input type="checkbox"/>	118-82e6f6b9-2aff-4129-b3f4-ddb2900ab67d	SCHEDULED	2/26/2018 00:00:00	9999090	Not Specified	
<input type="checkbox"/>	118-fa5c2f59-2380-47c2-a623-fc870588ad56	COMPLETED (CANCELLED_BY_ADMIN)	3/1/2018 00:00:00	11111	Not Specified	
<input type="checkbox"/>	118-e61e5bfc-5bd5-4ccb-b2f9-09e614c89e2f	COMPLETED (CANCELLED_BY_ADMIN)	3/2/2018 00:00:00	11151515	Not Specified	
<input type="checkbox"/>	118-665bbd02-bd78-4781-a630-3e9e0180a9fd	SCHEDULED	3/2/2018 00:20:00	11151515	placeholder	

Reschedule Completed Callback

Last Callback Information

Last Callback Time

3/2/2018 00:00:00

Callback Number

11151515

Desired Callback Time

Desired Date

3/2/2018

Check Availability

Available Time Slot

3/2/2018 00:00:00

Edit Customer Lookup Keys

\_foo

placeholder

Back

Reschedule

Introduced in 8.5.200

In the Callback table, you can reschedule completed Callbacks that show a blue repeat icon in the last column. Clicking this icon displays the Reschedule options for that Callback.

- The properties and user data of the completed callback are merged with the parameters of the newly scheduled callback.
- You can choose to cancel the operation.



## Get Additional Details about the Queued State

3 Callback(s) Found ▼ **1** *Expand the state*

<input type="checkbox"/>	State	Desired Callback Time (GMT+2)
<input type="checkbox"/>	QUEUED ▼	8/7/2017 17:35:57
<input type="checkbox"/>	QUEUED ▼	8/7/2017 17:39:56
<input type="checkbox"/>	QUEUED ▼	8/7/2017 17:40:09

▲ Back to top

3 Callback(s) Found ▼

<input type="checkbox"/>	State	Desired Callback Time (GMT+2)
<input type="checkbox"/>	QUEUED ▲ ↻	8/7/2017 17:35:57
<input type="checkbox"/>	QUEUED ▼	8/7/2017 17:39:56
<input type="checkbox"/>	QUEUED ▼	8/7/2017 17:40:09

Position in queue: Not in queue

**2** *Additional Queue information is displayed*

▲ Back to top

You can expand the QUEUED state to get ORS-level diagnostics about the queued Callback.

The following information can be displayed:

- **Estimated wait time:** The estimated time that the customer will wait for the callback. For example: 46.5 seconds
- **Position in queue:** The callback's current position in the queue. For example: 3
- **Agents Logged in:** The number of agents that have logged in. For example: 3
- **Callback type:** The type of callback. For example: WAIT\_FOR\_AGENT
- **Callback version:** The version of the ORS Callback strategy. For example: v2.39

- **Channel:** The callback channel. For example: WEB
- **Dial attempt number:** The number of dials that the agent has attempted. For example: 2
- **Dial Result:** The result of the callback dial. For example: PUSH\_DELIVERY\_NOT\_CONFIRMED
- **EWT at first outbound call:** The estimated wait time when the first outbound call happened. For example: 22.5
- **EWT at callback offer:** The estimated wait time when the callback is offered. For example: 0
- **Is snoozed:** Shows whether the callback is snoozed or not. For example: false
- **ORS session ID:** ORS session ID of the callback. For example: 00NEEH6C74C6NAC01G015B5AES000005
- **Position at first outbound call:** The callback's position in the queue when the first outbound call happened. For example: 3
- **Position at callback offer:** The callback's position in the queue when the callback is offered. For example: 3
- **Current priority:** The callback's priority. For example: 0
- **Routing target:** The callback's target or skill expression. For example: GMSCallbackAgents@stat.GA
- **Time of first outbound call:** The time when the first outbound call happened. For example: 1/3/2017 11:26:21
- **Time callback was accepted:** The time when the callback is accepted. For example: 1/3/2017 11:26:02
- **Time of next outbound call:** The time when the next outbound call happened. For example: 1/3/2017 11:27:24

## Bulk Cancel and Export of Callback Records

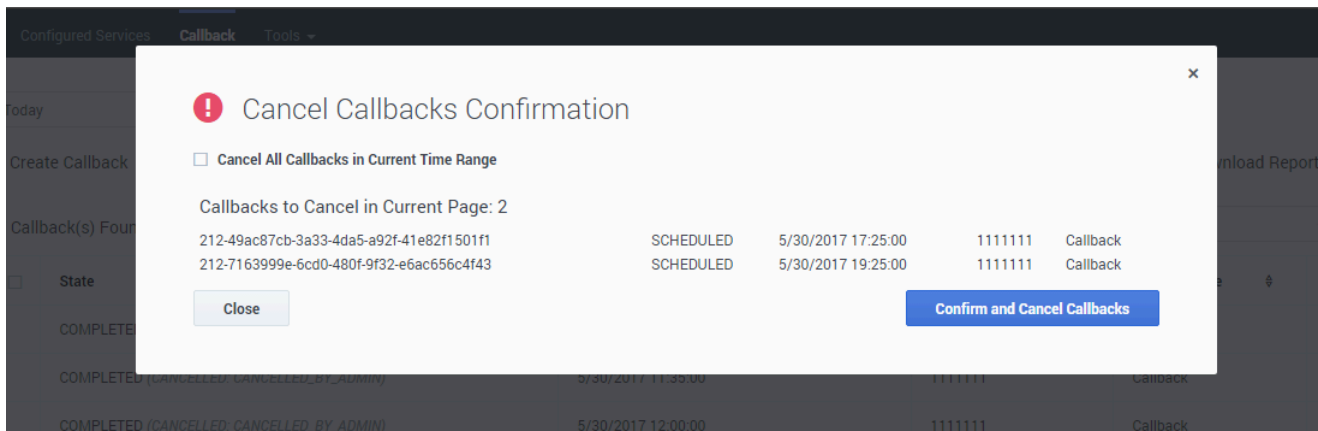
**Added in: 8.5.110**

### Important

First enable this feature in your GMS configuration by creating a features section in your GMS application, then by setting disable-bulk-cancel-and-export-callback to false.

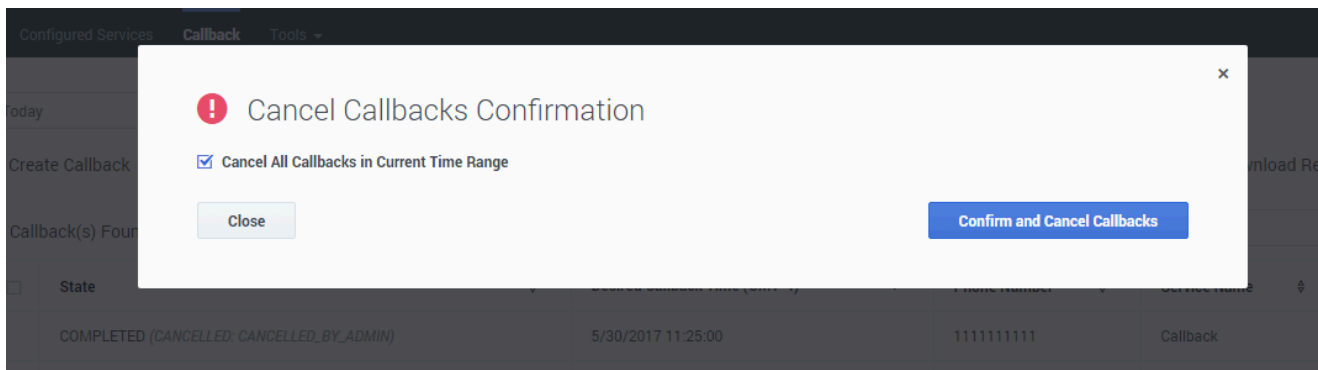
## Bulk Cancel

Make sure to select an appropriate Time Range to filter callbacks, then make a callback selection to activate the **Cancel Callbacks** button. When you click this button, the **Cancel Callbacks Confirmation** dialog opens, displaying the selected callback cancellations.



You can either:

- Continue with the selections you have made and click confirm to cancel them.
- Check **Cancel All Callbacks in Current Time Range**, to override your previous callback selections and delete all callbacks in the current time range. In that case, the list of displayed callbacks disappears from the dialog window. Confirm to cancel the records.



The resulting display shows all the callbacks that you have selected to cancel and that are now in COMPLETED (CANCELLED\_BY\_ADMIN) state.

The screenshot shows the 'Callback' tab in the Mobile Services interface. At the top, there's a navigation bar with 'Mobile Services', 'Monitor', 'Services', 'Office Hours', 'Callback' (selected), and 'Tools'. Below the navigation bar, there's a 'Today' dropdown menu. To the right of the dropdown are buttons for 'Create Callback', 'Advanced Options', 'Refresh', 'Cancel Callbacks', and 'Download Reports' (with a green checkmark). Below these buttons, it says '100 Callback(s) Found'. There's a search bar with 'Search' and a dropdown menu for 'Phone Number'. The main part of the interface is a table with the following columns: 'State', 'Desired Callback Time (GMT-4)', 'Phone Number', and 'Service Name'. The table contains four rows of data, all with the state 'COMPLETED (CANCELLED\_BY\_ADMIN)' and a time of '7/12/2017 12:15:33'. The phone numbers are 2315464, 2315465, 2315467, and 2315468. The service name for all is 'user-terminated-workspace'.

State	Desired Callback Time (GMT-4)	Phone Number	Service Name
COMPLETED (CANCELLED_BY_ADMIN)	7/12/2017 12:15:33	2315464	user-terminated-workspace
COMPLETED (CANCELLED_BY_ADMIN)	7/12/2017 12:15:33	2315465	user-terminated-workspace
COMPLETED (CANCELLED_BY_ADMIN)	7/12/2017 12:15:33	2315467	user-terminated-workspace
COMPLETED (CANCELLED_BY_ADMIN)	7/12/2017 12:15:33	2315468	user-terminated-workspace

## Download the Reports

Then, Download Reports dialog can provide two files:

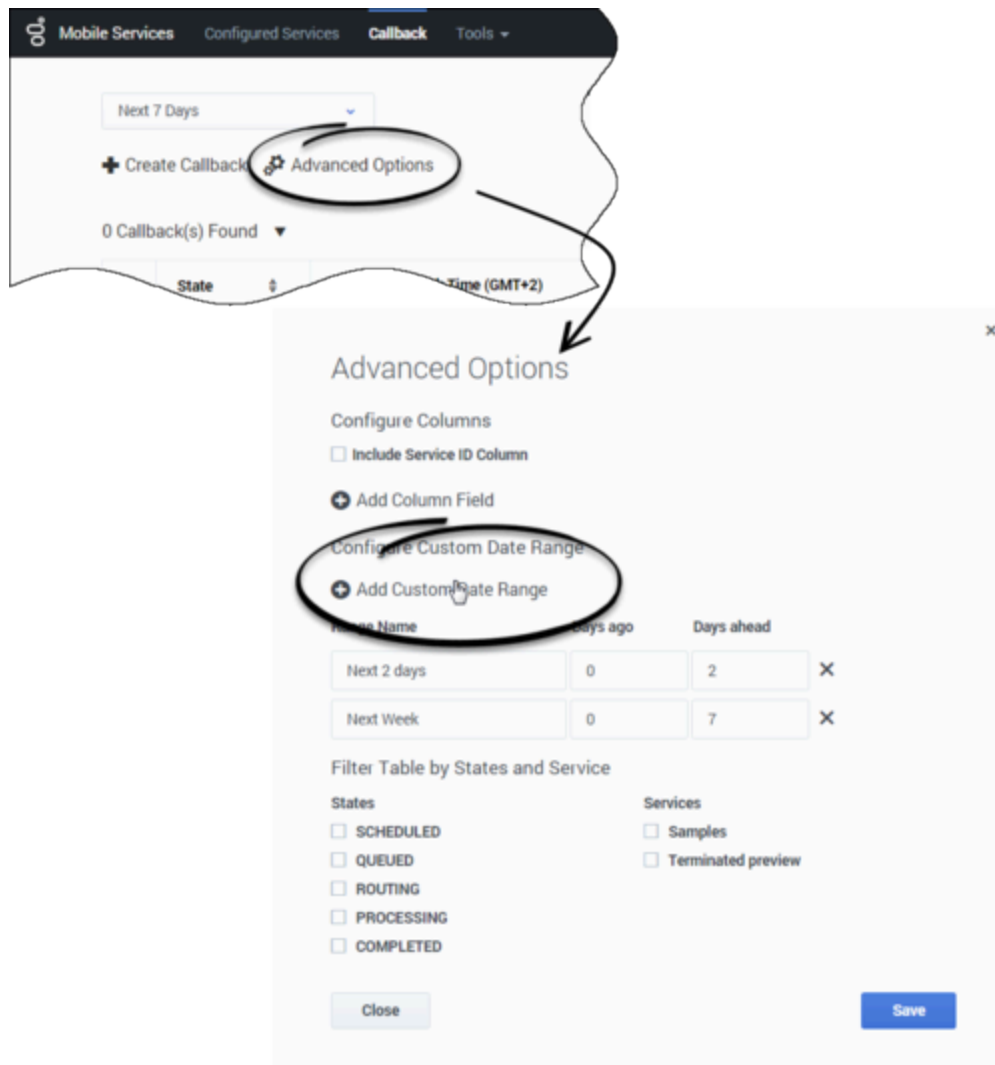
- **Export Cancelled Callbacks** allows you to export a CSV file that includes all of the recently canceled Callbacks. Click the Refresh button beside the label to get an updated report if the one downloaded seems out of date.
- **Cancellation Summary Report** is available only if you recently canceled some callbacks. This report shows the cancellation status of the recently Cancelled Callbacks.

The screenshot shows the 'Download Reports' dialog box. It has a title bar with a close button. Inside, there's a 'Report Type' section. Below it, there are two options: 'Export Cancelled Callbacks' with a refresh icon and a blue 'Export' button, and 'Cancellation Summary Report' with a green checkmark and a blue 'Download' button. The background shows the same 'Callback' interface as the previous screenshot, but it's dimmed.

## Configure Custom Date Range in Advanced Options

As detailed previously, the **Custom Date Range** selection in the drop-down list enables you to specify a start time and end time for the displayed callbacks. If you are often using the same date filters, consider saving these filters in advanced options.

1. In the **Callback** Panel, click **Advanced Options**, then **Add Custom Date Range**.
2. Add your date filters with appropriate names.
3. Once saved, they will appear at the bottom of the drop-down list.



## Configure Aliases to Display Custom Fields

### Introduced in: 8.5.111

You can configure aliases for additional Column Names that display the custom fields passed in your Callback queries parameters. To do so:

1. Make sure that `disable-additional-columns-from-callbacks` is false in your GMS configuration.
2. Allow the list of the parameters that you wish to see displayed by using the `filter-keys` and `returned-keys` options.
3. Create a list of aliases for the parameters that you wish to see displayed by using the `callback_column_alias` option.

For example, if you pass the `_LOB` parameter in your callback queries, enable its alias as follow in the callback section:

```
filter-keys=_callback_state,_callback_reason,_request_queue_time_stat,
_request_ewt_service,_vq,_LOB
```

```
returned-keys=_desired_time,_callback_state,_callback_state,_callback_reason,
_ors_session_id,_LOB
```

```
callback_column_alias = {"_LOB": "Line Of Business"}
```

Custom Date Range

7/25/2017

7/26/2017

Submit

Create Callback

Advanced Options

Refresh

Cancel Callbacks

Download Reports

10 Callback(s) Found

Search

Phone Number

<input type="checkbox"/>	State	Desired Callback Time (GMT-4)	Phone Number	Service Name	Line Of Business	
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10015	user-terminated-workspace	Secondary	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10016	user-terminated-workspace	Special Projects	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10013	user-terminated-workspace	Primary	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10017	user-terminated-workspace	Not Specified	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10011	user-terminated-workspace	Primary	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10020	user-terminated-workspace	Not Specified	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10014	user-terminated-workspace	Not Specified	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10019	user-terminated-workspace	Not Specified	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10012	user-terminated-workspace	Not Specified	<a href="#">✎</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10018	user-terminated-workspace	Not Specified	<a href="#">✎</a>

[▲ Back to top](#)

Then, the Callback UI will display the `_LOB` values in the **Line Of Business** column.

If you wish to display multiple custom values, the UI will group them in the **Custom Fields** column. For example, if you wish to display the values for the `_LOB` and `_service_type` query parameters, configure the alias as follow:

```
filter-keys=_callback_state,_callback_reason,_request_queue_time_stat,
_request_ewt_service,_vq,_LOB,_service_type
```

```
returned-keys=_desired_time,_callback_state,_callback_state,_callback_reason,
_ors_session_id,_LOB,_service_type
```

```
callback_column_alias = {"_LOB": "Line Of Business", "_service_type": "Service Type"}
```

Custom Date Range

7/25/2017

7/26/2017

Submit

Create Callback

Advanced Options

Refresh

Cancel Callbacks

Download Reports

10 Callback(s) Found

Search




Phone Number


<input type="checkbox"/>	State	Desired Callback Time (GMT-4)	Phone Number	Service Name	Custom Fields	
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10015	user-terminated-workspace	Service Type : Service 1 Line Of Business : Secondary	<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10016	user-terminated-workspace	Service Type : Service2 Line Of Business : Special Projects	<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10013	user-terminated-workspace	Line Of Business : Primary	<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10017	user-terminated-workspace		<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10011	user-terminated-workspace	Line Of Business : Primary	<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10020	user-terminated-workspace		<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10014	user-terminated-workspace	Service Type : Service3	<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10019	user-terminated-workspace		<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10012	user-terminated-workspace		<a href="#">/</a>
<input type="checkbox"/>	SCHEDULED	7/25/2017 14:00:00	10018	user-terminated-workspace		<a href="#">/</a>



[▲ Back to top](#)

Then, the Callback UI will display the `_LOB` and `_service_type` values in the **Custom Field** column. The aliases will identify each custom field.

Submit

 Refresh  Cancel Callbacks  Download Reports

Phone Number 

Service Name 	Custom Fields
user-terminated-workspace	Service Type : Line Of Business
user-terminated-workspace	Service Type : Line Of Business
user-terminated-workspace	Line Of Business : Primary 

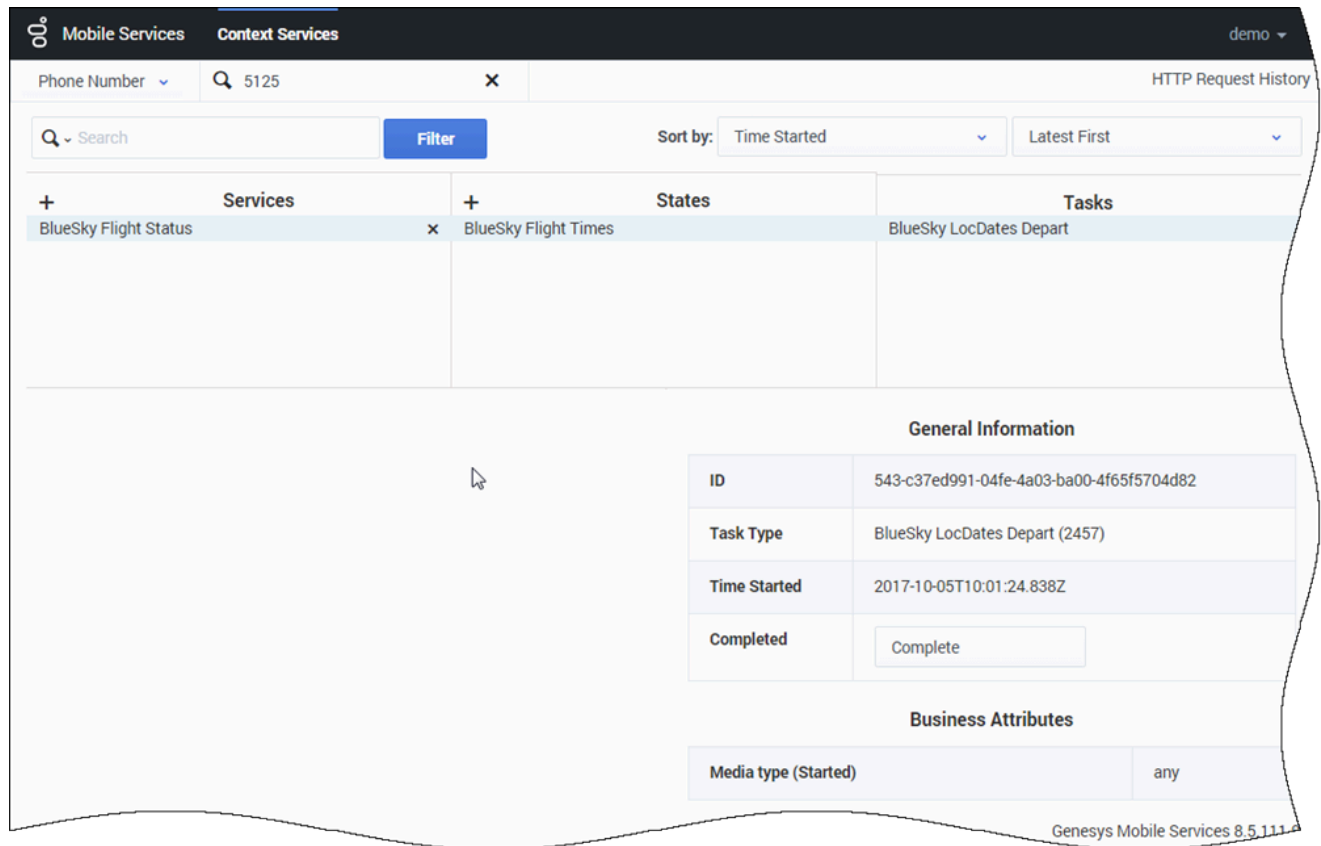
Note that you can also use the aliases to search and filter the list of displayed Callbacks.

### Tip

Keys for Custom Fields do not need to start with underscores: you can use `_LOB` or `LOB` for the name of your Custom Field.



