GENESYS™

Service Management UI Help

Genesys Mobile Engagement 8.5.0

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Service Management User Interface

Genesys Mobile Services (GMS) includes a Service Management User Interface, where you can:

- Load and manage service templates.
- Add, delete, and modify a GMS service.
- Perform simple testing to verify a GMS service.
- Manage Resource groups.
- Manage Call Center operating hours and holiday schedules.
- Manage Callbacks, and manage the exception list for Callback services.
- Run reports.
- Access Samples.
- Download DFM files.

Getting Started

The following sections provide an overview of the UI.

Login

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

The UI hub displays all of the UIs available to the user based on their roles. The Hub is the *home* of the UIs; you can return to the hub from any UI by clicking *Home*.

Use the login credentials that were configured during the Creating and Configuring the GMS Application Object procedure. For example, *default/password.* Your access will also depend on the role-based access that was configured in the same procedure.

Browser support is listed in the Genesys Supported Operating Environment Reference Guide.

Monitor

The *Monitor* tab displays the current health of the GMS nodes, and is the first screen that appears after logging into the UI.

The following figure shows an example of two GMS nodes. The green bar on the left shows that the system status of one node is *up*. The red bar reflects a *down* system status for the other node. You can remove the down node from the GMS cluster by using the **X** button, as shown in the upper right. Important: If a node goes down for more than 45 minutes, you should remove it from the cluster.

The *Monitor* screen refreshes every three minutes.
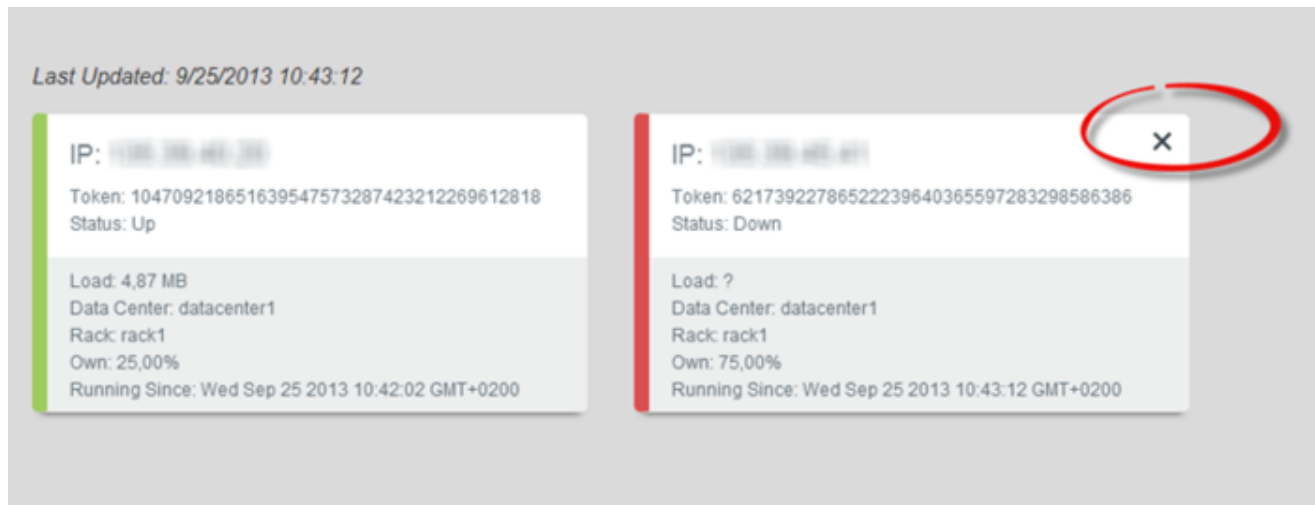
Services

The *Services* tab enables you to manage Callbacks, and to manage the service templates, which contain defined parameters. Before you can get started managing the services, you must first load the service templates through the **Tools** tab. Once a service template has been loaded, the *Services* tab has the following features:

Configured Services

The service templates that you loaded will be available in the drop-down list on the right. You can now add, and then manage your services based on the templates. The services and categories can be collapsed or expanded for easier viewing, and you can set the quantity of services per page. (For a Chrome browser, Genesys recommends 10 services per page, and for Mozilla, 5 services per page.)

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`

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. 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 on the *X* on the right side.

- Advanced parameters - can be hidden by selecting the check box in the upper right.

- Request parameters - are identified with an *i* icon, which displays a hint when your cursor hovers over it.