# Context Services Interface



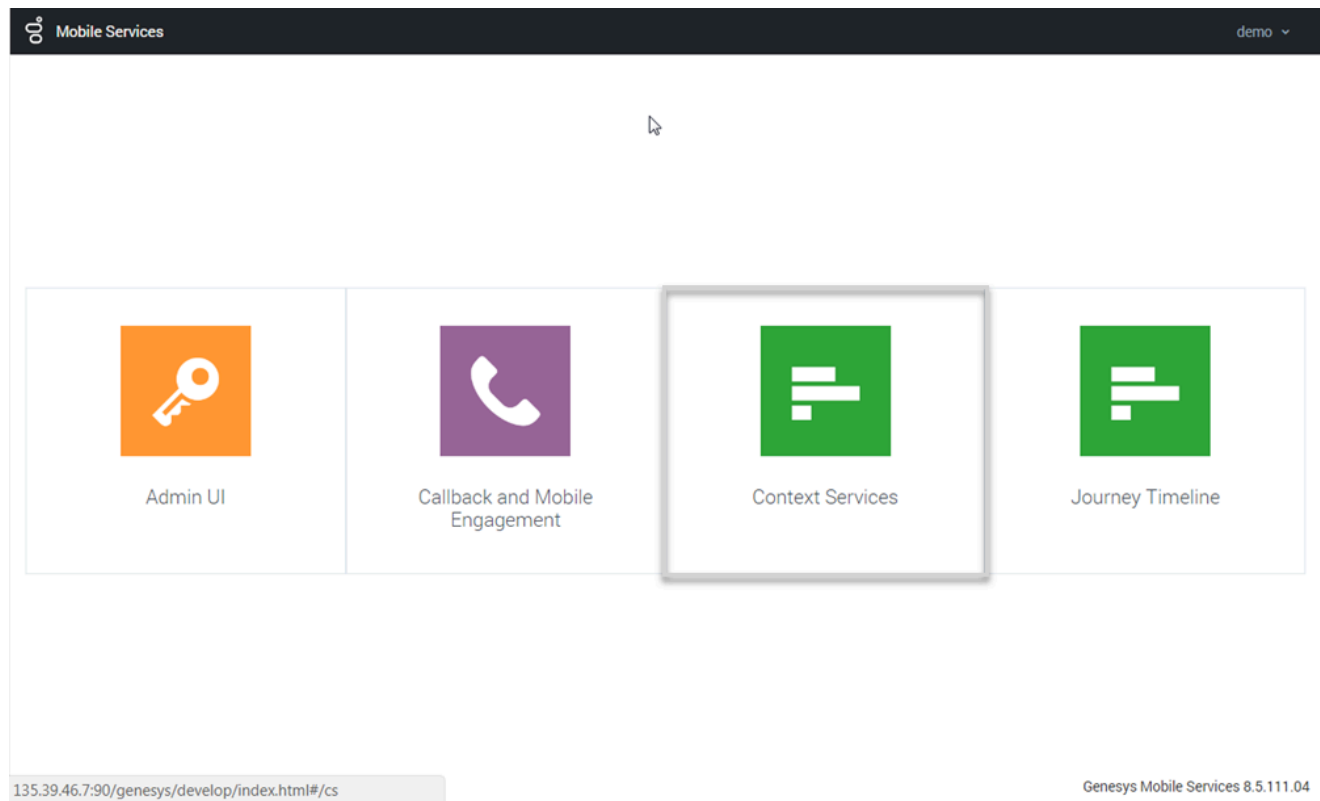
The Context Services Interface is a web-based interface that enables edition of Context Services data. This interface is intended to be used by developers and supervisors looking for detailed information about services because it is built to search for profiles, services, states, and tasks based on ID information or UCS information. It does not include all the search abilities that are available in typical agent interfaces.

This interface also enables you to modify or delete a given service.

## Important

1. The Context Services Interface is available only for single-tenant installations.
2. If you change business attribute values in your configuration, users will need to refresh the Context Services Interface to see the changes taken into account.

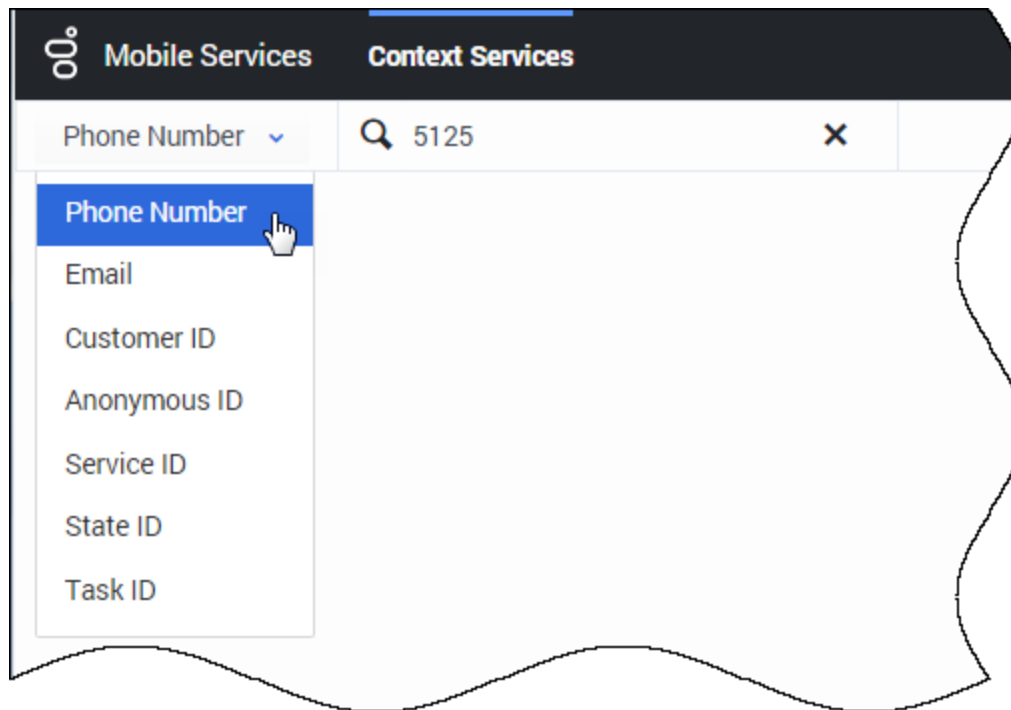
## Login Panel



The Context Services Interface is available as part of the GMS Service Management User interface (detailed in the [Service Management Help](#)).

- To access this interface, you must login as a user who owns the [Administrator or Supervisor role](#).
- Then, you can select the Context Services icon.

## Search for Services



First, you start by searching for services or customers in the Context Services panel. You can search for UCS keys or Service, State, and Task IDs. These fields must be identical to a key in the UCS database to work correctly. There is no automatic completion available.

Select a key in the Search drop-down menu, then enter a value in the Search text box. The value must match a UCS entry to provide a result.

The screenshot shows the 'Context Services' tab in the 'Mobile Services' interface. A search bar at the top contains the phone number '5125'. Below the search bar, a modal titled 'Which Of these Customers are you referring to?' displays a table of customer records. A 'Cancel' button is located at the bottom left of the modal.

Last Name	First Name	Phone	Email	Country	State	City	Language
Jones	Jane	5125, 6515559881, 6505559881	jones@demosrv.genesyslab.com	USA	IL	Smallville	Spanish
Jones	John	5125		USA	IL	Smallville	English
Jones	Billy	5125		USA	IL	Smallville	English
Thompson		5125					

The interface displays a list of results. Select an item in the list.

You can then use the interface to modify the service.

## Manage your Services

The screenshot shows the 'Manage your Services' interface. At the top, there is a search bar and a 'Sort by' dropdown menu. Below this, there are three columns: 'Services', 'States', and 'Tasks'. Each column has a '+' icon to add new items and an 'x' icon to delete existing items. A red box highlights the search bar and the 'Sort by' dropdown menu, with the annotation 'Filter the results'. A red box highlights the '+' icons in the 'Services', 'States', and 'Tasks' columns, with the annotation 'Create new services, states or tasks'. A red box highlights the 'Delete' button in the 'Services' column, with the annotation 'Delete'. Below the table, there is a 'General Information' section with fields for ID, State Type, Time Started, and Completed. A red box highlights this section, with the annotation 'General Information updates with the current selection'. Below the 'General Information' section, there is a 'Business Attributes' section with fields for Media type (Started) and voice (100).

Filter the results

Create new services, states or tasks

Delete

'General Information' updates with the current selection

General Information	
ID	451-b03b7080-15c8-4637-bef7-2f78c5570fd1
State Type	BlueSky Upsell (2455)
Time Started	2016-01-08T13:28:28.276Z
Completed	<input type="button" value="Complete"/>

Business Attributes	
Media type (Started)	voice (100)

The interface lets you manage the list of objects that you selected. If you selected a customer instance, you get the complete list of objects associated with the Customer ID.

- You can use the sorting tools to change the list displayed.
- You can select an item in the list, and get more details about the object.
- You can delete an object by clicking the 'x' icons.
- You can use the Action menu to perform more actions, such as creating new services, states, tasks.
- You can add services, states, and tasks by clicking the '+' icons.

**HTTP Request History**

Action	Path	Data	Method	Status	Time
Get Business Attributes	../1/cs/metadata/business-attributes		GET	200 (OK)	Mon .
Query PhoneNumber	../1/cs/metadata/business-attributes		GET	200 (OK)	Mon .
Query Customer ID	../1/cs/customers/0001Ba5SW8PJ0027/services	{ "acti	GET	200 (OK)	Mon .
Complete Task: 451-e2ec3853-6ea3-4b	../1/cs/services/451-3356a9db-3b75-467d-b23f-0c65ada34c	{ "tim	POST	204 (No Content)	Mon .
Query Customer ID	../1/cs/customers/0001Ba5SW8PJ0027/services	{ "acti	GET	200 (OK)	Mon .
Complete State: 451-9e263313-0175-4	../1/cs/services/451-3356a9db-3b75-467d-b23f-0c65ada34c	{ "tim	POST	204 (No Content)	Mon .

Genesys Mobile Services 8.5.103.08

- You can get a history view of your queries by clicking **HTTP Request History**.

## Create a Service, State, or Task

**Services**

- BlueSky Flight Status
- BlueSky Book Flight

**States**

- BlueSky Upsell
- BlueSky Confirmation

**Tasks**

- BlueSky Confirm Booking
- BlueSky Confirm Booking

**State Selection**

Select State Type

- BlueSky Pricing
- BlueSky Location Dates
- BlueSky Flight Times
- BlueSky Upsell
- BlueSky Welcome
- BlueSky Premier To Agent
- BlueSky Resume Service
- BlueSky Preferred Airport
- BlueSky Main Menu
- BlueSky Confirmation
- BlueSky Transfer To Agent
- CMS Test State
- OESSample Sales State
- OESSample Svc State
- OESSample Abandon State

*Select a type*

**General Information**

ID	451-a4cdabb-5caa-4f7f-8600-ca4529bff2bf
State Type	BlueSky Confirmation (2469)
Time Started	2016-01-08T15:25:47.081Z
Completed	<input type="button" value="Complete"/>

**Business Attributes**

Media type (Started)	cobrowsing (107)
----------------------	------------------

**State Selection**

Select State Type

**New State - BlueSkyPreferredAirport for 451-a4cdabb-5caa-4f7f-8600-ca4529bff2bf** } *State ID*

**Properties**

session\_id

interaction\_id

application\_type

application\_id

resource\_type

resource\_id

media\_type

est\_duration

timestamp ☒ Use Current Timestamp

**Additional properties**

*Finish by starting the service*

You can add services, states, and tasks by clicking the '+' icons. To create states or tasks, first, select a service or a state, then choose a type. When you create a new resource, you can fill it and even add some extension data.

## Complete a Service, State, or Task

**Properties**

session\_id

interaction\_id

application\_type

application\_id

resource\_type

resource\_id

media\_type

est\_duration

timestamp   
☐ Use Current Timestamp

disposition

disposition\_desc

**Additional properties** +

**General Information**

ID	451-a4fcdabb-5caa-4f7f-8600-ca4529bff2bf
State Type	BlueSky Confirmation (2469)
Time Started	2016-01-08T15:25:47.081Z
Completed	<input type="button" value="Complete"/>

**Business Attributes**

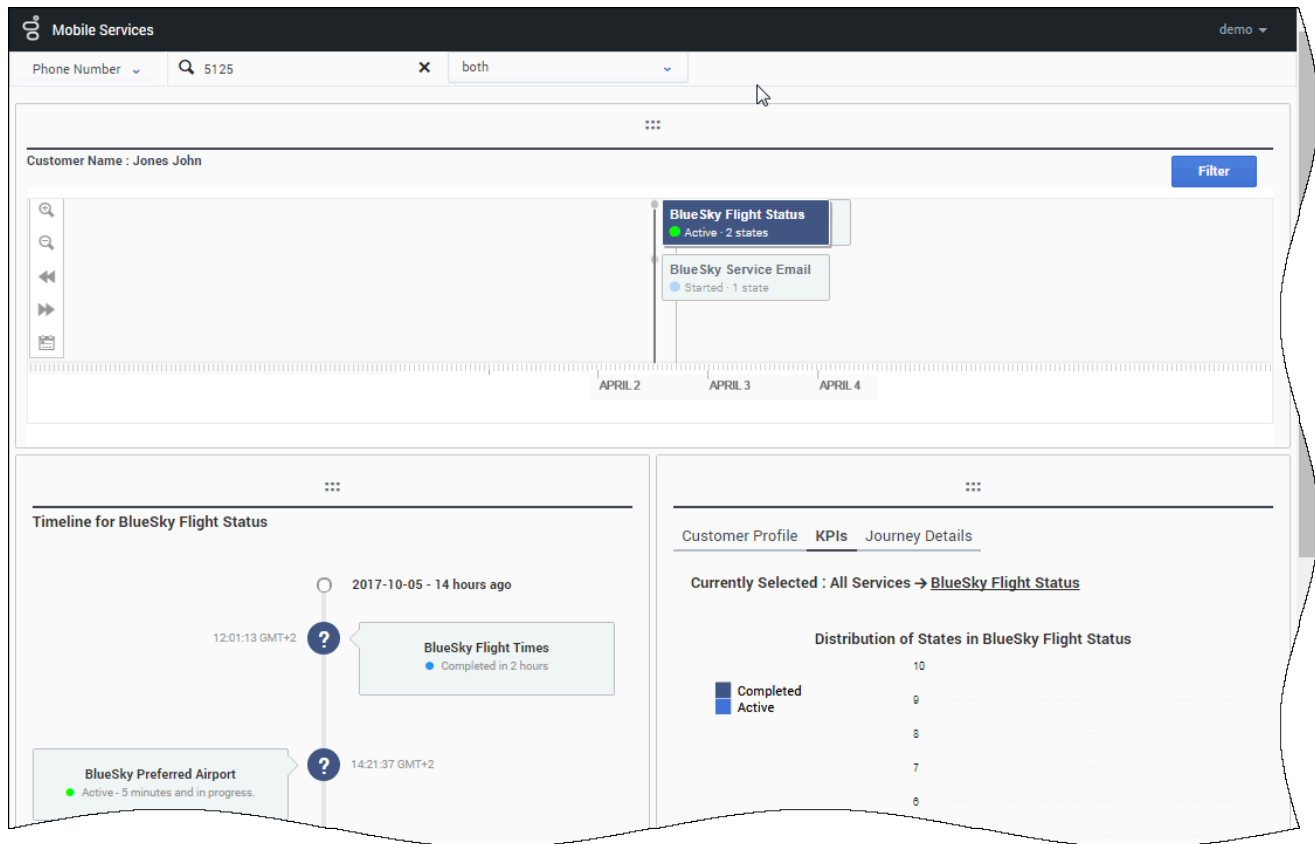
Media type (Started)	cobrowsing (107)
----------------------	------------------

*Displays the complete panel*

*Terminate your state*

If you can complete a Service, State, or Task, the interface displays a Complete button, that opens the Completion panel.

# Journey Timeline Interface



The Journey Timeline is a web-based interface that provides a visualization of Context Services data. This interface is intended to be used by developers and supervisors looking for detailed information about a specific customer because it is built to search for profiles, services, states, and tasks based on ID information or UCS information. It does not include all the search abilities that are available in typical agent interfaces.

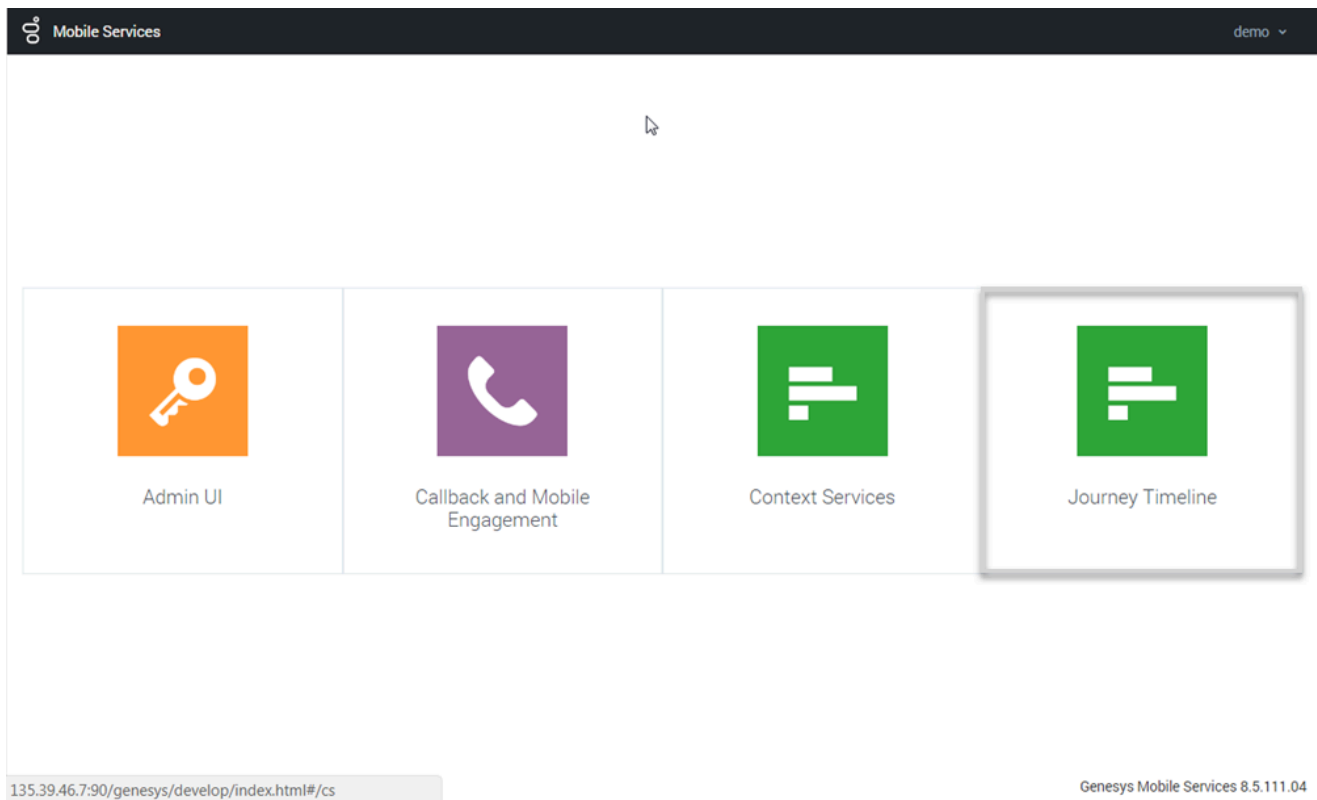
Starting in 8.5.103, you can **customize** this interface.

## Important

The Journey Timeline is available only for single-tenant installations.

## Login





The Customer Journey Timeline is available as part of the GMS Service Management User interface (you can read help information [here](#)). To access this interface, you must login as a user who owns the **Administrator or Supervisor** privilege.

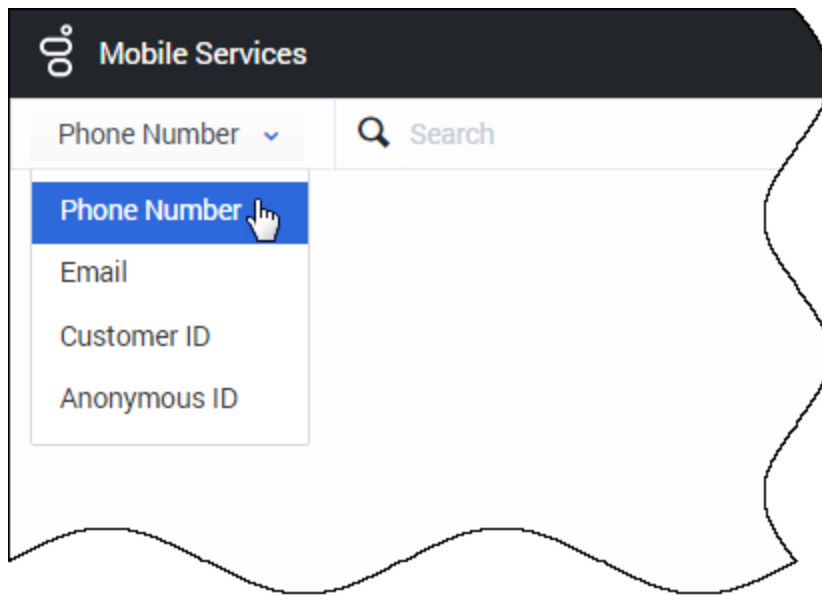
Then, you can select the Journey Timeline item and:

1. Search and select a customer.
2. Visualize the customer's Journey Timeline.

### Important

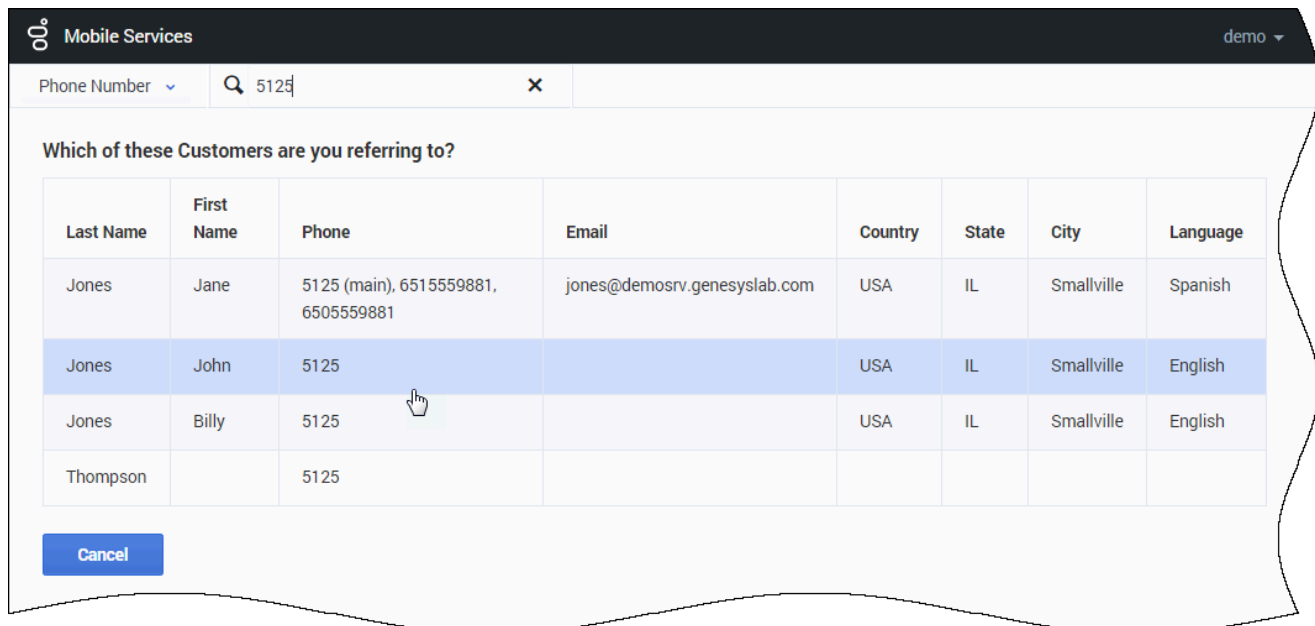
If you do not see the Journey Timeline item, it means that you did not **enable** Context Services properly.

## Search a Customer with Customer Journey



You can query a user based on the email address, phone number, and name fields. These fields must match a value in the UCS database to work correctly. There is no automatic completion available.

Select a key in the search drop-down menu, then enter a value in the Search textbox. The value must match a UCS entry to get a result.

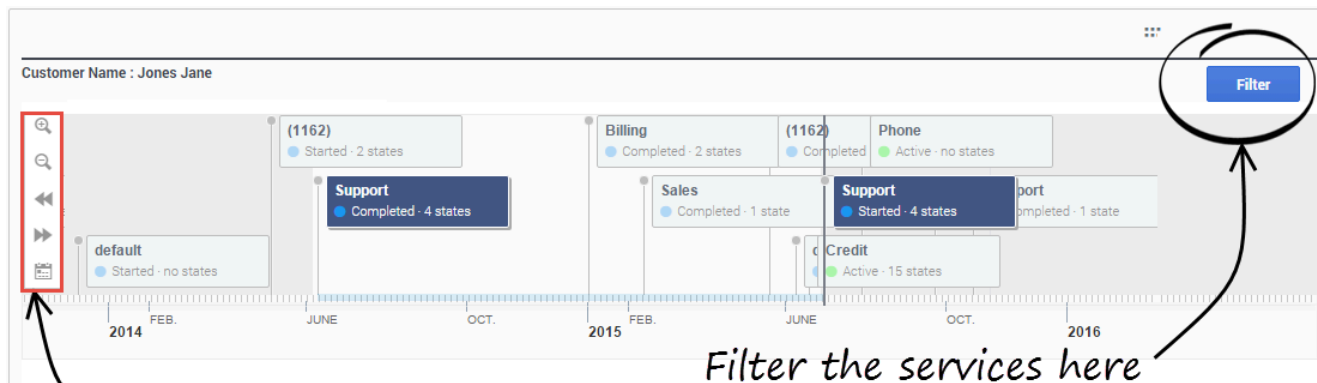


The interface displays a list of results. Select a customer in the list to display the customer's timeline.

## Important

You can customize the searched items through JSON configuration. See [Customizing Profiles](#).

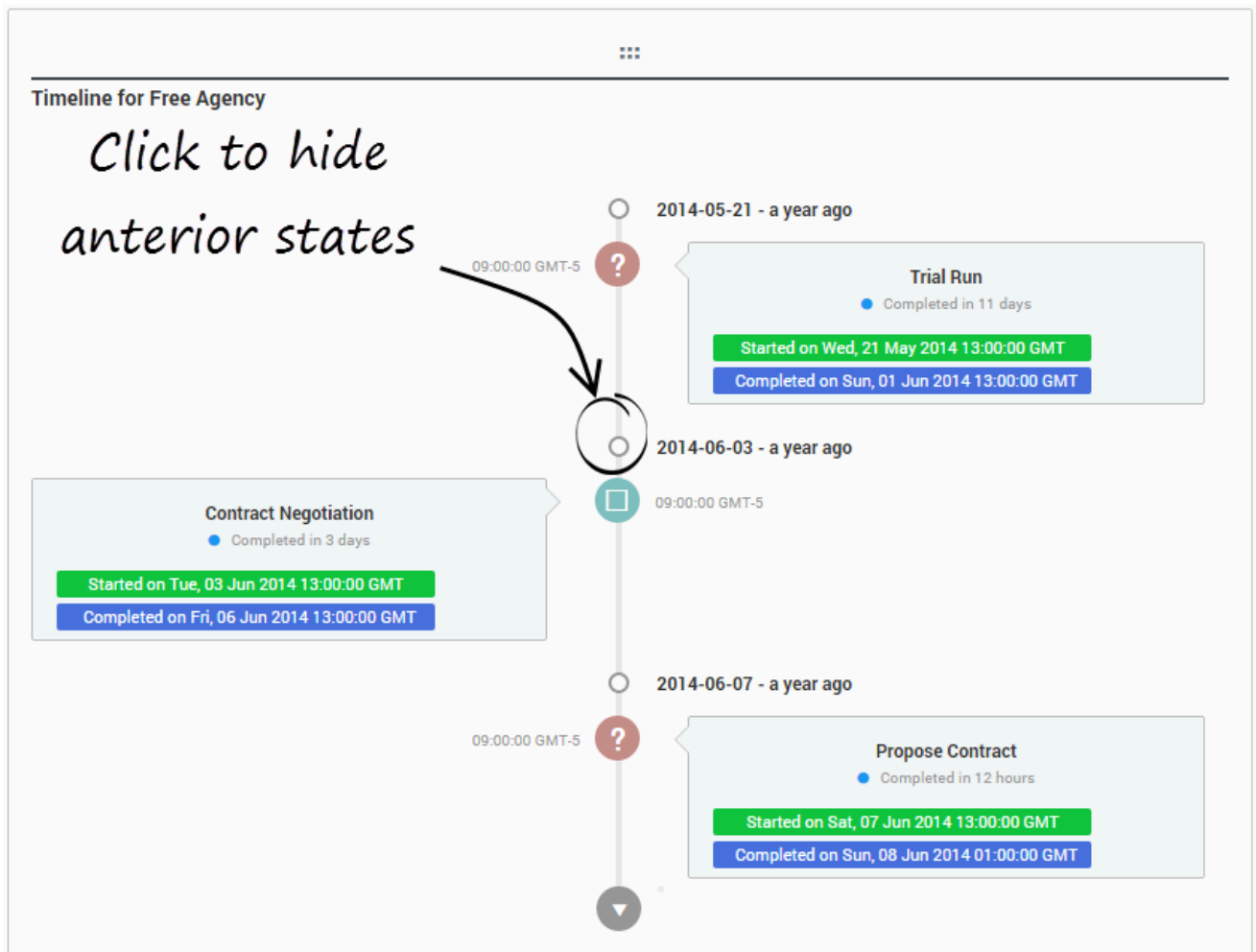
## Manage the Timeline



The timeline shows all the customer's services and their current status (active, inactive). If you select a service, Customer Journey displays the list of states for the given selection.

- You can manage the timeline (expand or contract) by using the icons in the left menu sidebar.
- You can zoom or navigate to services by using the icons in the left menu sidebar, or you can simply left-click in the timeline to move it.
- You can also filter the displayed services.

## Display States and Tasks



If you select a service in the timeline, for instance, Agency, its nested states and tasks are displayed in the Vertical Timeline. You can then select one of them to get KPIs, customer or journey details.

### Important

You can customize the display through templates. See the [guidelines](#) in the Developer's Guide.

## Display Details related to Service and State Selection

⋮

**Customer Profile** | KPIs | Journey Details

**Identification**

Customer Name	Jones Jane
Title	Sr. Product Manager
Company	Genesys

**Segmentation**

City	Smallville
Language	English
Sentiment	Positive

**Contact Information**

Phones	5125 6504661100
Emails	jones@demostrv.genesyslab.com jane@gmail.ca



The selection in the horizontal and vertical timelines automatically updates the information area.

### Important

You can customize the display through templates. See the [guidelines](#) in the Developer's Guide.

## Integrate with UCS Profiles

If you **enabled** Customer profiles in UCS, you can integrate Journey Timeline with UCS profiles as follows:

- Install and set up NGINX on your local machine
- Ensure that the NGINX configuration includes the following information:

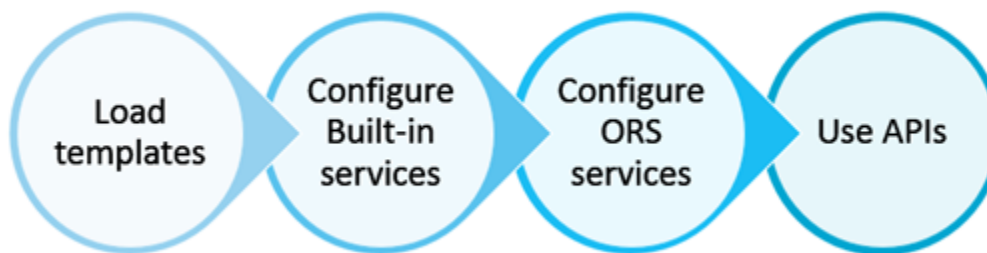
```
location /genesys/1/cs/profiles { proxy_pass http://<location of UCS>/profiles; }  
location /genesys { proxy_pass http://localhost:8080/genesys; }
```

You can read more details [here](#).

# More about Built-in and ORS services

## Before you start

Genesys Mobile Engagement provides a set of templates that you can use to create your customized workflow. Templates are already loaded at the product installation and show up in the **Templates** panel.



Templates include two types of services:

- Built-in services of type `builtin` that are basic services executed in the Genesys Mobile Services server. They provide fixed functionality that you can tune only through configuration options in the **Configured services** section.
- Orchestration Server-based (ORS) services of type `ors` that implement ORS scenarios. The implemented scenarios depend on the ORS service configuration.

These templates enable you to create services that provide the **GMS APIs**.

Note that `ors` and `builtin` services may implement some **cross-dependencies**. You may also be interested in reading the **following page**, that lists examples of flow diagrams. These diagrams show how you can use request-access and request-interaction services to implement Access Number Allocation.

### Important

The Callback services are executed in the Orchestration Server and managed in the Genesys Mobile Services server. See the **Scenarios** section of the *Callback User's Guide* for more information.

## Relationship between Configured Services and API queries

When you create a new {service-execution-name} service in the **Configured Services** section of the Service Management UI, this service is also created in the service.{service-execution-name} section of your GMS configuration.

The screenshot shows the 'Configured Services' section of the Service Management UI. The 'Match interaction' service is selected. The table below shows request parameters and their values. Annotations highlight dependencies and built-in services.

Name	Value	Description
<input type="checkbox"/> _access_code		Request Parameter - Access code returned as a result of request-access
<input type="checkbox"/> _access_number		Request Parameter - Number to which the user called
<input type="checkbox"/> _phone_number		Request Parameter - Phone number of the mobile phone where the service request originated
<input type="checkbox"/> _service	match-interaction	
<input type="checkbox"/> _type	builtin	

Annotations in the image:

- An arrow points from the text '{service-execution-name}' to the 'Match interaction' service name.
- A circle around '\_access\_code' is labeled 'Dependency'.
- A circle around 'builtin' is labeled 'builtin or ors'.

The URLs used by the Service API are dependent on the execution name of the service that you have just created. Services are available at the following URL:

`http://<host>:<port>/genesys/1/service/{service-execution-name}`

For instance, if you create a service named match-interaction, then {service-execution-name} is match-interaction and the service is available at:

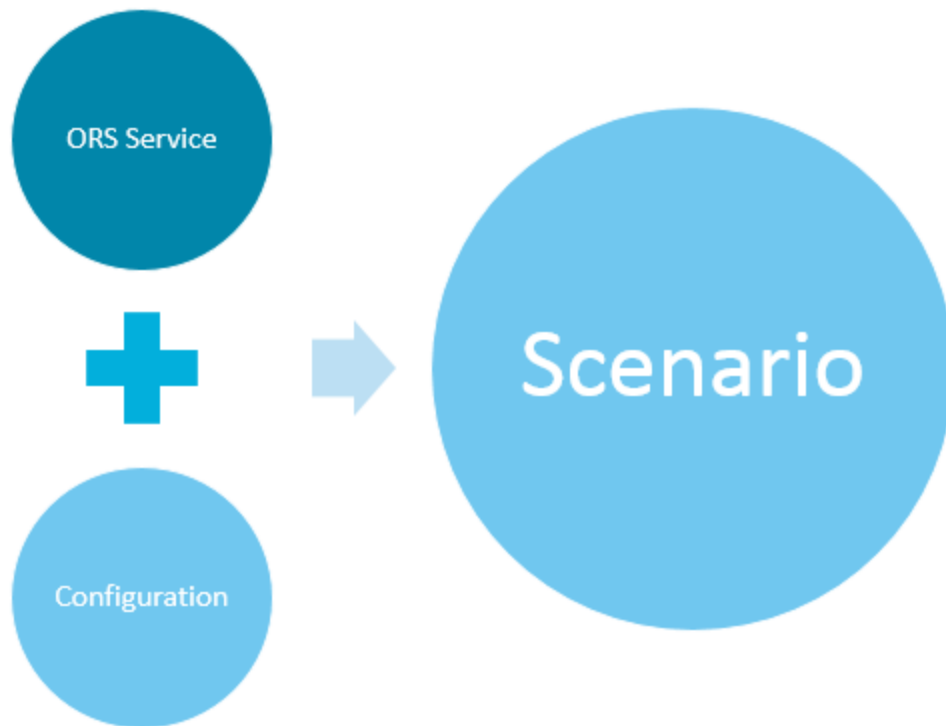
`http://<host>:<port>/genesys/1/service/match-interaction`

### Important

To use a service, you should start by allocating resources to this service with a **create service** request. Note that for some builtin services, this may not be necessary.



## Customized ORS Scenarios



To implement a customized ORS scenario, you will need to **create** an ORS service and select the **Callback** template.

Choose your scenario in the list that the template displays. Then, refer to the pages of this chapter for configuration details and sequence diagrams.

**[+] See the list.**

Add New Service

Service Template

callback

Service Name

New Service Name

Common Default Configuration

Choose among the following...

User Originated Immediate

User Originated Delayed

User Terminated Immediate

User Terminated Delayed

User Terminated Preview

Chat Immediate

Chat Delayed

Samples

Cancel

Add

Advanced Customization


If you are an advanced user of **Composer**, you can customize the SCXML and VXML of the **Classic Callback sample** that includes a Composer project.

Services Cross-Dependencies











According to the services that you plan to use, you may need to create and configure the following services in the **Configured Services** panel, even for services of type builtin.

- **request-access** — Use the request-access template to create a **request-access**.
- **match-interaction** — Use the match-interaction template to create a **match-interaction** service.

The following table presents the builtin and ORS services that require one of these services (or both).

Builtin or Scenario name	request-access	match-interaction
match-interaction		

---

Builtin or Scenario name	request-access	match-interaction
request-interaction		
User Terminated Delayed Voice (notification)		
User Terminated Immediate Voice ORS Service		
User Terminated Scheduled Voice		
User Terminated Delayed Voice Agent Preview		

# Request-interaction

Type: **builtin**

The Request-interaction scenario illustrates a Simple Voice Inbound-Immediate Call.

## Overview

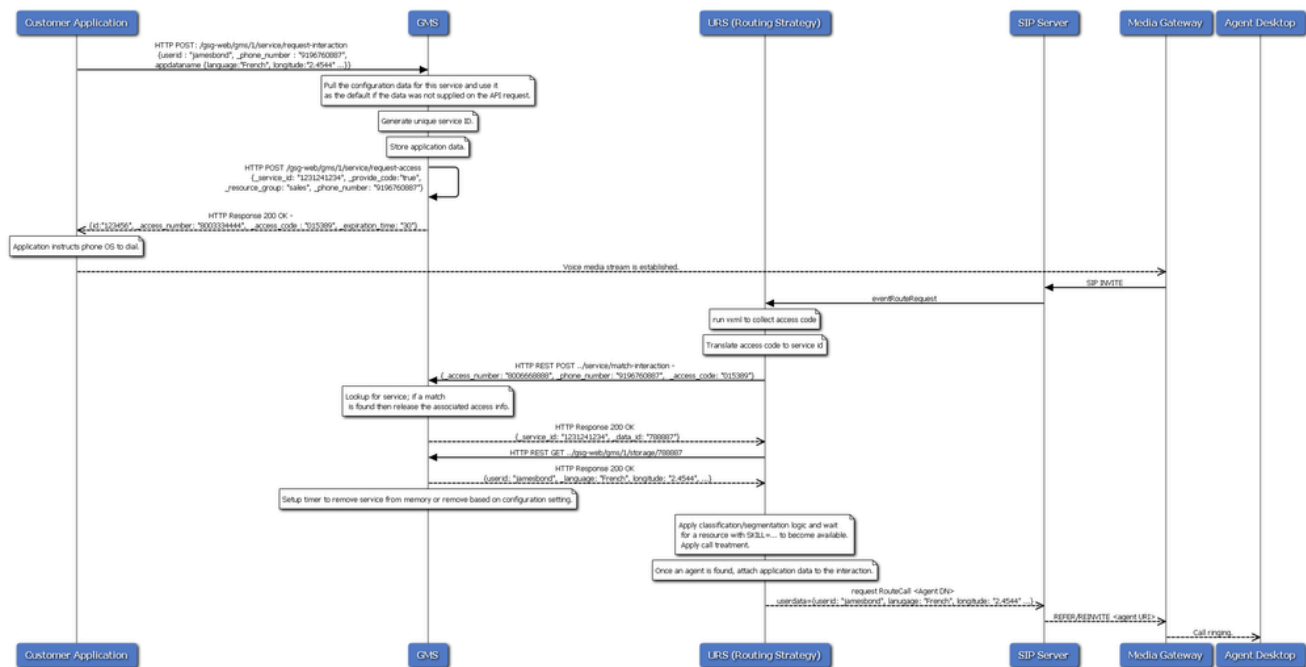
This is a basic service that helps an application/end user contact the contact center. It has the following characteristics:

- It supports only customer initiated voice contacts.
- It stores and maintains application data with the service.
- It returns access information in the response of the Create API.
- It supports very basic access number allocation (random and locking)
- It supports reserving the access information when allocated for the application for a configurable period of time.
- It support the following types of access information:
  - Access Number (DNIS) which is to be called by the application
  - Access code which is to be supplied by the customer/application when the contact is being established. This provides an extra level of authentication.

## request-interaction - No Delay



## request-interaction - No Delay, access code



## Request, Response, and Events Reference

## Create Request Data

These are the service specific parameters that will be supplied on the Create service API.

Parameters	Mandatory	Description
_phone_number	No	The phone number of the device that the application is running on. This data will be used to match the specified data when the device/application calls the supplied access number.
_provide_code	No	This indicates if the service should return an access code which will add more security and reliability when trying to correlate the incoming call with the service. The value is a boolean. If not present, then GMS will use the value that was configured for the service. If it is not configured and not supplied on the Create API request then

Parameters	Mandatory	Description
		the value will be false.
_resource_group	No	This identifies the type of resource group that is need to help this end user. This maps to a configured set of access numbers. If not present, then GMS will use the group that was configured for the service. If it is not configured and not supplied on the Create API request then the request will be rejected.
{appdataname}	No	This is data that is supplied by the application and used to help the contact center resources better service the end user. The application can supply as many application data parameters as they want. These parameters may be string values or files. They should add to the multi-part structure in the body.

## Create Response Data

These are the service specific parameters that will be supplied on the Create service API response.

Parameters	Mandatory	Description
_access_number	Yes	This is the access number which was allocated for this application. The application should use this number to contact the contact center.
_access_code	No	This is the access code that should be supplied by the application or end user when the call is established to further authentication the application/ user. This will be present when the Create API specifies that it needs a access code (_provide_code = true).
_expiration_time	No	This is the amount time (in seconds) that this access information will be locked/ reserved for the service.

## Specific Requests

There are no specific requests for this service.

## Events

There are no events associated with this service.

## Customization

You can customize your own services based on the request-interaction service. The way you do this is by defining your custom service in the [Mobile Engagement UI](#).

1. [Create](#) a request-interaction service.
2. You then specify the configuration options and appropriate values for your service. These options are detailed in the [request-interaction Section](#) of the [Service Options](#) reference.

Most of these options are parameters that will be passed to a request-interaction service but have been given pre-defined values via configuration. For details on the configuration options see the section below. This enables you to simplify the API signature for your service. Once the new service is defined, the application can use it. The following is an example:

## Configuration Options

You can configure the following options in the [Mobile Engagement UI](#) if you create a customized service based on the request-interaction template:

Option	Description
<code>_service = <b>request-interaction</b>.</code>	<ul style="list-style-type: none"><li>• For Genesys Mobile Services-based services: The name of the matching service.</li><li>• For Orchestration Server-based services: The URL of the service's SCXML application.</li><li>• Other SCXML Callback services: The URL of the service's SCXML callback application. In that case, you must set <code>_service_type</code> to <code>callback</code>.</li></ul>
<code>_type = <b>builtin</b></code>	<ul style="list-style-type: none"><li>• For Genesys Mobile Services-based services: <code>builtin</code></li><li>• For Orchestration Server-based services: <code>ors</code></li></ul>
<code>_ttl</code>	Specifies the default time to live for all stored data in seconds.
<code>_resource_group</code>	Resource group from which the access number



Option	Description
	must be allocated.
_provide_code	If set to true, the service returns the access code along with the access number.

### Important

If you pass one of the request-interaction parameters in a Create API query for a customized version of the service, the configuration option value will supercede the passed value (that is, the passed value will be ignored).

## Example

You can create an iPhoneService section under the services section and set the following configuration options:

Option	Value
_type	built-in
_service	request-interaction
_ttl	7200
_provide_code	false
_resource_group	iPhoneService

The following is the example Create API invocation for the iPhoneService service:

```
Request URL:http://localhost:8080/gms-web/gms/1/service/iPhoneService
Request Method:POST
Accept:*/*
Accept-Charset:ISO-8859-1,utf-8;q=0.7,*;q=0.3
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:xxxx
Content-Type:multipart/form-data; boundary=----Boundary
Request Payload
-----Boundary
Content-Disposition: form-data; name="_phone_number"
6504669999
-----WebKitFormBoundaryy16qocbN6tmPORZL
Content-Disposition: form-data; name="current_location_latitude"
48.8583
-----WebKitFormBoundaryy16qocbN6tmPORZL
Content-Disposition: form-data; name="current_location_longitude"
```

---

2.2944

-----WebKitFormBoundaryy16qocbN6tmP0RZL

# Get and Basic Get

Type: **builtin**

This is a *get* service that returns node information. You can use the *get* service (with the associated Service Template) to isolate a GMS node based on GMS status. This service has the following characteristics:

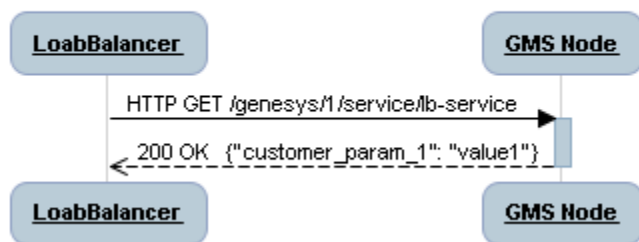
- It returns an HTTP response code of either 200 OK or 503 Service Unavailable, by default.
- For 200 OK responses, it also returns all options specified in the configuration.

You can create a service of this type in your environment, and configure your load balancer to use the service as the health check. To take a node out of service (for load balancing purposes and based on your load balancer settings), simply configure the service to return the required HTTP code (503, 404, and so on).