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 on the garbage can icon and the value becomes *not specified.*

The following figure shows an example of a service.
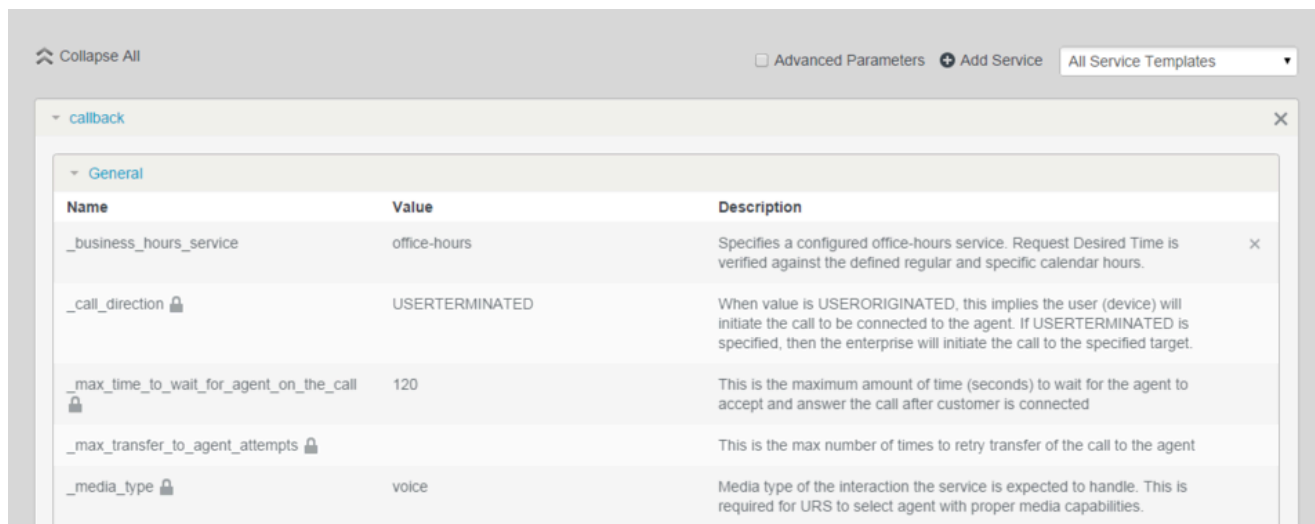
Callback

The *Callback* UI displays completed and scheduled Callbacks.

Notes:

- 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).

- You must have the appropriate role-based access in order to view the Callback UI.

The following features are available:

- The dropdown 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.

- Custom Date Range - You can select a custom range by selecting this check box and specifying a start-time and end-time. The maximum range is one month.

- Include Service ID Column - Selecting this check box includes the Service ID column in the table.

- Create Callback - Opens a new window where 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 Configuration Manager), as it cannot be defined in both places.

- `_request_queue_time_stat` - Queue statistics. For example, "ExpectedWaitTime;Queue;8999@SIP_Server;Environment".

Note: Make sure that the selected service has the parameter `_wait_for_user_confirm = false`.

- 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.

  - 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. The states are:

    - 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 agent in ORS/URS; 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.

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

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

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

  - You can choose to cancel the Callback.

Reporting

The *Reporting* tab 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 detail.

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** tab.

- 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 water marks (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.

Tools

Patterns

The *Patterns* tab enables you to configure exceptions; for example, phone numbers. The *Help* button displays the format for the expressions.

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.

Resources

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.

Service Templates

The *Service Templates* tab enables you to load the predefined templates that are included with GMS, or you can load your own service templates. The GMS service templates are located in the *<GMS installation directory>/service_templates* directory. After uploading the templates, you can configure the services in the **Services** screen. The following templates are available:

- callback.zip
- match-interaction.zip
- office-hours.zip
- request-access.zip
- request-chat.zip

- request-interaction.zip
- get.zip

Download DFM

The *Download DFM* tab enables you to download special configuration files, called DFM. (**Tell me why.**

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.
)

1. In your browser, open the Service Management UI with the following URL:
   `<GMS Local Host>:8080/genesys/`

2. Click `Admin UI` .

3. Select , then click . The Download DFM panel displays the list of
   required files.

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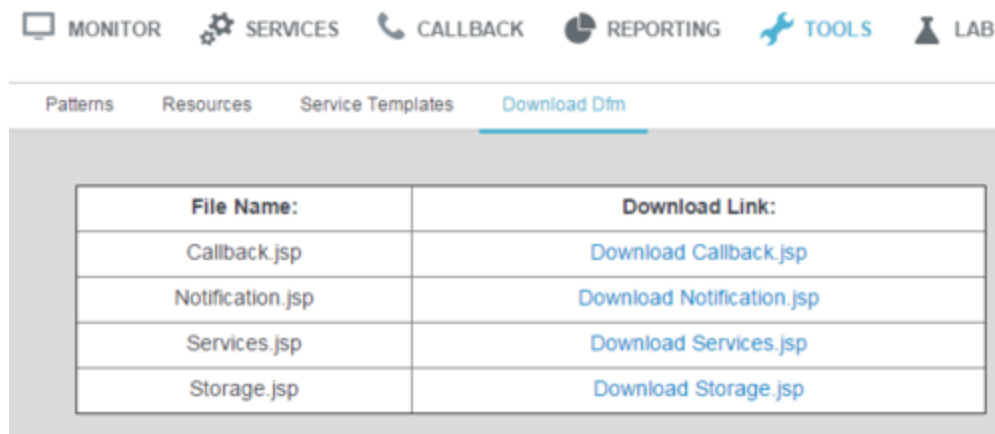
Lab

> **Important**
>
> The Lab area of the UI is for testing purposes and is provided "as is" without warranty of any kind.