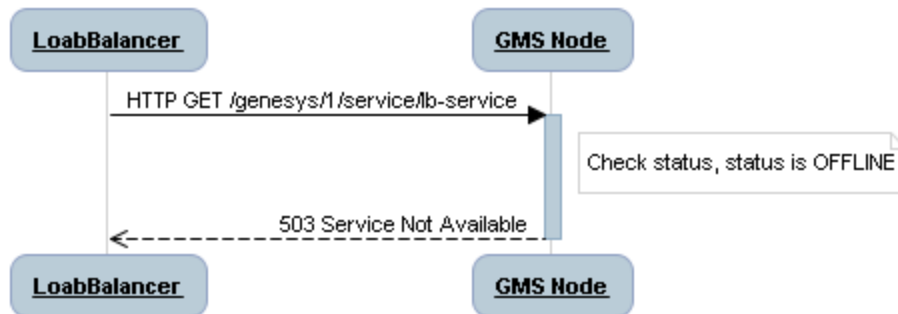
## Sequence Diagrams

### [+] Show diagrams

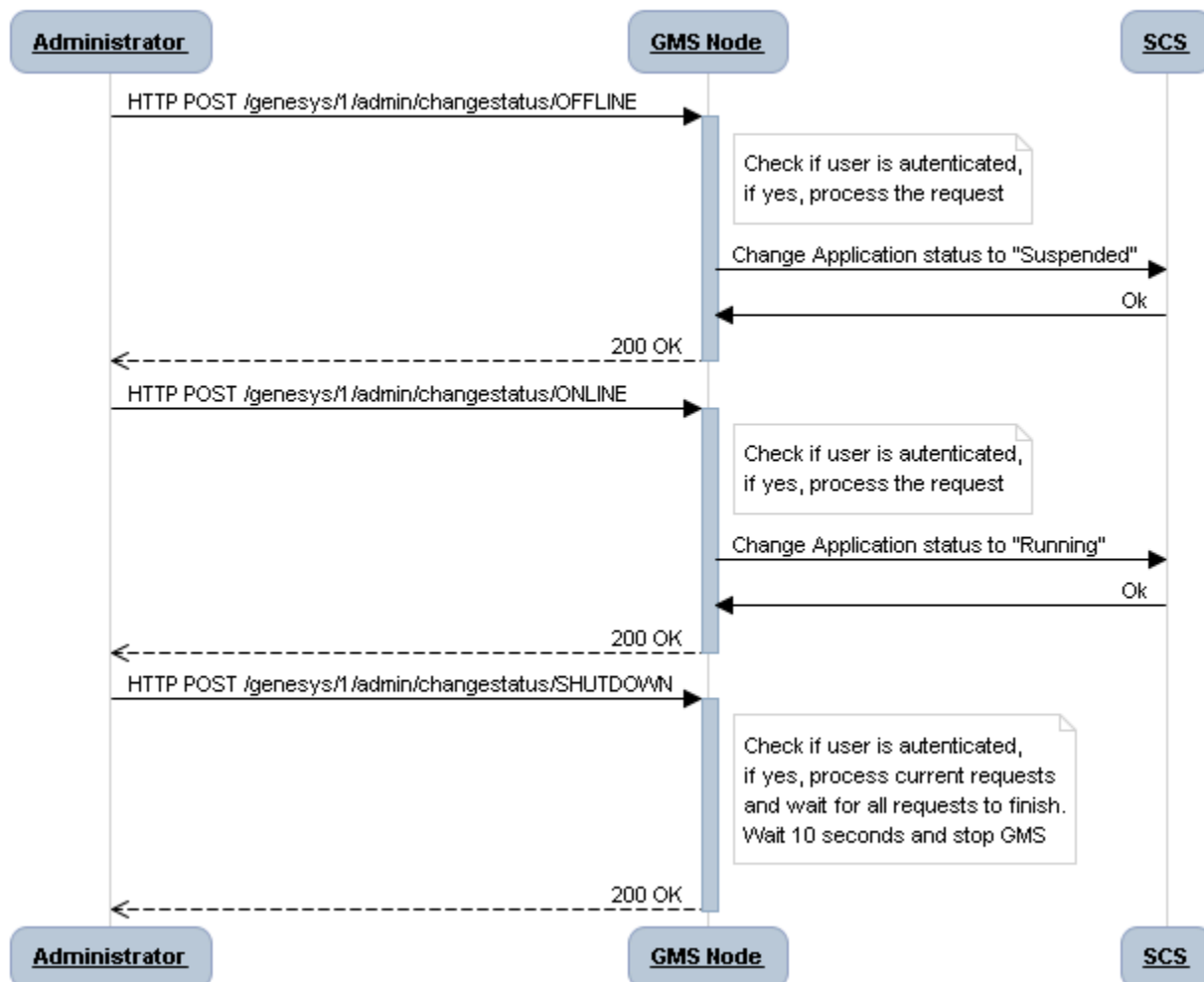
#### Health Check (GMS is online)



## Health Check (GMS is offline)



## Change GMS status



## Upload and Configure the Get Service

Using the [Service Templates Interface](#), load the Get Service service template, and configure the Get service.

The Mobile Engagement UI provides the following attributes:

Option	Description
<code>_service = <b>get</b></code>	<ul style="list-style-type: none"><li>For Genesys Mobile Services-based services: The name of the matching service.</li><li>For Orchestration Server-based services: The URL of the service's SCXML application.</li><li>Other SCXML Callback services: The URL of the service's SCXML callback application. In that case, you must set <code>_service_type</code> to <code>callback</code>.</li></ul>
<code>_type = <b>builtin</b></code>	<ul style="list-style-type: none"><li>For Genesys Mobile Services-based services: <code>builtin</code></li><li>For Orchestration Server-based services: <code>ors</code></li></ul>
<code>_online_code</code>	HTTP code to return when GMS is ONLINE.
<code>_offline_code</code>	HTTP code to return when GMS is OFFLINE.

You can also add any custom values as key-value pairs by clicking **Add New** in your Get service. These custom values will be returned in the service responses.

### Warning

Do not use a leading underscore with the custom parameters (for example, `_my_custom_key`). Custom parameters with leading underscores will not be returned in responses from the service.

Get

*First add a new custom value* → [+ Add New](#)

Q Search Table No categories available

[Delete](#) [Advanced Parameters](#) [Refresh](#)

	Name	Value	Description
<input type="checkbox"/>	_offline_code	503	HTTP code returned if GMS is offline
<input type="checkbox"/>	_online_code	200	HTTP code returned if GMS is online
<input checked="" type="checkbox"/>	_service	get	
<input type="checkbox"/>	_type	builtin	
<input type="checkbox"/>	custom_key1	I can add want I want	

*Enter your key value pair* →

☒  ☒  click here to set the value

⚠ Parameter not saved

## Get API

### Enable / Disable Node

Enables changing the GMS node status:

- ONLINE: GMS is OK to process requests.
- OFFLINE: GMS is running, accepts requests, but Load Balancer will be aware that it will need to remove this GMS from the active GMS list (for future maintenance). The Application in Solution Control Interface (SCI) will appear as Suspended.
- SHUTDOWN: GMS shuts down.

### Important

The following two URLs are protected by **Basic Authentication**:

- POST <http://127.0.0.1:8080/genesys/1/admin/node/changestatus/OFFLINE>
- POST <http://127.0.0.1:8080/genesys/1/admin/node/changestatus/ONLINE>

## Operation

<b>Method</b>	POST		
<b>URL</b>	/genesys/1/admin/node/changestatus/{status}		
<b>Parameter</b>	<b>Type</b>	<b>Mandatory</b>	<b>Description</b>
<b>URI Parameters</b>			
status	string	mandatory	ONLINE, OFFLINE, SHUTDOWN

## Response

<b>HTTP code</b>	200
<b>HTTP message</b>	OK

## Get Node Status

### Operation

<b>Method</b>	GET		
<b>URL</b>	/genesys/1/service/{serviceName}		
<b>Parameter</b>	<b>Type</b>	<b>Mandatory</b>	<b>Description</b>
<b>URI Parameters</b>			
serviceName	string	mandatory	Name of the builtin "GET" service defined in Service Management UI.

## Response

<b>HTTP code</b>	200
<b>HTTP message</b>	OK
<b>Body</b>	A JSON object with list of defined parameters

## Example

To perform this request, you must first create a service of type Get in the Admin UI, called LoadBalancer-checker.

```
GET http://127.0.0.1:8080/genesys/1/service/LoadBalancer-checker HTTP/1.1
Accept-Encoding: gzip,deflate
gms_user: dd
Host: 127.0.0.1:8080
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)
```

Response in case of GMS being online:

```
HTTP/1.1 200 OK
Date: Tue, 12 Nov 2013 15:38:55 GMT
```

```
Pragma: no-cache
Cache-Control: no-cache
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Type: application/json;charset=UTF-8
Transfer-Encoding: chunked
{"custom_parameter_1":"value1","custom_parameter_2":"value2"}
```

## Basic Get Service

This is a *basic\_get* service that returns service information. You can use the *basic\_get* service to isolate a GMS service based on the Configuration Manager option. This service has the following characteristics:

- It returns an HTTP response code based on the `result` option defined in Configuration Manager. If the result is 404, a 404 error will be thrown on the service response.
- It returns a JSON list of values defined in Configuration Manager if the value of the `result` option is 200.

### Example

The following table shows an example for the **section service.basicget** service in Configuration Manager:

Option Name	Option Value	Description
<code>_service</code>	<code>basic_get</code>	Service name.
<code>_type</code>	<code>builtin</code>	Genesys Mobile Services-based services.
<code>error_code</code>	404 Not Found	HTTP error code.
<code>result</code>	404	HTTP response code.

Where:

Option name	Option type	Restriction on value	Description
<code>result</code>	String	Mandatory  Valid values: 200,401,403,404,503, and so on.	A valid HTTP response code (See <a href="#">rfc2616</a> ). If <code>result=200</code> , the response body will contain a JSON list of options defined in Configuration Manager (options that do not have a leading underscore, for example, <code>error_code</code> or <code>result</code> ).

Example of response:



```
[service.basic_get]
_service=basic_get
_type=builtin
error_code=200 OK
result=200
HTTP Response:

{
  "result": "200",
  "error_code": "200 OK"
}
```

# Urs-stat

**Type:** builtin

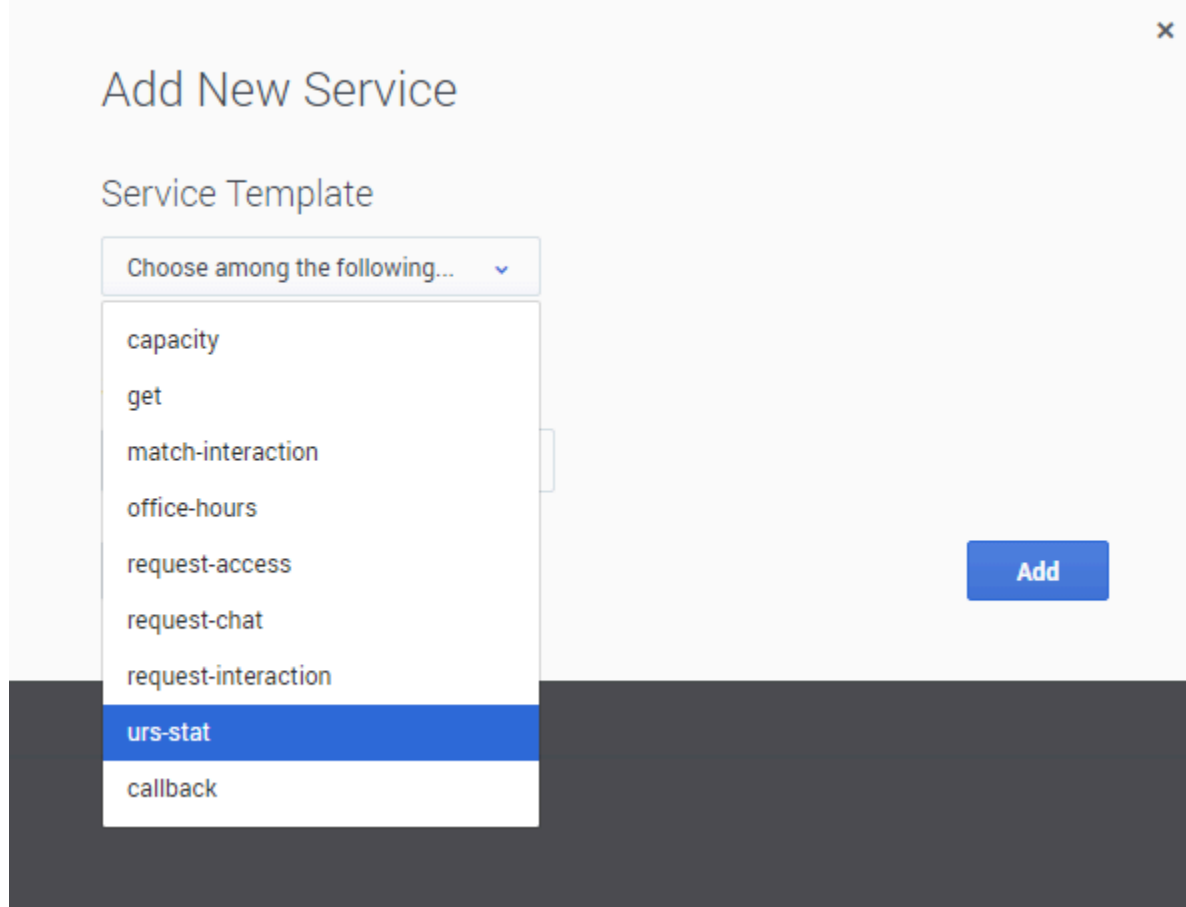
**Updated in:** 8.5.109

Create a GMS built-in service using the **urs-stat** template that provides the following benefits:

- Statistics caching of the statistic to reduce load on URS. The `_caching_policy` parameter sets the cache period in seconds (see below).
- Load balancing and scaling across multiple GMS nodes.
- A single point of contact for your app.

## Create a urs-stat Service

To create this GMS built-in service, select the **urs-stat** template when **creating** a new service.



## Configure urs-stat parameters

Configure the following parameters in your <name-of-urs-stat-service> service:

Option	Description
_urs_url	The URS URL formatted as follows: http://<urshost>:<ursport>/urs/call/max/lvq. This option can also point to the load balancer in front of the URS.
_urs_stat_url_parameters	Additional URS lvq input parameters (url-encoded format). For example: name=<VQ_Name>&tenant=<Tenant_Name>&aqt=urs
_caching_policy	URS Statistic caching policy in seconds.

For example:

```
_caching_policy=30 # Cache refresh time in seconds
_service=urs-stat
_type=builtin
_urs_stat_url_parameters=name=<VQ_Name>&tenant=<Tenant_Name>&aqt=urs
_urs_url=http://<urshost>:<ursport>/urs/call/max/lvq
```

Where: VQ\_Name, Tenant\_Name, urshost, and ursport match the environment and Callback service's Virtual Queue (VQ). The following screenshot shows the creation and configuration of the **my-urs-stat** service.

my-urs-stat

Q Search Table No categories available + Add New Delete Advanced Parameters

Name	Value	Description
_caching_policy	30	URS Statistic caching policy (seconds)
_service	urs-stat	
<input type="checkbox"/> _type	builtin	
_urs_stat_url_parameters	name=MyCallbackVQ&tenant=Environment&aqt=urs	Statistic parameters (url encoded format)
_urs_url	http://urs-demo:2828/urs/call/max/lvq	URS URL

### Important

The `_urs_url` option can point to the load balancer in front of the URS that should be configured as part of the GMS provisioning steps in that scenario.

## Query EWT Using the urs-stat Service

The following query example shows the resulting response that you get when you call the service:

```
GET http://<gmshost>:<gmsport>/genesys/1/service/<name-of-urs-stat-service>
```

Response:

```
{ "wcalls" : 20, "wpos" : 21, "time" : 1467922222, "hit" : 95, "calls" : 20,
  "wt" : 0, "ewt" : 300, "pos" : 21, "aqt" : 300 }
```

### Important

- The value of interest here is `ewt`: the time unit is seconds and can be a float value.

- An empty object will be returned if there is no activity for the VQ.

You can use a single service for multiple VQs by omitting the `_urs_stat_url_parameters` option from the service and including the value for that option (for example, name of virtual queue, tenant ID, or statistical method) in the HTTP request as follows:

```
http://<gmshost>:<gmsport>/genesys/1/service/<name-of-urs-stat-service>
?name=<one-of-the-callback-VQs>&tenant=<tenant-name>&aqt=urs
```

The URS stat service will append the content of the `_urs_stat_url_parameters` option and the HTTP request parameters to the URS query. To view additional URS `lvq` input parameters and output information, open a browser with URS running and run the help method for `lvq` as follows:

```
http://<urshost>:<ursport>/urs/help/call/lvq
```

The help method is described in the [Universal Routing 8.1 Reference Manual, Appendix C, "Supported Methods."](#)

If, for example, you set the following configuration for the `<name-of-urs-stat-service>` service:

```
_caching_policy=5
_service=urs-stat
_type=builtin
_urs_stat_url_parameters=scale=true&tenant=Environment&aqt=urs
_urs_url=http://<ursloadbalancer>:<ursport>/urs/call/max/lvq
```

You can use this service for multiple VQs by specifying only the name of a virtual queue in the HTTP request as follows:

```
http://<gmshost>:<gmsport>/genesys/1/service/<name-of-urs-stat-service>
?name=<one-of-the-callback-VQs>
```

# Match-interaction

This service will do the following for **ALL** Services:

- It looks through all the services for one that matches the input criteria.
- Only the service id (session id) and data id will be returned to the requester by default. Since 8.5.102, to retrieve user data, you can set the `_return_user_data` option to `true` in your query.
- The matched service access information will be unreserved (access resources returned).

## Important

The user of this service can use the [Storage APIs](#) to retrieve any data that was associated with the matched service.

## Create Request Data

These are the service specific parameters that will be supplied on the Create service API.

Parameters	Mandatory	Description
<code>_phone_number</code>	No	This is the phone number of the party that is calling and will be matched against the <code>_phone_number</code> property of the services.
<code>_access_number</code>	Yes	This is the number that the party called and will be matched against the <code>_access_number</code> property associated with the services.
<code>_access_code</code>	No	This is the code assigned to the party that is calling will be matched against the <code>_access_code</code> property assigned to the services.
<code>_return_multiple_matches</code> [since 8.5.102]	No	Set this option to <code>true</code> to retrieve an array of matching results in the JSON response in the following format:  <pre>{ "matches" : [ { _id...}, { _id...} ] }</pre>
<code>_return_data</code>	No	Set this option to <code>true</code> to retrieve

Parameters	Mandatory	Description
[since 8.5.102]		the user data instead of data_id only; false by default.
<code>_delete_service</code> [since 8.5.102]	No	Set this option to true to delete the service; false by default. Note that, in any case, GMS releases the <code>_access_number</code> and <code>_access_code</code> resources.

## Create Response Data

Parameters	Mandatory	Description
<code>_id</code>	Yes	Identifier of the matching service.
<code>_data_id</code>	Yes	Identifier of the matching service's data that is in GMS Storage.
<code>user_data</code> [since 8.5.102]	No	User Data attached to service, if you set the <code>_return_user_data</code> option to true.

## Specific Requests

There are no specific requests for this service.

## Events

There are no events associated with this service.

## Configuration

The following are the configuration options that you can access or modify in the Mobile Engagement UI:

Option	Description
<code>_type = builtin</code>	<ul style="list-style-type: none"><li>For Genesys Mobile Services-based services: builtin</li><li>For Orchestration Server-based services: ors</li></ul>
<code>_service = match-interaction</code>	<ul style="list-style-type: none"><li>For Genesys Mobile Services-based services: The name of the matching service.</li></ul>

---

Option	Description
	<ul style="list-style-type: none"><li>• For Orchestration Server-based services: The URL of the service's SCXML application.</li><li>• Other SCXML Callback services: The URL of the service's SCXML callback application. In that case, you must set <code>_service_type</code> to <code>callback</code>.</li></ul>
<code>_phone_number</code>	<p>Note: Request parameter.</p> <p>Number of the mobile phone where the service request originated.</p>
<code>_access_code</code>	<p>Access code returned as a result of request-access.</p> <p>Note: Request parameter.</p>
<code>_access_number</code>	<p>Number that the customer called.</p> <p>Note: Request parameter.</p>



# Request-access

**Type:** builtin

**Updated in:** 8.5.109

This service provides a service with access information that has been allocated for it and can then be used to contact the contact center. This service will do the following for any service:

- It will validate that the requesting service is active and running.
- It will acquire the appropriate access information based on the basic allocation algorithm.
  - It can reserve the access information for a configurable period of time
  - Simple random or round-robin allocation
- It supports the following types of access information:
  - Access Number (DNIS) which is to be called by the application
  - Access code which is to be supplied by the customer/application when the contact is being established. This provides an extra level of authentication.

## Create Request Data

These are the service-specific parameters that will be supplied on the Create service API.

Parameters	Mandatory	Description
_id	Yes	Identifier of the service which the allocated access information should be associated with.
_provide_code	No	If true, the service should return an access code which will add more security and reliability when trying to correlate the incoming call with the service. The value is a boolean. The default is false.
_phone_number	No	Phone number that is to be associated with the reserved access information.
_resource_group	Yes	Resource group from which an available access number will be taken.
_booking_expiration_timeout	No	Expiration time in seconds used to book the resource. This parameter will override the value in <b>Resource</b> options and in configuration options. This

---

Parameters	Mandatory	Description
		integer value must be between 5 and 1800; if not, the <code>_expiration_time</code> parameter returned in the response is 30.

## Create Response Data

Parameters	Mandatory	Description
<code>_id</code>	Yes	This is the identifier of the service which the allocated access information should be associated with.
<code>_access_number</code>	Yes	This is the access number which was allocated for this application. The application should use this number to contact the contact center.
<code>_access_code</code>	No	This is the access code that should be supplied by the application or end user when the call is established to further authentication the application/user. This will be present when the Create API specifies that it needs an access code ( <code>_provide_code = true</code> ).
<code>_expiration_time</code>	Yes	This is the amount time that this access information will be locked/reserved for the service.

## Example

```
POST genesys/1/service/request-access
_id=1212-887ad635-22b1-49c5-ae7b-3b271bc10289
_resource_group=DNIS

<Response xmlns="http://10.10.26.36/genesys/1/service/request-access">
  <_access_number>6504664136</_access_number>
  <_expiration_time>29</_expiration_time>
  <_id>1213-2fb1b27e-81b7-4f21-832c-39cf00ac1822</_id>
</Response>
```

## Specific Requests

There are no specific requests for this service.

## Events

There are no events associated with this service.

## Configuration

The following are the configuration options that are defined for this service:

Option	Description
_access_code_length	Length of the access code which can be allocated. Note: Request parameter.
_id	Identifier of the service which the allocated access information should be associated with. Note: Request parameter.
_phone_number	Phone number to associate with the reserved access information. Note: Request parameter.
_provide_code	If set to true, the service returns an access code which will add more security and reliability when trying to correlate the incoming call with the service. Note: Request parameter.
_resource_group = GMS_Resources	Resource group from which an available access number will be taken. Note: Request parameter.

# Request-chat

**Type:** builtin  
**Updated in:** 8.5.109

This service is responsible for receiving the GMS request and providing a URL to start the chat interaction. This is a basic chat service which helps a customer application to contact the call center. It has the following characteristics:

- It supports only customer-initiated chat sessions.
- It stores and maintains the application data within the service.
- It is responsible for routing the the chat interaction to a specified (or configured) interaction endpoint.
- It supports both poll and async (via cometd) mode of message delivery.

## Basic Chat API

For further details, refer to the [Chat API Version 1](#) page.

### Create a basic chat service

This API allows the application to create basic chat service session and then initiate chat interaction immediately or when user is ready.

#### Important

If the agent availability needs to be checked before the chat interaction is started, use one of the advanced sessions.

### Operation

Method	POST		
URL	/genesys/1/service/request-chat		
Parameter	Type	Mandatory	Description
URI Parameters			
'request-chat'	String	yes	Name of the preconfigured basic chat service
<b>Body:</b> The body will be x-www-form-urlencoded form consisting of different items representing the key/value pairs associated with the request.			
<b>Body Properties:</b> The following are the properties:			

Method	POST
<ul style="list-style-type: none"><li>• <code>_verbose</code> - This will allow the application to get all the detail attributes associated with the chat session in the corresponding response.</li><li>• ... - Any other business data attributes can also be passed.</li></ul>	

## Response

HTTP code	200
HTTP message	OK
Body	A chat JSON object for details on the properties of the object. See the section on <a href="#">data structures</a> for more details.
Notes	None

HTTP code	503
HTTP message	Service Unavailable
Body	None
Notes	This is send if the service has not sent a notification to the application that an agent is available.

## Example Request:

```
POST http://localhost:8080/genesys/1/service/request-chat HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: application/x-www-form-urlencoded
_verbose=true
```

## Response:

```
HTTP/1.1 200 OK
Date: Sun, 10 Jun 2012 07:49:46 GMT
Pragma: no-cache
Cache-Control: no-cache
Cache-Control: no-store
Content-Type: application/json
Transfer-Encoding: chunked
Server: Jetty(7.6.0.v20120127)
{
  "_chatIxnAPI-CREATE-URL":
  "/genesys/1/service/81f0ef4e-99dd-43ea-8366-8d27a2cbd605/ixn/chat",
  "_id": "81f0ef4e-99dd-43ea-8366-8d27a2cbd605"
}
```

## Configuration

The following are the configuration options that are defined for this service:

\_ttl

**Section:** request-chat

**Default Value:** 3600

**Valid Values:** Any positive integer

**Changes Take Effect:** Immediately

This option is mandatory.

Specifies the default time to live for the chat interaction in seconds.

\_chat\_endpoint

**Section:** request-chat

**Default Value:** gms\_builtin

**Valid Values:** String

**Changes Take Effect:** Immediately

The endpoint configured on the Chat Server that will be used to submit Chat interactions for this service.

# Capacity

Type: **ors**

The Capacity Service enables you to define the number of scheduled callbacks that are allowed for Callback for a given time slot in the week. Then, your Callback service refers to your Capacity service and to your Office Hours service to adjust the agent availability and the number of scheduled callbacks. You can also implement exceptions that allow you to set a specific capacity for a given date.

If your Callback Service needs to define its scheduled callback capacity, you must map the `_capacity_service` parameter value with the name of the Capacity service that you have created. Depending on the defined capacity and on the defined business hours, the number of scheduled callbacks during certain days or hours will increase or decrease.

## Important

Callback services that need fixed capacity levels can continue to use the `_max_request_by_time_bucket` option. But, if your Callback service includes both `_capacity_service` and `_max_request_by_time_bucket` options, then `_max_request_by_time_bucket` is ignored.

## REST API

The Capacity service is similar to Office Hours and is accessible through REST API for external queries.

Refer to the [API Reference](#) for further details.

## Configuration

Option	Value	Comment
<code>_type</code>	builtin	Mandatory option.
<code>_service</code>	capacity	Mandatory
<code>_capacity_*</code>	JSON-formatted String	Multiple properties that start with a prefix <code>_capacity_</code> and describe capacity allocation through the course of the week. The JSON structure specifies the day of the week, and capacity for hourly

Option	Value	Comment
		<p>slots during that day. Days of the week are numbered as recommended by ISO-8601 from 1 (Monday) to 7 (Sunday).</p> <pre> _capacity_1 : {   1 : { // Monday     "0900" : 5,     "1000" : 7,     "1100" : 10,     "1200" : 10 } } _capacity_2 : {   2 : { // Tuesday     "0900" : 3,     "1000" : 5,     "1100" : 7,     "1200" : 7 } } </pre>
_capacity_add*	JSON-formatted String	<p>Multiple properties that start with the _capacity_add_prefix and describe the capacity exceptions for additional working days.</p> <p>The format is similar to the format of _capacity_* properties but instead of a weekday, the full date for the extra day is used to prefix the capacity exception. This date is entered in the format of yyyyMMdd (year, month, day of the month).</p> <pre> _capacity_add_20160508 : {   20160508 : { // May 8, 2016     "0900" : 5,     "1000" : 7,     "1100" : 10 } } _capacity_add_20161111 : {   20161111 : { // November 11, 2016     "0900" : 3,     "1000" : 5,     "1100" : 7 } } </pre>
_timezone		<p>Timezone for your capacity service. For instance, if you configured "EST", or "PST" timezones with the CME, your parameters must use the timezones defined for Java such as "America/Toronto", or "Europe/Paris". See <a href="#">here Wikipedia</a> to get the list of correct timezones.</p>



---

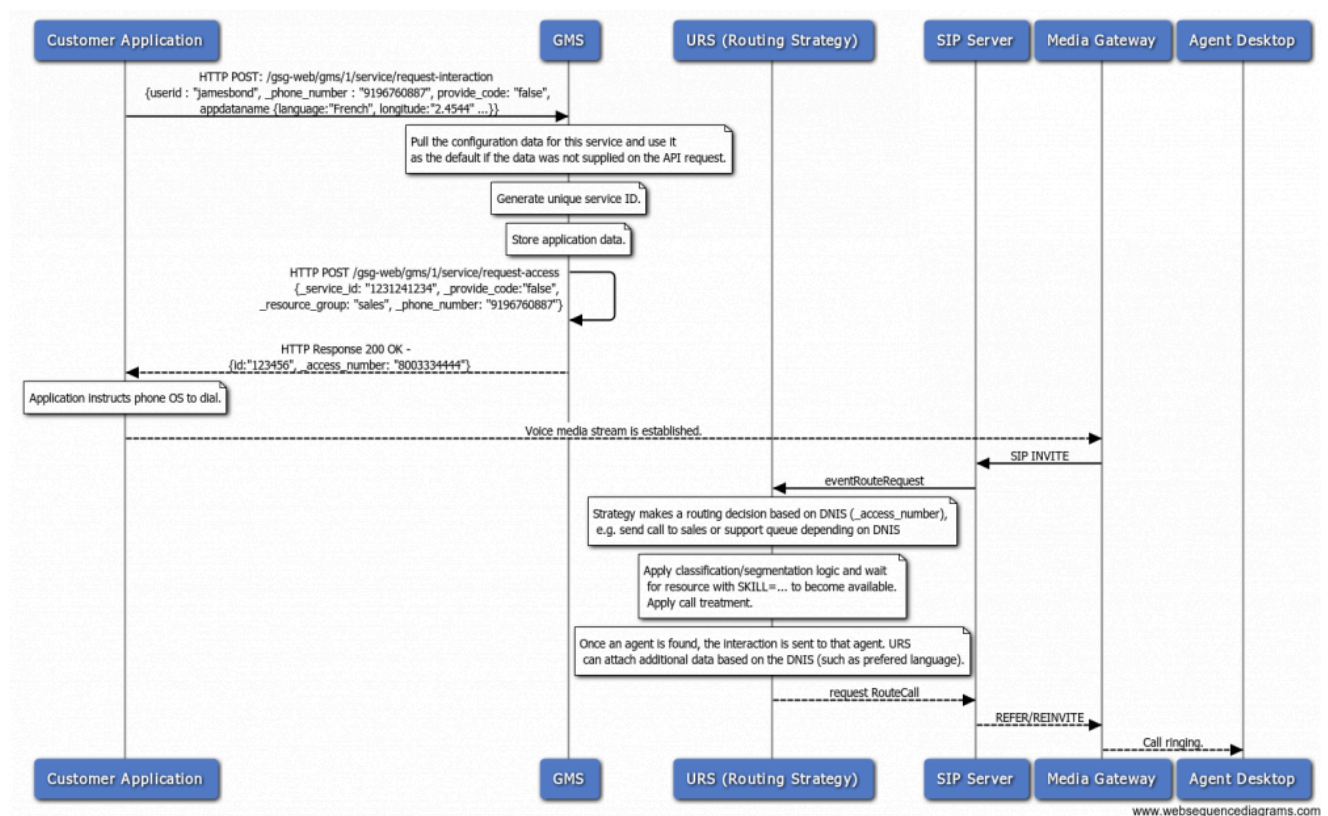
Option	Value	Comment

# Examples of Call Flows for Access Number Allocation

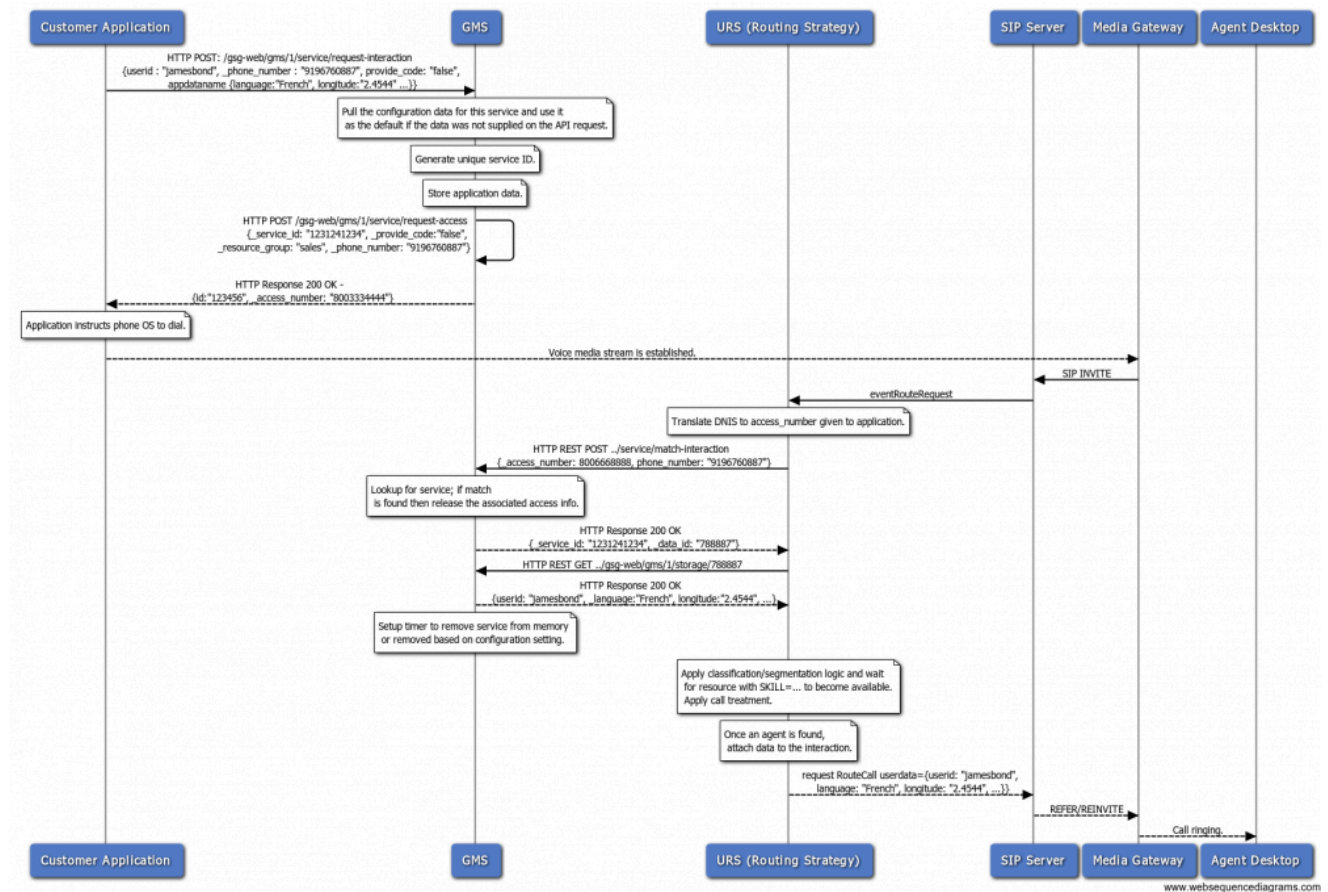
The following call flows show how you can use the following builtin services to implement access number allocation.

## No Locking

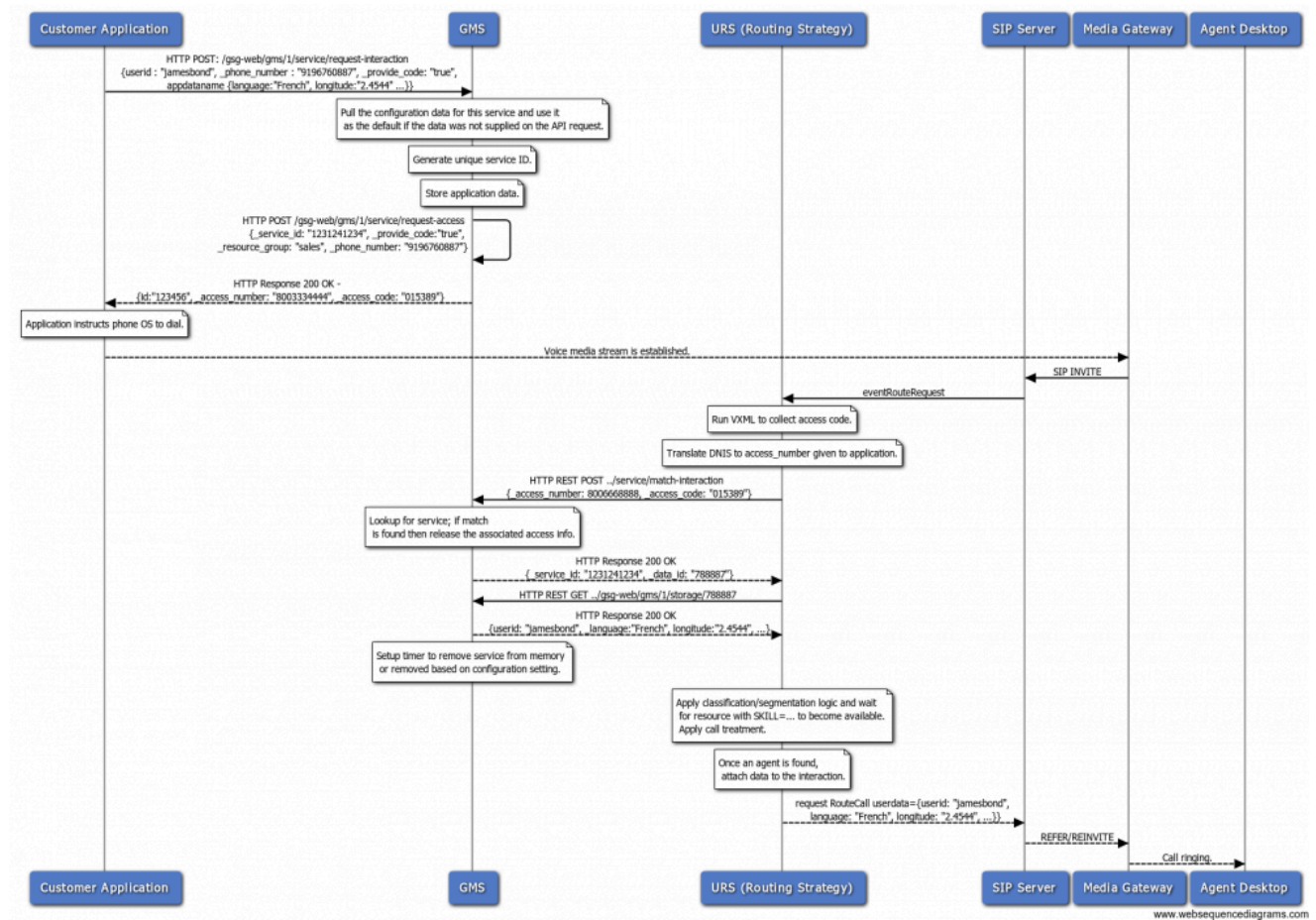
DNIS only - no match is done here



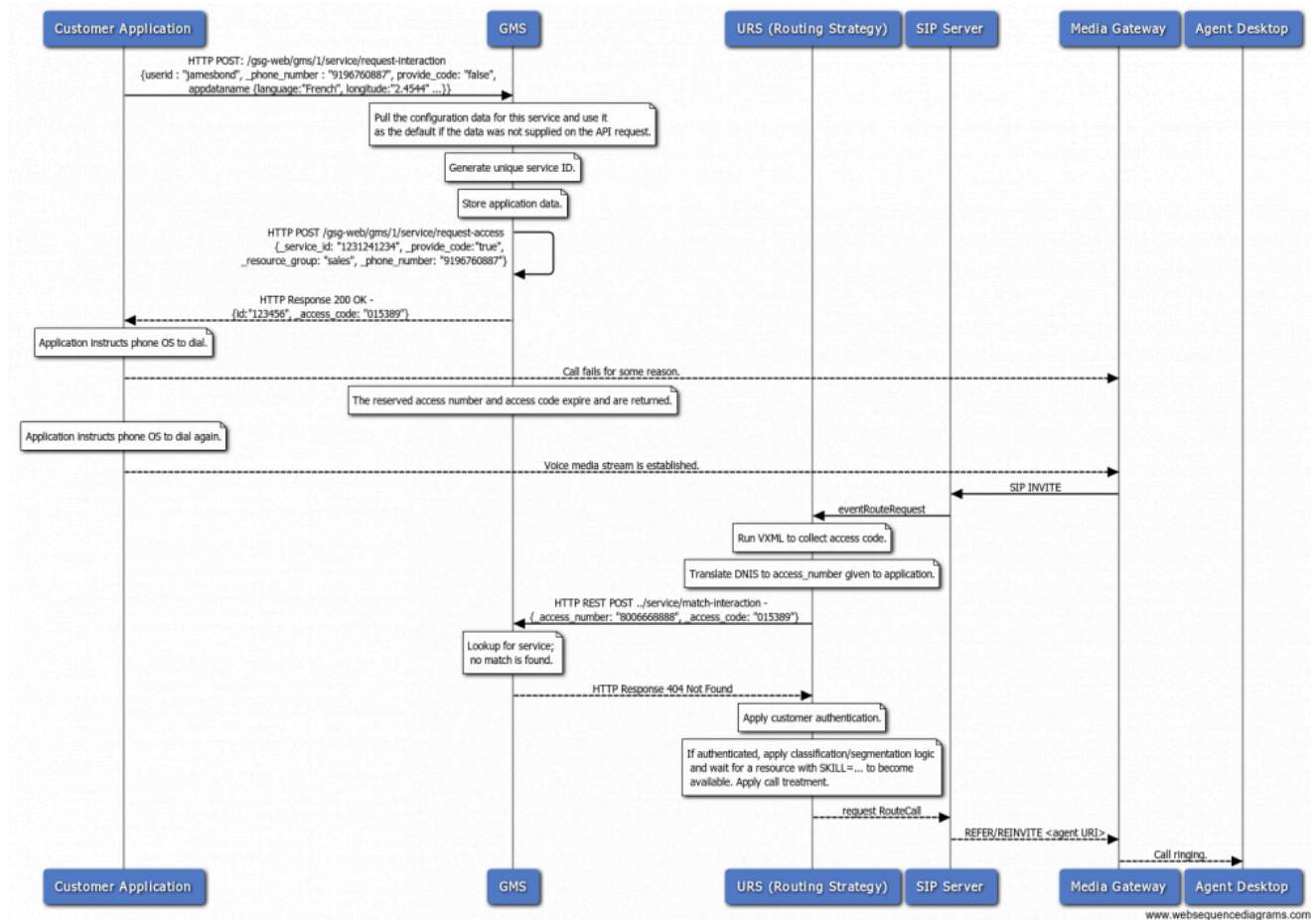
## Match DNIS + ANI



## Match DNIS + Access Code



## No Match



## Locking

The only difference between locking and non-locking call flows is the algorithm that determines how access numbers are handed out. In this case, a given access number is only assigned to a single service which allows for a more reliable match.

## Match DNIS + ANI

Same as the equivalent no lock case.

## Match DNIS + Access Code

Same as the equivalent no lock case.

## No Match

Same as the equivalent no lock case.

# User Originated Immediate

Type: **ors / inbound voice service**

## Scenario

The customer wishes to contact the Call Center immediately. The Callback service provides an access number and an access code (optional) that the customer can dial. Then, when the customer's inbound call is processed and routed to an agent.

This Callback scenario goes through the following stages:

### Start Callback

- Callback service: Returns access information immediately to the mobile device.
- Callback service: Waits for the voice call to arrive.
- Next: The Mobile device is expected to dial the access number.

### Dial Access Number

- Inbound service: Locates the GMS service associated with the arrived voice call.
- Inbound service: Delegates the call to be processed by the Callback service.
- Callback service: Plays treatment until the target is available.
- Callback service: Reserves target to route call.
- Callback service: Routes the call to the target.
- Callback service terminates.

## How to Configure this Scenario

Open the GMS Service Management UI to create the service and set the configuration options.

On the *Services > Configured Services* tab, add a Callback service with *User-Originated-Immediate* as the Common Default Configuration (see [Configured Services](#)). When you add this service and default configuration, many options are automatically populated with the appropriate default values. Some options, however, will require you to enter your own values. See the sections below for further guidance. See the [Reference section](#) below for options' details.

## Default Values for Inbound Immediate

These are the default values, which are automatically populated when using the pre-defined User-Originated-Immediate service. Do not change these values:

Option	Description
<code>_wait_for_agent = false</code>	<p>True to wait for an agent to connect. If this option is set to true,</p> <p>the service will wait for the agent to initiate the interaction and to send the notification to the customer. If the option is set to false, the interaction can start right after the creation of the service instance. In voice scenarios, the access information will be returned immediately with the service ID.</p> <p><b>This option is mandatory.</b></p>
<code>_call_direction = USERORIGINATED</code>	<p>This is a default value, automatically populated when using the predefined User-Terminated scenario. You do not need to change this value.</p> <ul style="list-style-type: none"> <li>If this option is set to <code>USERORIGINATED</code>, the customer's device will initiate the call to get connected to the agent.</li> <li>If this option is set to <code>USERTERMINATED</code>, the agent or the system will initiate the call to contact the customer.</li> </ul>
<code>_userterminated_first_connect_party = CUSTOMER</code>	<p>First party to connect when <code>_call_direction</code> is set to <code>USERTERMINATED</code>. Set this option to <code>CUSTOMER</code> to call the customer first; set this option to <code>AGENT</code> to call the agent first.</p> <p><b>This option is mandatory.</b></p>
<code>_ttl = 86400</code>	<p>Duration (in seconds) for which the service will be kept in storage after the Desired Time is passed (Time To Live).</p> <p>Once expired, the service is removed from the system. For example, if you want the callbacks to be visible in the Service Management UI for one week past the execution time, then you should set 7 days of Time To Live, which means <code>_ttl=604800</code>.</p> <p><b>This option is mandatory.</b></p>
<code>_type = ors</code>	<ul style="list-style-type: none"> <li>For Genesys Mobile Services-based services: builtin</li> </ul>



Option	Description
	<ul style="list-style-type: none"> <li>For Orchestration Server-based services: ors</li> </ul>
<code>_provide_code = false</code>	<p>If true, returns a randomly generated code to be used for the authentication of the user originated (inbound) call.</p> <p><b>This option is mandatory.</b></p>

See the [Reference section](#) below for options' details.

## Additional Required Options

You must enter a string value for the following options:

Option	Description
<code>_resource_group="DNIS"</code>	<p>Resource group from which access number is to be allocated.</p> <p><b>This option is mandatory.</b></p>
<code>_urs_virtual_queue="MyVirtualQueue"</code>	<p>Virtual queue (alias) to which the service request will be added.</p>
<code>_target="MyTarget@StatServer.GA"</code>	<p>Routing target that specifies the agent/queue resource that will process this request.</p> <ul style="list-style-type: none"> <li>Starting in 8.5.108.02, you can set multiple targets in this option, limited to 5.</li> <li>Starting in 8.5.114.09, the limit is increased to 15.</li> </ul> <p><b>Single Target</b></p> <p>For a <b>single</b> target, format the string according to the URS target specification: &lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt; where Target Type is one of the following:</p> <ul style="list-style-type: none"> <li>A (Agent)</li> <li>AP (Agent Place)</li> <li>GA (Group of Agents)</li> </ul>

Option	Description
	<ul style="list-style-type: none"> <li>GP (Group of Places)</li> <li>GC (Campaign Group)</li> </ul> <p>&lt;Target String&gt; can be a skill expression. In that case, &lt;Target String&gt; must start with '?:'. For example:</p> <ul style="list-style-type: none"> <li>Billing@StatServer.GA—Routes to Agent Group "Billing".</li> <li>?:English=20&amp;;Loans=2@StatServer.GA—Routes to any agent matching the skill expression.</li> </ul> <p>See the Universal Routing Server (URS) documentation for additional information about URS targets.</p> <h3>Multiple Targets</h3> <p>To set multiple targets, create a JSON-formatted string array of maximum 15 elements as follows:</p> <pre>[   {     "target": "&lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt;",     "timeout": "&lt;integer&gt;",     "clear":&lt;true/false&gt;,     "stat_to_check": "&lt;stat name&gt;",     "stat_operator": "&lt; or &gt;",     "stat_value": "1"   } ]</pre> <ul style="list-style-type: none"> <li>The <code>timeout</code> property specifies how long to wait in seconds before switching of targets.</li> <li>The <code>stat_to_check</code> property can be set to any of the values supported by the Statistics parameter passed to the IRD function <code>SData(Target, Statistics)</code>, unless target is a skill expression. If target is a skill expression, you must choose one of the following values:       <ul style="list-style-type: none"> <li>RStatAgentsReadyvoice—agents ready for voice media.</li> <li>RStatAgentsReady—agents ready for any media.</li> <li>RStatAgentsTotal—agents logged in.</li> </ul> </li> <li>The <code>stat_value</code> property specifies the threshold for the statistic passed in <code>stat_to_check</code>. If the condition set by the combination of <code>stat_to_check</code>, <code>stat_operator</code>, and <code>stat_value</code> is met, the current target is skipped, except if it is the last</li> </ul>

Option	Description
	<p>target of the list.</p> <ul style="list-style-type: none"> <li>If <code>clear=true</code>, the target will be overridden when switching to the next target; if <code>clear=false</code>, the target will be expanded with the next target.</li> </ul> <div> <p><b>Important</b></p> <p>If you set multiple targets in this option, then <code>_urs_queued_ttl</code> should be set to the total queue time across all targets.</p> </div> <p><a href="#">more...</a></p>
<pre>_urs_prioritization_strategy = WaitForTarget _urs_strategy_update_sub_routine = SetRouteDelay</pre>	<p>These options respectively match the name of the <b>URS strategy and subroutine</b> that you imported into IRD. If you changed one of these names, update the corresponding option to reflect the correct name.</p>

See the [Reference section](#) below for options' details.

## Customization

All of the options in the **Voice-User Originated** section are applicable. You can use the default values, or you can set your own values.

Option	Description
<b>Section: Voice-User Originated</b>	
<code>_booking_expiration_timeout = 30</code>	<p>Used to book the access number resource for a period of time. The customer needs to make the call within the specified timeout to ensure a successful match.</p> <p><b>This option is mandatory.</b></p>
<code>_provide_code= false</code>	<p>If true, returns a randomly generated code to be used for the authentication of the user originated (inbound) call.</p> <p><b>This option is mandatory.</b></p>
<code>_userorig_connect_limit=3</code>	<p>Maximum number of times that the customer can request a connection or a reconnection.</p>

Option	Description
<b>Section: Voice Treatment</b>	
<code>_treatment_find_agent_fail = GMSApplications/&lt;treatmentfile1&gt;</code>	Music file to be played when the service fails to find the agent in the time specified by the Max Time To Wait For Agent on the Call parameter. This parameter accepts a URI as a string or as a JSON-formatted string. See also <code>_treatment_waiting_for_agent</code> . By default, this option has an empty value and Callback will use the <code>&lt;GMS installation&gt;/Resources/SampleTreatments/all_agents_busy.wav</code> file available in the callback template.
<code>_treatment_waiting_for_agent = GMSApplications/&lt;treatmentfile2&gt;</code>	Music file to play when the customer is waiting for an agent. This parameter accepts a URI as a string or as a JSON-formatted string. If you do not set this option, Callback will use the default <code>&lt;GMS installation&gt;/Resources/SampleTreatments/next_customer_rep.wav</code> file of the callback template.

### Important

In the **Voice Treatment** section, the `GMSApplications/<treatmentfile>` path is applicable if you are using the treatments builtin to the Callback strategy. If you are not using the builtin treatments, enter the path where you have placed your voice treatment files.

## Sample Request and Response Sequence

### Create inbound immediate service

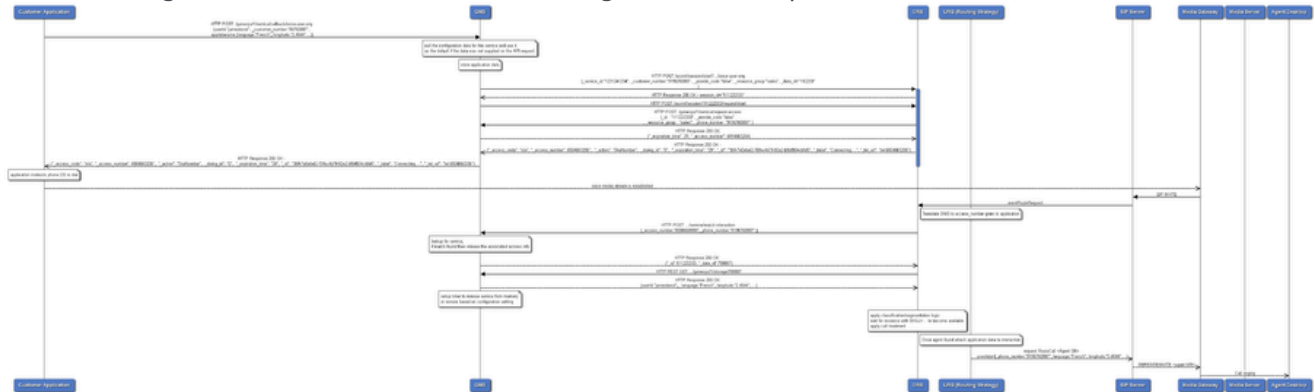
---

```
Request URL:http://localhost:8080/genesys/1/service/callback/voice-userorig-immediate
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:*//*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:44
Content-Type:multipart/form-data; boundary=---WebKitFormBoundarypn9IDb0VLCgiULed
Cookie:JSESSIONID=142p9me7hc3ht635n8mkx3eit; BAYEUX_BROWSER=86721orubxagcqhwhj14cpyaqk2
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundarypn9IDb0VLCgiULed--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 06:37:45 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=5lpxopl7oanu50iexlwaqrvq;Path=/genesys
Transfer-Encoding:chunked

Response Body:
{
  "_access_code": "n/a",
  "_access_number": "6504663204",
  "_action": "DialNumber",
  "_dialog_id": "0",
  "_expiration_time": "29",
  "_id": "369-37f2ab38-ec98-4316-a28d-dec01d622ae8",
  "_label": "Connecting ...",
  "_tel_url": "tel:6504663204"
}
```

---

[Click the diagram to access full resolution](#) or [right-click and open in another tab to zoom in](#).



# User Originated Delayed

Type: **ors** / **inbound voice service**

## Scenario

The customer wishes to contact the Call Center and accepts to wait for an agent. The Callback service notifies the mobile when an agent is ready, then provides an access number and an access code (optional) that the customer can dial. Then, the customer's inbound call is processed and routed to an agent.

This Callback scenario is an inbound voice service that goes through the following stages:

### Start Callback

- Callback service: Returns session id to the user.
- Callback service: Waits for an agent to be available.
- Callback service: When an agent is available, notifies the mobile device that agent is available.
- Next: the Mobile device is expected to send connect request to confirm the user's availability.

### Connect

- Callback service: Returns access information immediately to the mobile device.
- Callback service: Waits for the voice call to arrive.
- Next: the Mobile device is expected to dial the access number.

### Dial Access Number

- Inbound service: Locates the GMS service associated with the arrived voice call.
- Inbound service: Delegates the call to be processed by the Callback service.



- Callback service: Reserves target to route call.
- Callback service: Routes the call to the target.
- Callback service terminates.

## How to Configure this Scenario

The sections below list the key options applicable to this scenario. Use the GMS Service Management UI to set the User Originated Delay service and configure options. On the *Services > Configured Services* tab, add a Callback service with *User-Originated-Delayed* as the Common Default Configuration (see [Configured Service](#)). When you add this service and default configuration, many options are automatically populated with the appropriate default values. Some options, however, will require you to enter your own values. See the Comments column in the following table for these details.

### Default Values for User Originated Delay

These are the default values, which are automatically populated when using the pre-defined User-Originated-Immediate service. You must not change these values.

Option	Description
<code>_wait_for_agent = true</code>	<p>True to wait for an agent to connect. If this option is set to true, the service will wait for the agent to initiate the interaction and to send the notification to the customer. If the option is set to false, the interaction can start right after the creation of the service instance. In voice scenarios, the access information will be returned immediately with the service ID.</p> <p><b>This option is mandatory.</b></p>
<code>_wait_for_user_confirm = true</code>	<p>True to wait for confirmation of the customer's availability. If this option is set to true, the service sends a push notification to the customer's device to get confirmation that the customer is ready to have a conversation with the agent. This scenario is possible only if the <code>_wait_for_agent</code> option is set to</p>

Option	Description
	true.
<code>_call_direction = USERORIGINATED</code>	<p>This is a default value, automatically populated when using the predefined User-Terminated scenario. You do not need to change this value.</p> <ul style="list-style-type: none"><li>• If this option is set to <code>USERORIGINATED</code>, the customer's device will initiate the call to get connected to the agent.</li><li>• If this option is set to <code>USERTERMINATED</code>, the agent or the system will initiate the call to contact the customer.</li></ul>
<code>_userterminated_first_connect_party = CUSTOMER</code>	<p>First party to connect when <code>_call_direction</code> is set to <code>USERTERMINATED</code>. Set this option to <code>CUSTOMER</code> to call the customer first; set this option to <code>AGENT</code> to call the agent first.</p> <p><b>This option is mandatory.</b></p>
<code>_ttl = 86400</code>	<p>Duration (in seconds) for which the service will be kept in storage after the Desired Time is passed (Time To Live).</p> <p>Once expired, the service is removed from the system. For example, if you want the callbacks to be visible in the Service Management UI for one week past the execution time, then you should set 7 days of Time To Live, which means <code>_ttl=604800</code>.</p> <p><b>This option is mandatory.</b></p>
<code>_type = ors</code>	<ul style="list-style-type: none"><li>• For Genesys Mobile Services-based services: <code>builtin</code></li><li>• For Orchestration Server-based services: <code>ors</code></li></ul>

Option	Description
<code>_provide_code = false</code>	If true, returns a randomly generated code to be used for the authentication of the user originated (inbound) call.  <b>This option is mandatory.</b>
<code>_use_debug_push_certificate = false</code>	Use debug certificates for the push notification provider

## Additional Required Options

You must enter a string value for the following options:

Option	Description
<code>_resource_group="DNIS"</code>	Resource group from which access number is to be allocated.  <b>This option is mandatory.</b>
<code>_urs_virtual_queue="MyVirtualQueue"</code>	Virtual queue (alias) to which the service request will be added.
<code>_target="MyTarget@StatServer.GA"</code>	Routing target that specifies the agent/queue resource that will process this request. <ul style="list-style-type: none"><li>Starting in 8.5.108.02, you can set multiple targets in this option, limited to 5.</li><li>Starting in 8.5.114.09, the limit is increased to 15.</li></ul>

Option	Description
	<p><b>Single Target</b></p> <p>For a <b>single</b> target, format the string according to the URS target specification: &lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt; where Target Type is one of the following:</p> <ul style="list-style-type: none"> <li>• A (Agent)</li> <li>• AP (Agent Place)</li> <li>• GA (Group of Agents)</li> <li>• GP (Group of Places)</li> <li>• GC (Campaign Group)</li> </ul> <p>&lt;Target String&gt; can be a skill expression. In that case, &lt;Target String&gt; must start with '?:'. For example:</p> <ul style="list-style-type: none"> <li>• Billing@StatServer.GA—Routes to Agent Group "Billing".</li> <li>• ?:English=20&amp;;Loans=2@StatServer.GA—Routes to any agent matching the skill expression.</li> </ul> <p>See the Universal Routing Server (URS) documentation for additional information about URS targets.</p> <p><b>Multiple Targets</b></p> <p>To set multiple targets, create a JSON-formatted string array of maximum 15 elements as follows:</p> <pre>[   {     "target": "&lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt;",     "timeout": "&lt;integer&gt;",     "clear":&lt;true/false&gt;,     "stat_to_check": "&lt;stat name&gt;",     "stat_operator": "&lt; or &gt;",</pre>

Option	Description
	<pre data-bbox="1131 316 1467 391">       "stat_value": "1"     }   ] </pre> <ul style="list-style-type: none"> <li>The <code>timeout</code> property specifies how long to wait in seconds before switching of targets.</li> <li>The <code>stat_to_check</code> property can be set to any of the values supported by the <code>Statistics</code> parameter passed to the <code>IRD</code> function <code>SData(Target, Statistics)</code>, unless <code>target</code> is a skill expression. If <code>target</code> is a skill expression, you must choose one of the following values:             <ul style="list-style-type: none"> <li><code>RStatAgentsReadyvoice</code>—agents ready for voice media.</li> <li><code>RStatAgentsReady</code>—agents ready for any media.</li> <li><code>RStatAgentsTotal</code>—agents logged in.</li> </ul> </li> <li>The <code>stat_value</code> property specifies the threshold for the statistic passed in <code>stat_to_check</code>. If the condition set by the combination of <code>stat_to_check</code>, <code>stat_operator</code>, and <code>stat_value</code> is met, the current target is skipped, except if it is the last target of the list.</li> <li>If <code>clear=true</code>, the target will be overridden when switching to the next target; if <code>clear=false</code>, the target will be expanded with the next target.</li> </ul> <div data-bbox="1131 986 1951 1093"> <p><b>Important</b></p> <p>If you set multiple targets in this option, then <code>_urs_queued_ttl</code> should be set to the total queue time across all targets.</p> </div> <p data-bbox="1977 1106 2063 1129" style="text-align: right;">more...</p>
<pre data-bbox="174 1222 723 1294"> _urs_prioritization_strategy = WaitForTarget _urs_strategy_update_sub_routine = SetRouteDelay </pre>	<p>These options respectively match the names of the <b>URS strategy and subroutine</b> that you imported into <code>IRD</code>. If you changed one of these names, update the corresponding option to reflect the correct name.</p>

## Customization

All of the options in the section are applicable. You can use the default values, or you can set your own values.

Option	Description
<b>Voice-User Originated</b>	
<code>_booking_expiration_timeout = 30</code>	Used to book the access number resource for a period of time. The customer needs to make the call within the specified timeout to ensure a successful match. <b>This option is mandatory.</b>
<code>_provide_code= false</code>	If true, returns a randomly generated code to be used for the authentication of the user originated (inbound) call. <b>This option is mandatory.</b>
<code>_userorig_connect_limit=3</code>	Maximum number of times that the customer can request a connection or a reconnection.
<b>Voice Treatment section</b>	
<code>_treatment_find_agent_fail = GSMApplications/&lt;treatmentfile1&gt;</code>	Music file to be played when the service fails to find the agent in the time specified by the Max Time To Wait For Agent on the Call parameter. This parameter accepts a URI as a string or as a JSON-formatted string. See also <code>_treatment_waiting_for_agent</code> . By default, this option has an empty value and Callback will use the <GMS installation>/Resources/SampleTreatments/all_agents_busy.wav file available in the callback template.

Option	Description
<code>_treatment_waiting_for_agent = GMSApplications/&lt;treatmentfile2&gt;</code>	Music file to play when the customer is waiting for an agent. This parameter accepts a URI as a string or as a JSON-formatted string. If you do not set this option, Callback will use the default <GMS installation>/Resources/SampleTreatments/next_customer_rep.wav file of the callback template.

### Important

In the **Voice Treatment** section, the `GMSApplications/<treatmentfile>` path is applicable if you are using the treatments builtin to the Callback strategy. If you are not using the builtin treatments, enter the path where you have placed your voice treatment files. This path may or may not point to files on a Genesys Media Server.

## Sample Request and Response Sequence

### Create inbound delay service

```
Request URL:http://localhost:8080/genesys/1/service/callback/voice-userorig-delay
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:/*/*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:753
Content-Type:multipart/form-data; boundary=---WebKitFormBoundary4KngrF26eEEFKIu5
Cookie:JSESSIONID=5lpxopl7oanu50iexlwaqrvg; BAYEUX_BROWSER=86721orubxagcqhwh0hj14cpyaqk2
```

---

```
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundary4KngrF26eEEFKIu5
Content-Disposition: form-data; name="type"

Gold
-----WebKitFormBoundary4KngrF26eEEFKIu5
Content-Disposition: form-data; name="_customer_number"

6504661232
-----WebKitFormBoundary4KngrF26eEEFKIu5
Content-Disposition: form-data; name="usr_customer_name"

Bob Markel
-----WebKitFormBoundary4KngrF26eEEFKIu5
Content-Disposition: form-data; name="usr_reason"

billing question
-----WebKitFormBoundary4KngrF26eEEFKIu5
Content-Disposition: form-data; name="_device_notification_id"

b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
-----WebKitFormBoundary4KngrF26eEEFKIu5
Content-Disposition: form-data; name="_device_os"

iOS
-----WebKitFormBoundary4KngrF26eEEFKIu5--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 06:51:31 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=fbnacjg4ginj1xlbzkc5j7wq;Path=/genesys
Transfer-Encoding:chunked

Response Body:
```

---



```
{
  "_id": "369-90f389cf-ae63-46ec-a3f7-7b76c0522e2f",
  "_text": "We will notify you when agent is available"
}
```

Push notification data:

```
{
  "id": "db508720258611e300006072543ed1ff",
  "message": {
    "_action": "get-dialog-user-confirmation-provide_code-false",
    "_id": "369-90f389cf-ae63-46ec-a3f7-7b76c0522e2f"
  },
  "tag": "service.agentavailable.369-90f389cf-ae63-46ec-a3f7-7b76c0522e2f"
}
```

## Connect (user confirmation/request access info)

Request URL:http://localhost:8080/genesys/1/service/369-90f389cf-ae63-46ec-a3f7-7b76c0522e2f/connect

Request Method:POST

Status Code:200 OK

Request Headersview source

Accept:\*/\*

Accept-Encoding:gzip,deflate,sdch

Accept-Language:en-US,en;q=0.8

Connection:keep-alive

Content-Length:44

Content-Type:multipart/form-data; boundary=---WebKitFormBoundarylg0FYFBusYz5okcj

Cookie:JSESSIONID=febiiafprxsoln7bokxbrqwqv; BAYEUX\_BROWSER=86721orubxagcqhwhj14cpyaqk2

gms\_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673

Host:localhost:8080

Origin:http://localhost:8080

Referer:http://localhost:8080/gmstester/chat.html

User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36

Request Payload

-----WebKitFormBoundarylg0FYFBusYz5okcj--

Response Headersview source

Cache-Control:no-cache

Cache-Control:no-store

Content-Length:312

Content-Type:application/json;charset=UTF-8

Content-Type:application/json;charset=UTF-8

---

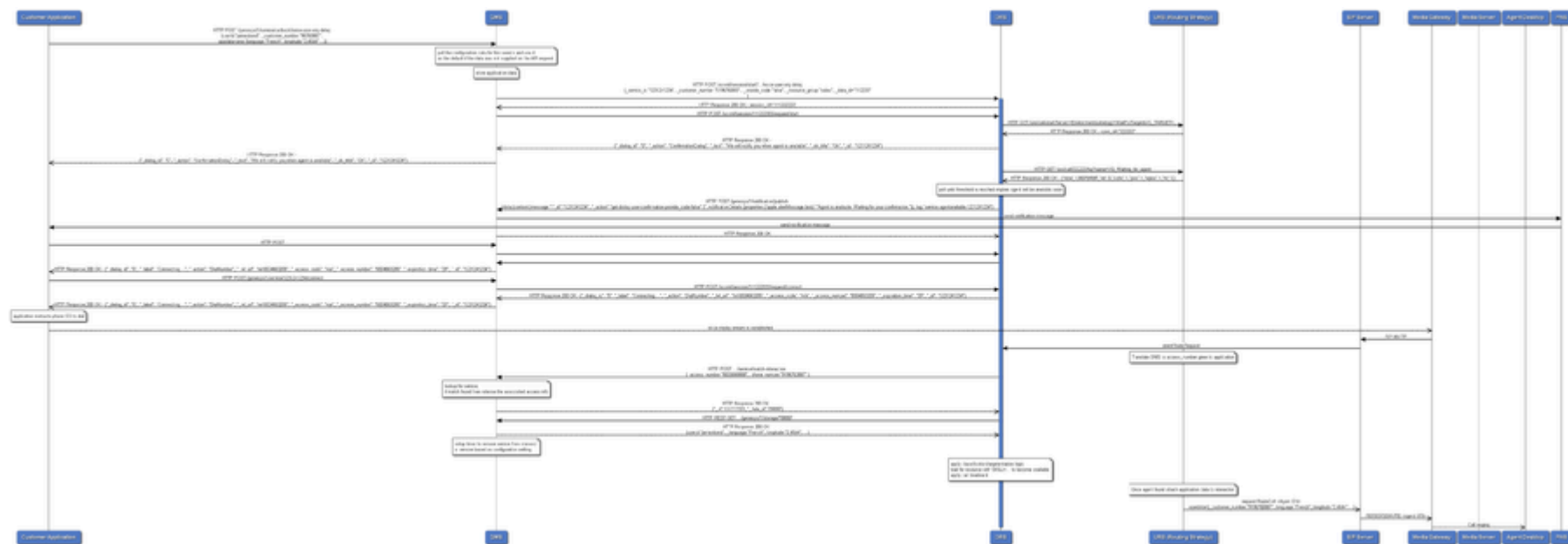
Date: Tue, 30 Jul 2013 06:54:21 GMT  
Expires: Thu, 01 Jan 1970 00:00:00 GMT  
Pragma: no-cache  
Set-Cookie: JSESSIONID=1t65gbvy9mrwdwysh123gpb0f; Path=/genesys

Response Body:

```
{
  "_dialog_id": "0",
  "_label": "Connecting ...",
  "_action": "DialNumber",
  "_tel_url": "tel:6504663205",
  "_access_code": "n/a",
  "_access_number": "6504663205",
  "_expiration_time": "29",
  "_id": "369-90f389cf-ae63-46ec-a3f7-7b76c0522e2f"
}
```

## Sequence Diagram

Click the diagram to access full resolution.



# Chat Immediate

**Type: ors / chat**

## Scenario

The customer wishes to chat immediately with an agent of the Call Center. The Callback service provides an access URL that the customer can connect. Then, the customer's chat interaction is processed and routed to an agent.

This Callback scenario is a chat service that goes through the following stages:

### Start Callback

- Callback service: Returns the URL to initiate chat interaction, immediately to the mobile device.
- Callback service: Waits for chat interaction to arrive.
- Next: Mobile device is expected to initiate chat interaction.

### Initiate Chat

- Inbound Chat service: Locates the GMS service associated with the arrived chat interaction.
- Inbound Chat service: Delegates the chat interaction to be processed by the Callback service.
- Callback service: Reserves target to route chat interaction.
- Callback service: Routes the chat interaction to the target.
- Callback service terminates.

---

## Setting up Acceptance of a Chat Interaction

In order for the Callback service to accept a chat interaction, you must set up the `inbound_chat.scxml` matching the service through Configuration Manager (or Genesys Administrator). The steps detailed below use Configuration Manager.

**Note:** The `inbound_chat.scxml` file is included in your GMS installation.

### Start

1. In Configuration Manager, create an enhanced script object (for example, *GMSInbound*).
2. On the *Annex* tab, configure the *Application/url* option as follows:  
url = `http://<gmshost>:<gmsport>/genesys/1/document/service_template/callback/src/inbound_chat.scxml`
3. On the *Annex* tab, configure the *ApplicationParms* section by adding the below options:  
app\_find\_agent\_timeout = `<timeout in seconds when routing to agent>`  
  
app\_selected\_agent\_group = `<agent_group for GMS match fails>`
4. Configure an Interaction Queue to use the enhanced routing object that you just created. To do this, on the *Annex* tab, configure the *Orchestration/application* option as follows:  
script:GMSinbound

### End

## Configuration Options

The sections below list the key options applicable to this scenario.

Use the GMS Service Management UI to set the configuration options. On the *Services > Configured Services* tab, add a Callback service with *Chat-Immediate* as the Common Default Configuration (see [Configured Services](#)). When you add this service and default configuration, many options are automatically populated with the appropriate default values. Some options, however, will require you to enter your own values.

## Predefined Values

These are the default values, which are automatically populated when using the pre-defined User-Originated-Immediate service. You must not change these values.

Option	Description
<code>_media_type=chat</code>	<p>Media type of the interaction that the service is expected to handle. This option enables URS to select an agent who has the appropriate media capabilities. This is a default value, automatically populated when using the predefined User-Terminated scenario. You do not need to change this value.</p> <p><b>This option is mandatory.</b></p>
<code>_wait_for_agent = false</code>	<p>True to wait for an agent to connect. If this option is set to true, the service will wait for the agent to initiate the interaction and to send the notification to the customer. If the option is set to false, the interaction can start right after the creation of the service instance. In voice scenarios, the access information will be returned immediately with the service ID.</p> <p><b>This option is mandatory.</b></p>
<code>_wait_for_user_confirm = false</code>	<p>True to wait for confirmation of the customer's availability. If this option is set to true, the service sends a push notification to the customer's device to get confirmation that the customer is ready to have a conversation with the agent. This scenario is possible only if the <code>_wait_for_agent</code> option is set to true.</p>
<code>_ttl = 86400</code>	<p>Duration (in seconds) for which the service will be kept in storage after the Desired Time is passed (Time To Live).</p> <p>Once expired, the service is removed from the system. For example, if you want the callbacks to be visible in the Service Management UI for one week past the execution time, then you should</p>

Option	Description
	set 7 days of Time To Live, which means <code>_ttl=604800</code> . <b>This option is mandatory.</b>
<code>_type = ors</code>	<ul style="list-style-type: none"><li>For Genesys Mobile Services-based services: builtin</li><li>For Orchestration Server-based services: ors</li></ul>
<code>_use_debug_push_certificate = false</code>	Use debug certificates for the push notification provider

## Additional Required Options

You must enter a string value for the following options:

Option	Description
<code>_target</code>	<p>Routing target that specifies the agent/queue resource that will process this request.</p> <ul style="list-style-type: none"><li>Starting in 8.5.108.02, you can set multiple targets in this option, limited to 5.</li><li>Starting in 8.5.114.09, the limit is increased to 15.</li></ul> <p><b>Single Target</b></p> <p>For a <b>single</b> target, format the string according to the URS target specification: <code>&lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt;</code> where Target Type is one of the following:</p>



Option	Description
	<div><ul style="list-style-type: none"><li>A (Agent)</li><li>AP (Agent Place)</li><li>GA (Group of Agents)</li><li>GP (Group of Places)</li><li>GC (Campaign Group)</li></ul><p>&lt;Target String&gt; can be a skill expression. In that case, &lt;Target String&gt; must start with '?:'. For example:</p><ul style="list-style-type: none"><li>Billing@StatServer.GA—Routes to Agent Group "Billing".</li><li>?:English=20&amp;;Loans=2@StatServer.GA—Routes to any agent matching the skill expression.</li></ul><p>See the Universal Routing Server (URS) documentation for additional information about URS targets.</p><h3>Multiple Targets</h3><p>To set multiple targets, create a JSON-formatted string array of maximum 15 elements as follows:</p><pre>[   {     "target": "&lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt;",     "timeout": "&lt;integer&gt;",     "clear":&lt;true/false&gt;,     "stat_to_check": "&lt;stat name&gt;",     "stat_operator": "&lt; or &gt;",     "stat_value": "1"   } ]</pre><ul style="list-style-type: none"><li>The timeout property specifies how long to wait in seconds before</li></ul></div>

Option	Description
	<p>switching of targets.</p> <ul style="list-style-type: none"> <li>The <code>stat_to_check</code> property can be set to any of the values supported by the <code>Statistics</code> parameter passed to the <code>IRD</code> function <code>SData(Target, Statistics)</code>, unless <code>target</code> is a skill expression. If <code>target</code> is a skill expression, you must choose one of the following values: <ul style="list-style-type: none"> <li><code>RStatAgentsReadyvoice</code>—agents ready for voice media.</li> <li><code>RStatAgentsReady</code>—agents ready for any media.</li> <li><code>RStatAgentsTotal</code>—agents logged in.</li> </ul> </li> <li>The <code>stat_value</code> property specifies the threshold for the statistic passed in <code>stat_to_check</code>. If the condition set by the combination of <code>stat_to_check</code>, <code>stat_operator</code>, and <code>stat_value</code> is met, the current target is skipped, except if it is the last target of the list.</li> <li>If <code>clear=true</code>, the target will be overridden when switching to the next target; if <code>clear=false</code>, the target will be expanded with the next target.</li> </ul> <div data-bbox="1137 855 1951 962"> <p><b>Important</b></p> <p>If you set multiple targets in this option, then <code>_urs_queued_ttl</code> should be set to the total queue time across all targets.</p> </div> <p style="text-align: right;"><a href="#">more...</a></p>
<code>_urs_virtual_queue</code>	Virtual queue (alias) to which the service request will be added.
<code>_urs_prioritization_strategy = WaitForTarget</code> <code>_urs_strategy_update_sub_routine = SetRouteDelay</code>	By default, these options respectively match the names of the <b>URS strategy and subroutine</b> that you imported into <code>IRD</code> . If you changed one of these names, update the corresponding option to reflect the correct name.

---

## Sample Request and Response Sequence

When your chat immediate service is configured, you can use this service to retrieve your new service ID associated with your chat session. Then, you will be able to use this ID in the [Chat API v1](#).

### Create chat immediate service

```
Request URL:http://localhost:8080/genesys/1/service/callback/chat-immediate
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:*/*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:660
Content-Type:multipart/form-data; boundary=---WebKitFormBoundaryYbCe8VCHJCMGeynE
Cookie:JSESSIONID=1bob1qjgrmiy589bpyvtmrhow; BAYEUX_BROWSER=f3d8-3vwgdc1vyroghjsaf87ilc60
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundaryYbCe8VCHJCMGeynE
Content-Disposition: form-data; name="_customer_number"

6502388511
-----WebKitFormBoundaryYbCe8VCHJCMGeynE
Content-Disposition: form-data; name="usr_customer_name"

Bob Markel
-----WebKitFormBoundaryYbCe8VCHJCMGeynE
Content-Disposition: form-data; name="usr_reason"

billing question
-----WebKitFormBoundaryYbCe8VCHJCMGeynE
Content-Disposition: form-data; name="_device_notification_id"
```

---

```
b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
```

```
-----WebKitFormBoundaryYbCe8VCHJCMGeynE
```

```
Content-Disposition: form-data; name="_device_os"
```

```
comet
```

```
-----WebKitFormBoundaryYbCe8VCHJCMGeynE--
```

```
Response Headersview source
```

```
Cache-Control:no-cache
```

```
Cache-Control:no-store
```

```
Content-Type:application/json;charset=UTF-8
```

```
Content-Type:application/json;charset=UTF-8
```

```
Date:Tue, 13 Aug 2013 22:15:31 GMT
```

```
Expires:Thu, 01 Jan 1970 00:00:00 GMT
```

```
Pragma:no-cache
```

```
Set-Cookie:JSESSIONID=e6yzey0kup8v8l7l8lurnhzs;Path=/genesys
```

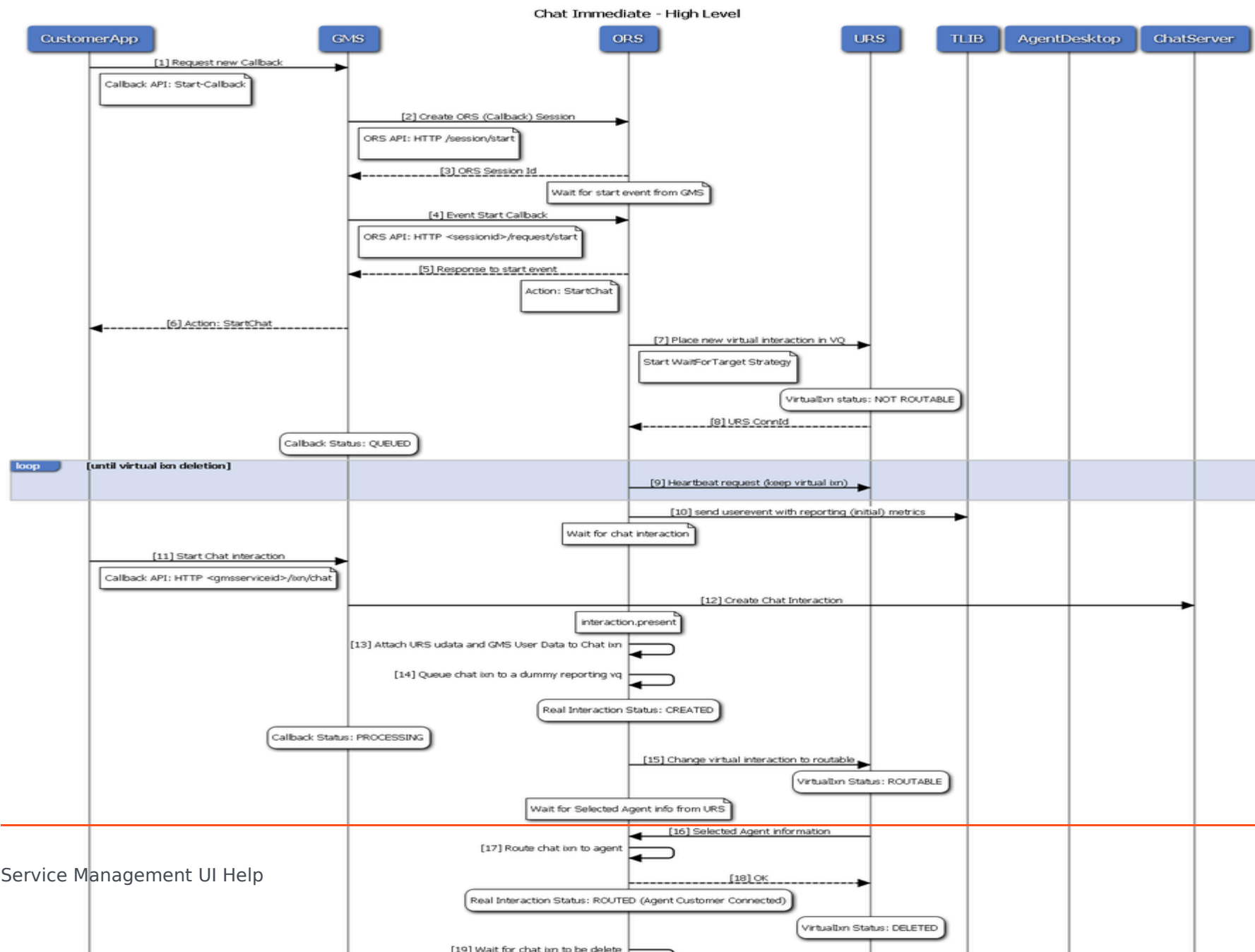
```
Transfer-Encoding:chunked
```

```
Response Body:
```

```
{
  "_dialog_id": "1",
  "_action": "StartChat",
  "_label": "Start Chat",
  "_start_chat_url": "http://localhost:8080/genesys/1/service/369-01d32409-b4bb-4884-b266-02d8216fe5e3/ixn/chat",
  "_comet_url": "http://localhost:8080/genesys/cometd",
  "_user_header": "b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673",
  "_id_to_jump_before": "exit://",
  "_chat_parameters": {
    "subject": "None"
  },
  "_id": "369-01d32409-b4bb-4884-b266-02d8216fe5e3"
}
```

## Sequence Diagram

Click the diagram to access full resolution.



---

# Chat Delayed

**Type:** `ors` / `chat`

---

## Scenario

The customer wishes to chat with an agent of the Call Center. The Callback service provides an access URL that the customer can connect and waits for an agent. Then, the Callback Service notifies the customer's mobile and the customer's chat interaction is processed and routed to an agent.

This Callback scenario is a chat service that goes through the following stages:

### Start Callback

- Callback service: Returns session id to the user.
- Callback service: Waits for an agent to be available.
- Callback service: When an agent is available, notifies mobile device that agent is available.
- Next: Mobile device is expected to send connect request to confirm the user's availability.

### Connect

- Callback service: Returns URL to initiate chat interaction, immediately to the mobile device.
- Callback service: Waits for chat interaction to arrive.
- Next: Mobile device is expected to initiate chat interaction.

### Initiate Chat

- Inbound Chat service: Locates the GMS service associated with the arrived chat interaction.
- Inbound Chat service: Delegates the chat interaction to be processed by the Callback service.
- Callback service: Reserves target to route chat interaction.

- Callback service: Routes the chat interaction to the target.
- Callback service terminates.

## Setting up Acceptance of a Chat Interaction

In order for the Callback service to accept a chat interaction, you must set up the `inbound_chat.scxml` matching service through Configuration Manager (or Genesys Administrator). The steps shown below use Configuration Manager.

### Important

The `inbound_chat.scxml` file is included in your GMS installation.

### Start

1. In Configuration Manager, create an enhanced script object (for example, *GMSInbound*).
2. On the *Annex* tab, configure the *Application/url* option as follows:  
url = `http://<gmshost>:<gmsport>/genesys/1/document/service_template/callback/src/inbound_chat.scxml`
3. On the *Annex* tab, configure the *ApplicationParms* section by adding the below options:  
app\_find\_agent\_timeout = `<timeout in seconds when routing to agent>`  
  
app\_selected\_agent\_group = `<agent_group for GMS match fails>`
4. Configure an Interaction Queue to use the enhanced routing object that you just created. To do this, on the *Annex* tab, configure the *Orchestration/application* option as follows:  
script:GMSInbound

### End



## Configuration Options

The sections below list the key options applicable to this scenario.

Use the GMS Service Management UI to set the configuration options. On the *Services > Configured Services* tab, add a Callback service with *Chat-Immediate* as the Common Default Configuration (see [Configured Services](#)). When you add this service and default configuration, many options are automatically populated with the appropriate default values. Some options, however, will require you to enter your own values. Predefined Values[edit]

These are the default values, which are automatically populated when using the pre-defined *Chat-Delayed* service. You must not change these values.

Option	Description
<code>_media_type=chat</code>	Media type of the interaction that the service is expected to handle. This option enables URS to select an agent who has the appropriate media capabilities. This is a default value, automatically populated when using the predefined User-Terminated scenario. You do not need to change this value. <b>This option is mandatory.</b>
<code>_wait_for_agent = true</code>	True to wait for an agent to connect. If this option is set to true, the service will wait for the agent to initiate the interaction and to send the notification to the customer. If the option is set to false, the interaction can start right after the creation of the service instance. In voice scenarios, the access information will be returned immediately with the service ID. <b>This option is mandatory.</b>
<code>_wait_for_user_confirm = true</code>	True to wait for confirmation of the customer's availability. If this option is set to true, the service sends a push notification to the customer's device to get confirmation that the customer is ready to have a conversation with the agent. This scenario is possible only if the <code>_wait_for_agent</code> option is set to true.

Option	Description
<code>_ttl = 86400</code>	<p>Duration (in seconds) for which the service will be kept in storage after the Desired Time is passed (Time To Live).</p> <p>Once expired, the service is removed from the system. For example, if you want the callbacks to be visible in the Service Management UI for one week past the execution time, then you should set 7 days of Time To Live, which means <code>_ttl=604800</code>.</p> <p><b>This option is mandatory.</b></p>
<code>_type = ors</code>	<ul style="list-style-type: none"><li>• For Genesys Mobile Services-based services: builtin</li><li>• For Orchestration Server-based services: ors</li></ul>
<code>_use_debug_push_certificate = false</code>	Use debug certificates for the push notification provider

## Additional Required Options

You must enter a string value for the following options:

Option	Description
<code>_target</code>	<p>Routing target that specifies the agent/queue resource that will process this request.</p> <ul style="list-style-type: none"><li>• Starting in 8.5.108.02, you can set multiple targets in this option, limited to 5.</li></ul>

Option	Description
	<ul style="list-style-type: none"><li>Starting in 8.5.114.09, the limit is increased to 15.</li></ul> <h3>Single Target</h3> <p>For a <b>single</b> target, format the string according to the URS target specification: &lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt; where Target Type is one of the following:</p> <ul style="list-style-type: none"><li>A (Agent)</li><li>AP (Agent Place)</li><li>GA (Group of Agents)</li><li>GP (Group of Places)</li><li>GC (Campaign Group)</li></ul> <p>&lt;Target String&gt; can be a skill expression. In that case, &lt;Target String&gt; must start with '?:'. For example:</p> <ul style="list-style-type: none"><li>Billing@StatServer.GA—Routes to Agent Group "Billing".</li><li>?:English=20&amp;;Loans=2@StatServer.GA—Routes to any agent matching the skill expression.</li></ul> <p>See the Universal Routing Server (URS) documentation for additional information about URS targets.</p> <h3>Multiple Targets</h3> <p>To set multiple targets, create a JSON-formatted string array of maximum 15 elements as follows:</p> <pre>[   {     "target": "&lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt;",     "timeout": "&lt;integer&gt;",     "clear":&lt;true/false&gt;,</pre>

Option	Description
	<pre>         "stat_to_check": "&lt;stat name&gt;",         "stat_operator": "&lt; or &gt;",         "stat_value": "1"       }     ] </pre> <ul style="list-style-type: none"> <li>The <code>timeout</code> property specifies how long to wait in seconds before switching of targets.</li> <li>The <code>stat_to_check</code> property can be set to any of the values supported by the <code>Statistics</code> parameter passed to the <code>IRD</code> function <code>SData(Target, Statistics)</code>, unless <code>target</code> is a skill expression. If <code>target</code> is a skill expression, you must choose one of the following values:           <ul style="list-style-type: none"> <li><code>RStatAgentsReadyvoice</code>—agents ready for voice media.</li> <li><code>RStatAgentsReady</code>—agents ready for any media.</li> <li><code>RStatAgentsTotal</code>—agents logged in.</li> </ul> </li> <li>The <code>stat_value</code> property specifies the threshold for the statistic passed in <code>stat_to_check</code>. If the condition set by the combination of <code>stat_to_check</code>, <code>stat_operator</code>, and <code>stat_value</code> is met, the current target is skipped, except if it is the last target of the list.</li> <li>If <code>clear=true</code>, the target will be overridden when switching to the next target; if <code>clear=false</code>, the target will be expanded with the next target.</li> </ul> <div> <b>Important</b>            If you set multiple targets in this option, then <code>_urs_queued_ttl</code> should be set to the total queue time across all targets.         </div> <div>more...</div>
<code>_urs_virtual_queue</code>	Virtual queue (alias) to which the service request will be added.

Option	Description
_urs_prioritization_strategy = WaitForTarget _urs_strategy_update_sub_routine = SetRouteDelay	By default, these options respectively match the names of the <b>URS strategy</b> and <b>subroutine</b> that you imported into IRD. If you changed one of these names, update the corresponding option to reflect the correct name.

## Sample Request and Response Sequence

### Create chat (delay) service

```

Request URL:http://localhost:8080/genesys/1/service/callback/chat-delay
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:*/*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:660
Content-Type:multipart/form-data; boundary=---WebKitFormBoundary0WnE36LruxJ4S5nu
Cookie:JSESSIONID=mjjvtphwb8lpce7io23ggxcu; BAYEUX_BROWSER=86721orubxagcqhwhj14cpyaqk2
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundary0WnE36LruxJ4S5nu
Content-Disposition: form-data; name="_customer_number"

4082652649
-----WebKitFormBoundary0WnE36LruxJ4S5nu
Content-Disposition: form-data; name="usr_customer_name"

```

---

```
Bob Markel
-----WebKitFormBoundary0WnE36LruxJ4S5nu
Content-Disposition: form-data; name="usr_reason"

billing question
-----WebKitFormBoundary0WnE36LruxJ4S5nu
Content-Disposition: form-data; name="_device_notification_id"

b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
-----WebKitFormBoundary0WnE36LruxJ4S5nu
Content-Disposition: form-data; name="_device_os"

comet
-----WebKitFormBoundary0WnE36LruxJ4S5nu--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 07:07:35 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=kwe77jz60uum1u16urv8vubd;Path=/genesys
Transfer-Encoding:chunked

Response Body:
{
  "_id": "369-166652d2-aed6-443c-9781-6bdf370f9a9",
  "_text": "We will notify you when agent is available"
}

Push Notification Data:
{
  "id": "01afcd60258a11e300006072543ed1ff",
  "message": {
    "_action": "get-dialog-user-confirmation-provide_code-false",
    "_id": "369-166652d2-aed6-443c-9781-6bdf370f9a9"
  },
  "tag": "service.agentavailable.369-166652d2-aed6-443c-9781-6bdf370f9a9"
}
```

---

## Connect (user confirmation)

```
Request URL:http://localhost:8080/genesys/1/service/369-166652d2-aed6-443c-9781-6bdf370f9a9/connect
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:*/*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:44
Content-Type:multipart/form-data; boundary=---WebKitFormBoundaryNY84ld7wm7oHB9fp
Cookie:JSESSIONID=1b81btxjbrblwybz5a93i24io; BAYEUX_BROWSER=86721orubxagcqhwhj14cpyaqk2
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundaryNY84ld7wm7oHB9fp--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Length:26
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 07:04:35 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=mjjvtphwb8lpce7io23ggxcu;Path=/genesys

Response Body:
{
  "_dialog_id": "1",
  "_action": "StartChat",
  "_label": "Start Chat",
  "_start_chat_url": "http://localhost:8080/genesys/1/service/369-8cea2901-1eba-4f5a-8c76-edf83dd26480/ixn/chat",
  "_comet_url": "http://localhost:8080/genesys/cometd",
  "_user_header": "b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673",
  "_id_to_jump_before": "exit://",
  "_chat_parameters": {
    "subject": "None"
  }
}
```

```

    },
    "_id": "369-166652d2-aed6-443c-9781-6bdff370f9a9"
  }
}

```

## Check estimated wait time (EWT) and position in the URS queue (check-queue-position)

Mobile is expected to use this API to poll for current ewt and position.

```

Request URL:http://localhost:8080/genesys/1/service/369-166652d2-aed6-443c-9781-6bdff370f9a9/check-queue-position
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:*//*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:44
Content-Type:multipart/form-data; boundary=---WebKitFormBoundary2gBrAJX9qPSafKwk
Cookie:JSESSIONID=61voqouznyaslvrp9fj1jmbwr; BAYEUX_BROWSER=f3d8-3vwgdc1vyroghjsaf87i1c60
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundary2gBrAJX9qPSafKwk--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Length:123
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Fri, 02 Aug 2013 23:07:59 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=1co1o30bhrm6719u8lfv9kvpei;Path=/genesys

```

Response Body (when eta is NOT provided by URS):

```

{
  "_position": 2,
  "_eta": "n/a",

```



```

    "_total_waiting": 2,
    "_agent_ready_threshold_passed": true,
    "_agent_ready_threshold_passed_reason": "eta n/a"
}
Response Body 2 (when eta is provided by URS):
{
  "_position": 2,
  "_eta": 30,
  "_total_waiting": 2,
  "_agent_ready_threshold_passed": true,
  "_agent_ready_threshold_passed_reason": "eta <= 35 and position <=5 "
}

```

## Create Chat Interaction

```

Request URL:http://localhost:8080/genesys/1/service/369-166652d2-aed6-443c-9781-6bdf370f9a9/ixn/chat
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:/*/*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:651
Content-Type:multipart/form-data; boundary=---WebKitFormBoundaryteXJ8ZpAGGDTAMFN
Cookie:JSESSIONID=kwe77jz60uumlu16urv8vubd; BAYEUX_BROWSER=86721orubxagcqh0hj14cpyaqk2
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundaryteXJ8ZpAGGDTAMFN
Content-Disposition: form-data; name="notify_by"

comet
-----WebKitFormBoundaryteXJ8ZpAGGDTAMFN
Content-Disposition: form-data; name="firstName"

John
-----WebKitFormBoundaryteXJ8ZpAGGDTAMFN

```

---

```
Content-Disposition: form-data; name="lastName"
```

```
Harry
```

```
-----WebKitFormBoundaryteXJ8ZpAGGDTAMFN
```

```
Content-Disposition: form-data; name="_verbose"
```

```
false
```

```
-----WebKitFormBoundaryteXJ8ZpAGGDTAMFN
```

```
Content-Disposition: form-data; name="subject"
```

```
testing
```

```
-----WebKitFormBoundaryteXJ8ZpAGGDTAMFN
```

```
Content-Disposition: form-data; name="email"
```

```
j.h@gmail.com
```

```
-----WebKitFormBoundaryteXJ8ZpAGGDTAMFN--
```

```
Response Headersview source
```

```
Cache-Control:no-cache
```

```
Cache-Control:no-store
```

```
Content-Length:77
```

```
Content-Type:application/json;charset=UTF-8
```

```
Content-Type:text/plain;charset=ISO-8859-1
```

```
Date:Tue, 30 Jul 2013 07:08:53 GMT
```

```
Pragma:no-cache
```

```
Response Body:
```

```
{
  "_id": "369-166652d2-aed6-443c-9781-6bdff370f9a9",
  "comet_channel": "/_genesys"
}
```

## Send notification from agent desktop to mobile (internal-notification, previously poke)

```
Request URL:http://localhost:8080/genesys/1/service/369-166652d2-aed6-443c-9781-6bdff370f9a9/internal-notification
```

```
Request Method:POST
```

```
Status Code:200 OK
```

```
Request Headersview source
```

```
Accept:/*/*
```

```
Accept-Encoding:gzip,deflate,sdch
```

```
Accept-Language:en-US,en;q=0.8
```

```
Connection:keep-alive
```

---

---

```
Content-Length:320
Content-Type:multipart/form-data; boundary=----WebKitFormBoundary8rbhQqxP5LoJ61i1
Cookie:JSESSIONID=kwe77jz60uumlu16urv8vubd; BAYEUX_BROWSER=86721orubxagcqh0hj14cpyaqk2
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundary8rbhQqxP5LoJ61i1
Content-Disposition: form-data; name="_display_message"

Message to be displayed to user
-----WebKitFormBoundary8rbhQqxP5LoJ61i1
Content-Disposition: form-data; name="_application_message"

MESSAGE_FOR_MOBILE_APP_INTERNAL_USE
-----WebKitFormBoundary8rbhQqxP5LoJ61i1--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Length:17
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 07:10:11 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=z1lrha8utmxw1xslu08z473ty;Path=/genesys

Response Body:
{
  "message": "Notification Sent"
}
```

## Retrieve any notifications from agent, when notifications are not enabled (retrieve-notifications)

This is necessary only in case of a poll scenario.

```
Request URL:http://localhost:8080/genesys/1/service/369-166652d2-aed6-443c-9781-6bdf370f9a9/retrieve-notifications
Request Method:POST
Status Code:200 OK
```

---

---

```
Request Headersview source
Accept: */*
Accept-Encoding: gzip, deflate, sdch
Accept-Language: en-US, en; q=0.8
Connection: keep-alive
Content-Length: 44
Content-Type: multipart/form-data; boundary=---WebKitFormBoundary3I4BzfVbhmlJvPRC
Cookie: JSESSIONID=z1lrha8utmwxlwslu08z473ty; BAYEUX_BROWSER=86721orubxagcqhwhj14cpyaqk2
gms_user: b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host: localhost:8080
Origin: http://localhost:8080
Referer: http://localhost:8080/gmstester/chat.html
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundary3I4BzfVbhmlJvPRC--
Response Headersview source
Cache-Control: no-cache
Cache-Control: no-store
Content-Length: 2
Content-Type: application/json; charset=UTF-8
Content-Type: application/json; charset=UTF-8
Date: Tue, 30 Jul 2013 07:10:58 GMT
Expires: Thu, 01 Jan 1970 00:00:00 GMT
Pragma: no-cache
Set-Cookie: JSESSIONID=18gvvxkjquop1x8er65g7ferp; Path=/genesys
```

Response Body (with push enabled):

```
[]
```

Note: Since CometD push was enabled the message was already sent to the device. If push was not configured then the response body would have contained the message (below)

```
Push: {
  "_internal_message": "MESSAGE_FOR_MOBILE_APP_INTERNAL_USE",
  "_id": "369-166652d2-aed6-443c-9781-6bdf370f9a9",
  "_display_message": "Message to be displayed to user"
}
```

Response Body (with push not configured):

```
[{
  "_internal_message": "MESSAGE_FOR_MOBILE_APP_INTERNAL_USE",
  "_id": "369-166652d2-aed6-443c-9781-6bdf370f9a9",
  "_display_message": "Message to be displayed to user"
}]
```

---

```
}]
```

## Send notification from mobile to agent

```
Request URL:http://localhost:8080/genesys/1/service/369-166652d2-aed6-443c-9781-6bdf370f9a9/agent-notification
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:*/*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:324
Content-Type:multipart/form-data; boundary=----WebKitFormBoundaryN11ULST36Tmhzro
Cookie:JSESSIONID=18gvvxkjquoplX8er65g7ferp; BAYEUX_BROWSER=86721orubxagcqhW0hj14cpyaqk2
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundaryN11ULST36Tmhzro
Content-Disposition: form-data; name="_display_message"

Message to be displayed to agent
-----WebKitFormBoundaryN11ULST36Tmhzro
Content-Disposition: form-data; name="_application_message"

MESSAGE_FOR_AGENT_DESKTOP_INTERNAL_USE
-----WebKitFormBoundaryN11ULST36Tmhzro--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Length:17
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 07:15:04 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=1cfd36s0cn6213lqge05h7y6l;Path=/genesys
```

---

---

Response Body:

```
{
  "message": "Notification Sent"
}
```

## Retrieve notifications from Mobile to Agent (retrieve-agent-notifications)

Agent desktop is expected to poll for messages since push notifications via cometd to agent desktop are not supported.

```
Request URL:http://localhost:8080/genesys/1/service/369-166652d2-aed6-443c-9781-6bdf370f9a9/retrieve-agent-notifications
Request Method:POST
Status Code:200 OK
Request Headersview source
Accept:*/*
Accept-Encoding:gzip,deflate,sdch
Accept-Language:en-US,en;q=0.8
Connection:keep-alive
Content-Length:44
Content-Type:multipart/form-data; boundary=---WebKitFormBoundaryIimjtpB6hZzFZRQ3
Cookie:JSESSIONID=1cfd36s0cn6213lqge05h7y6l; BAYEUX_BROWSER=86721orubxagcqhwh0hj14cpyaqk2
gms_user:b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
Host:localhost:8080
Origin:http://localhost:8080
Referer:http://localhost:8080/gmstester/chat.html
User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/27.0.1453.110 Safari/537.36
Request Payload
-----WebKitFormBoundaryIimjtpB6hZzFZRQ3--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Length:242
Content-Type:application/json;charset=UTF-8
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 07:16:17 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=1x5o3d8bkgczy1pxjb3dac0mpp;Path=/genesys
```

Response Body:

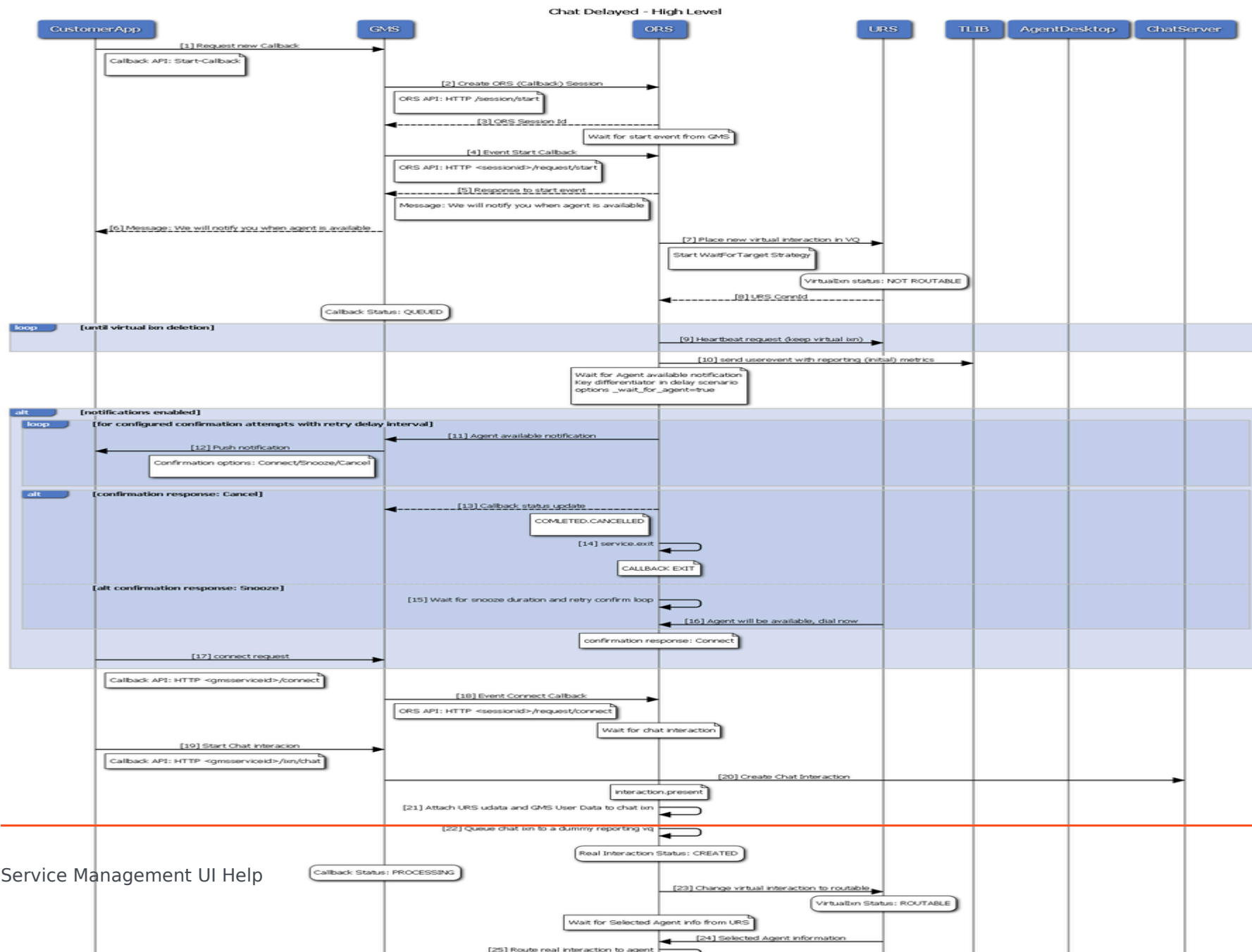
```
[
  {
```

---

```
"message": "{ \"_id\": \"369-166652d2-aed6-443c-9781-6bdf370f9a9\",
\"_internal_message\": \"MESSAGE_FOR_AGENT_DESKTOP_INTERNAL_USE\", \"_display_message\": \"Message to be displayed to agent\" }",
"tag": "agent.message.369-166652d2-aed6-443c-9781-6bdf370f9a9"
}
```

## Sequence Diagram

Click the diagram to access full resolution.





---

# Sample

This sample is a Javascript Web interface, available through the Service Management UI.

- This sample illustrates how to implement a Desktop/Mobile browser web application that communicates with GMS and performs supported contact scenarios. It is primarily meant to be used by developers as a reference to build a Javascript-based web application with GMS.
- To enable the sample in the Service Management UI, configure `enable-sample = true` in your GMS configuration.

## Important

You can also use this sample to test your GME deployment.

## Access the Web demo of the Sample

Make sure that GMS is started. By default, the **samples** template is loaded and a **samples** service should be available in the list of **Services**.

To access the sample, start the Service Management UI and navigate through **Services and Tools > Tools > Sample**.

You can try a list of scenarios (1) by selecting a scenario, (2) click Connect to submit your query to GMS.

The following screens are available by clicking the corresponding tabs.

- GMS - The application home screen showing which GMS scenario can be executed.
- Log - Displays log messages related to client-server communication and application debug messages.
- Queue - For delay scenarios, checks the status of the interaction in the queue (when a request has been placed and is waiting for an agent).
- Settings - Application settings can be made on this screen.

## Configure the Sample

**[+] See the list of configuration steps**

## Resource Group—Add Access Number

**Why:**

GMS provides this access number to the user, and the user dials into this access number.

**How:**

GMS Service Management UI

**Procedure:**

1. Go to the GMS Service Management UI > Tools > Resources.
2. Add the access number to the DNIS group.

## GMS Service—Create Service request-interaction

**Why:**

This service is responsible for receiving the GMS request and providing an access number to the user.

**How:**

GMS Service Management UI

**Procedure:**

1. Go to the GMS Service Management UI > Services > Configured Services.
2. Click Add Service.
3. Set Configure Service = request-interaction.
4. Set Service Name = request-interaction.
5. Click Save.

## GMS Service—Create Service match-interaction

**Why:**

This service helps to match a voice call with an existing GMS service

---

---

responsible for providing the access number.

**How:**

GMS Service Management UI

**Procedure:**

1. Go to the **GMS Service Management UI > Services > Configured Services**.
2. Click **Add Service**.
3. Set **Configure Service** = **match-interaction**.
4. Set **Service Name** = **match-interaction**.
5. Click **Save**.

## GMS Service—Create Service request-access

**Why:**

This service lets you:

- Create a new access to a service
- Allocate a new DN in the resource group

**How:**

GMS Service Management UI

**Procedure:**

1. Go to the **GMS Service Management UI > Services > Configured Services**.
2. Click **Add Service**.
3. Set **Configure Service** = **request-access**.
4. Set **Service Name** = **request-access**.
5. Click **Save**.

## Inbound SCXML Service—Voice

**Why:**

The inbound service matches the voice call with an existing GMS service. If a

---

matching service is found, the GMS user data is attached to the interaction, and the call is routed to the agent.

**How:**

- Configuration Manager > Switches > SIP\_Switch
- Configuration Manager > Scripts

**Procedure:**

1. Create a route point associated with the access number configured in the procedure [Resource Group Add Access Number](#).
2. Set Annex > Orchestration section > application = script:GMSInbound.Voice.GMSMatchBuiltin.
3. Create an enhanced routing script GMSInbound.Voice.GMSMatchBuiltin.
4. Set Annex > Application section > url = http://<gmshost:gmsport>/genesys/1/document/service\_template/callback/src-gen/IPD\_Voice\_GMSMatch.scxml.
5. In Annex > ApplicationParms, set:
  - app\_find\_agent\_timeout = 30
  - app\_match\_gms\_builtin = true.
  - app\_match\_target = <target> (Example: Customer\_Service@stat\_server.GA).
  - app\_no\_match\_target = <target> (Example: All\_Standard\_Agents@stat\_server.GA).
  - app\_require\_access\_code = false.
  - app\_require\_ani = true.
  - app\_treatment\_waiting\_for\_agent = <blank> (A blank value will force the service to use a packaged music file.).
6. Make sure that MSML capabilities are configured and working to play treatments. This step is required because this service includes play treatments, and has a dependency on Media Server.

## Interaction Workspace—Display GMS Attached Data

**Why:**

GMS attaches data to the call prior to routing it to the agent. This attached data is displayed to the agent when the call arrives at the agent desktop (Interaction Workspace), and helps the agent to understand the source of the call, as well as to understand the additional information sent from the customer's device when creating the Callback.

**How:**

---

## Configuration Manager > Business Attributes

1. Create a new business `GMSCaseData` attribute of type `Interaction Operational Attribute`.
2. Create new attribute values:
  - `first_name`
  - `last_name`
  - `location_lat`
  - `location_long`
  - `GMS_Call_Direction`
  - `GMS_MatchMethod_AccessNumber`
  - `GMS_MatchMethod_ANI`
  - `GMS_MatchResult`
  - `GMS_MatchReason`
  - `GMS_ServiceName`
  - `GMS_UserData`
3. Set the following `Application > InteractionWorkspace` options:
  - `interaction-workspace > interaction.case-data.format-business-attribute = GMSCaseData`
  - `interaction-workspace > toast.case-data.format-business-attribute = GMSCaseData`

## Implemented Scenarios

This sample supports the scenarios described in the [Callback Scenarios](#). These scenarios are server-driven, which means that the server instructs the client with the actions needed to carry out the scenario. The client just needs to perform these actions and the follow-up dialog with the server. Therefore, the client is flexible enough to support any scenario that is built using the same kind of actions. The following actions are supported:

- `DialNumber` - The app makes a phone call when running on a mobile browser.
- `ConfirmationDialog` - The app displays a message requesting the user to confirm a follow-up action.
- `DisplayMenu` - The app displays a menu for the user to select an item that may affect how the scenario proceeds.
- `get-dialog*` - Retrieves the dialog details and displays the dialog to the user. Dialogs are limited to alerts.

This sample also supports the `request-interaction` scenario.

Push notifications through CometD are supported. Delayed scenarios are supported by using push notifications only; the app will not poll the server to be notified about agent availability.

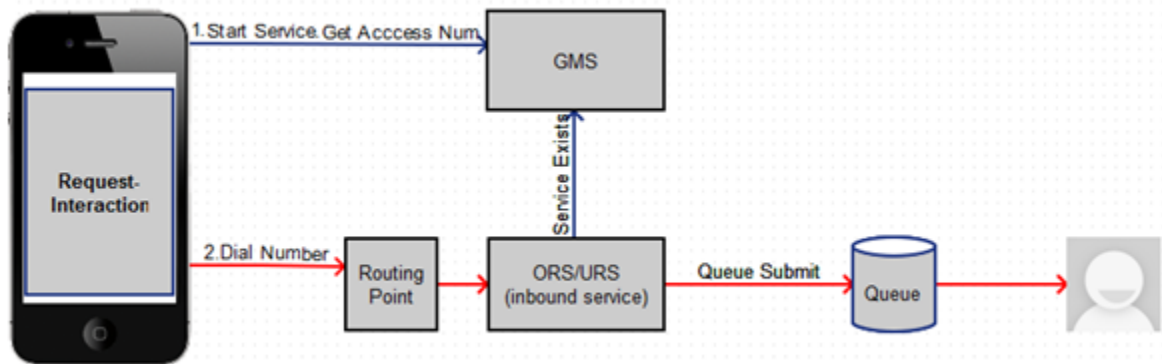
## Testing Built-in Scenarios

### [+] See the instructions to test the built-in scenarios

#### Important

In the following scenarios, if the GMS Match fails, there will be no user data attached to the interaction.

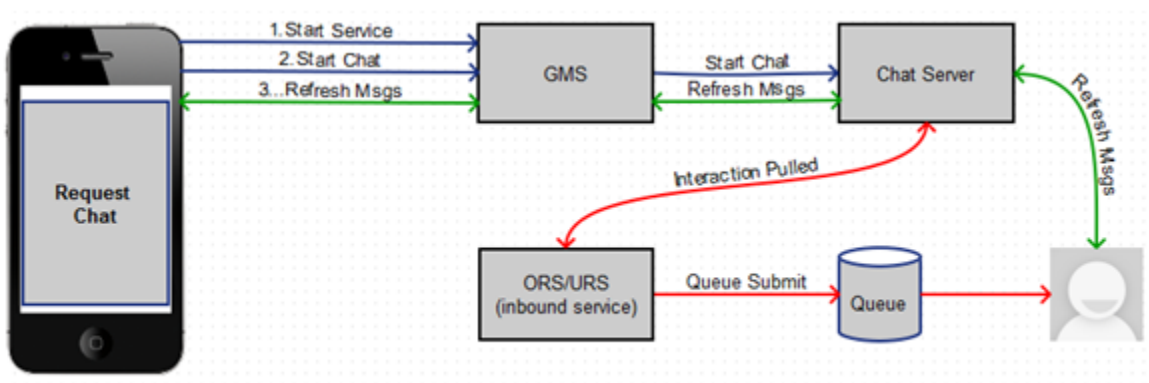
## Scenario request-interaction Test Procedure



1. On the Agent Desktop:
  - Log in agent.
  - Make voice ready.
2. Using the Javascript sample: Service Management UI > Lab > Sample:
  - Log in agent and make voice ready.
  - Set Contact# = <customer phone from which call will be dialed>
  - Set Scenario = REQUEST-INTERACTION
  - Click Connect.
  - Dial displayed Number to Call.
3. Expected result:

- Treatment is played.
- Call is routed to agent.
- Toast is displayed with attached data.
- Call is connected to agent.
- For a successful GMS call, `GMS_MatchResult = SUCCESS` is displayed in the agent desktop as attached data.

## Scenario request-chat Test Procedure



1. Agent Desktop
  - Log in agent.
  - Make chat ready.
2. Using the Javascript sample: Service Management UI > Lab > Sample:
  - Set Scenario = REQUEST-CHAT
  - Click Connect.
3. Expected result:
  - GMS app displays chat tab.
  - Chat interaction is routed to agent.
  - Toast is displayed with attached data.
  - Chat is connected to agent.
  - GMS app shows agent has joined chat.
  - Agent desktop shows customer has joined chat.
  - On a successful GMS call `GMS_MatchResult = SUCCESS`
  - Customer and agent can now exchange messages.

## Compiling and Running the Sample

### Important

This step is required only if you download the code sample in order to modify the source code.

### Prerequisites

In order to use this sample app, you need to have GMS installed and running, and the services that you want to make use of must be deployed. The source code of this sample is available via a downloadable zip file: [Genesys Mobile Services JavaScript Sample Zip File](#)

### Access the Sample

1. Download and unzip the .zip file from the above link.
2. Check the **readme.md** file in the unzipped files for the details on starting the sample and configuring it.

### Important

- The CometD client is automatically started when the application loads in the browser.
- Make sure that your URL starts with the value specified in GMS > Server > `external_url_base` when you access the Service Management UI.

### About the Code

The majority of the code is in two files:

- `index.html` - Controls the presentation aspects of the application, which includes the GMS response handler.
- `gms.js` - Responsible for interfacing with GMS and as well as managing the CometD connection.

#### `index.html`

The following screens are presented to the user and can be displayed by clicking the corresponding tabs.

- GMS - The application home screen showing which GMS scenario can be executed.



- 
- Log - Displays log messages related to client-server communication and application debug messages.
  - Queue - For delay scenarios, checks the status of the interaction in the queue (when a request has been placed and is waiting for an agent).
  - Settings - Application settings can be made on this screen.

## gms.js

Two objects are implemented in this file:

- gmsInterface - Allows the creation of GMS callback services and delegates responses to `index.html::onResponseRecieved`.
- gmsNotificationClient - Responsible for starting the CometD client and connecting to the GMS CometD channel. When the message is received, the callback function `index.html::onCometNotification` is invoked.

## Disclaimer

THIS CODE IS PROVIDED BY GENESYS TELECOMMUNICATIONS LABORATORIES, INC. ("GENESYS") "AS IS" WITHOUT ANY WARRANTY OF ANY KIND. GENESYS HEREBY DISCLAIMS ALL EXPRESS, IMPLIED, OR STATUTORY CONDITIONS, REPRESENTATIONS AND WARRANTIES WITH RESPECT TO THIS CODE (OR ANY PART THEREOF), INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. GENESYS AND ITS SUPPLIERS SHALL NOT BE LIABLE FOR ANY DAMAGE SUFFERED AS A RESULT OF USING THIS CODE. IN NO EVENT SHALL GENESYS AND ITS SUPPLIERS BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, ECONOMIC, INCIDENTAL, OR SPECIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, ANY LOST REVENUES OR PROFITS).