Statistics

The *Statistics* tab displays metrics from Stat Server.
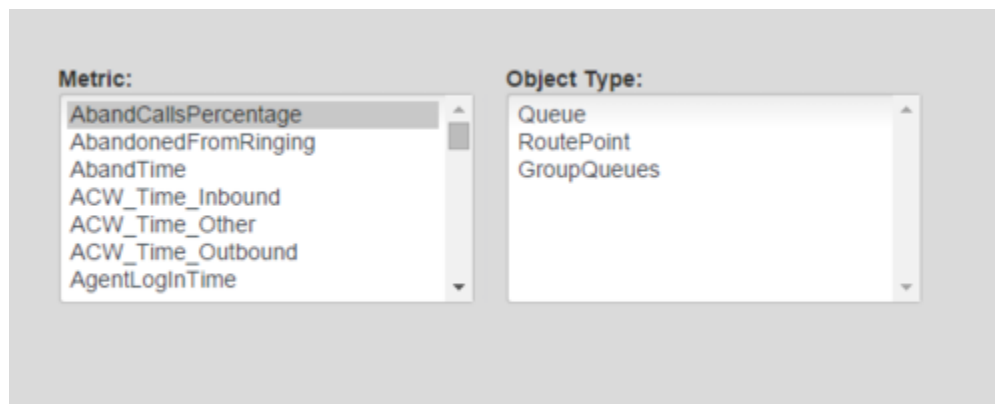
API

The *API* tab is a tool that enables you to test your services, such as having access to the request and response headers, and seeing how the response changes based on different arguments. Click on the

service > URL to expand it, enter your values, and then click *Try it out!* You can also view the source code by clicking *Raw.*

Config

The *Config* tab provides you with a code snippet that you must add to the `jetty.xml` file for port number control. The code snippet is available when port restrictions have been enabled in Configuration Manager. See Restricting Ports for more information about using this feature.
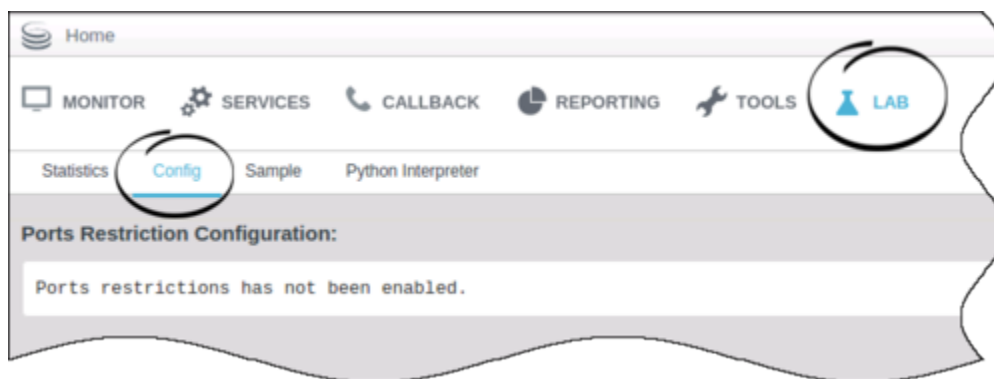
Sample

Note: Introduced in GMS 8.5.003.

The *Sample* tab provides you with the ability to test your GMS deployment, and supports the scenarios described in the Callback Scenarios. This sample can also be used to test an existing GMS deployment.

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.

- `Chat` - Allows exchange of chat messages between client and agent. Notices relating to agent status and connections are also displayed.

- `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.

For more information about the sample, as well as a download option, see the Client Samples.

Scenarios

GMS Built-in

These services are executed in the Genesys Mobile Services server. They provide a specific business oriented functionality that can be tuned through configuration options. This service is used by external applications. Note: For all types of services, the gms_user HTTP Header is stored as part of the service data.

- Request-interaction (Simple Voice Inbound-Immediate Call)
- Get Service (Load Balancing Service) and Basic Get Service

Call Matching Services

These are services that provide a utility or composite Access Information related functionality to other services or applications. They are to be used in conjunction with the business services.

- Match-interaction
- Request-access

Access Number Allocation Call Flows

- Access Number Allocation Call Flows No Locking and Locking

Callback Services

The Callback services are executed in the Orchestration server, and managed in the Genesys Mobile Services server. See the *Callback User's Guide* for information about these scenarios.

Access Number Allocation Call Flows

No Locking

DNIS only - no match is done here
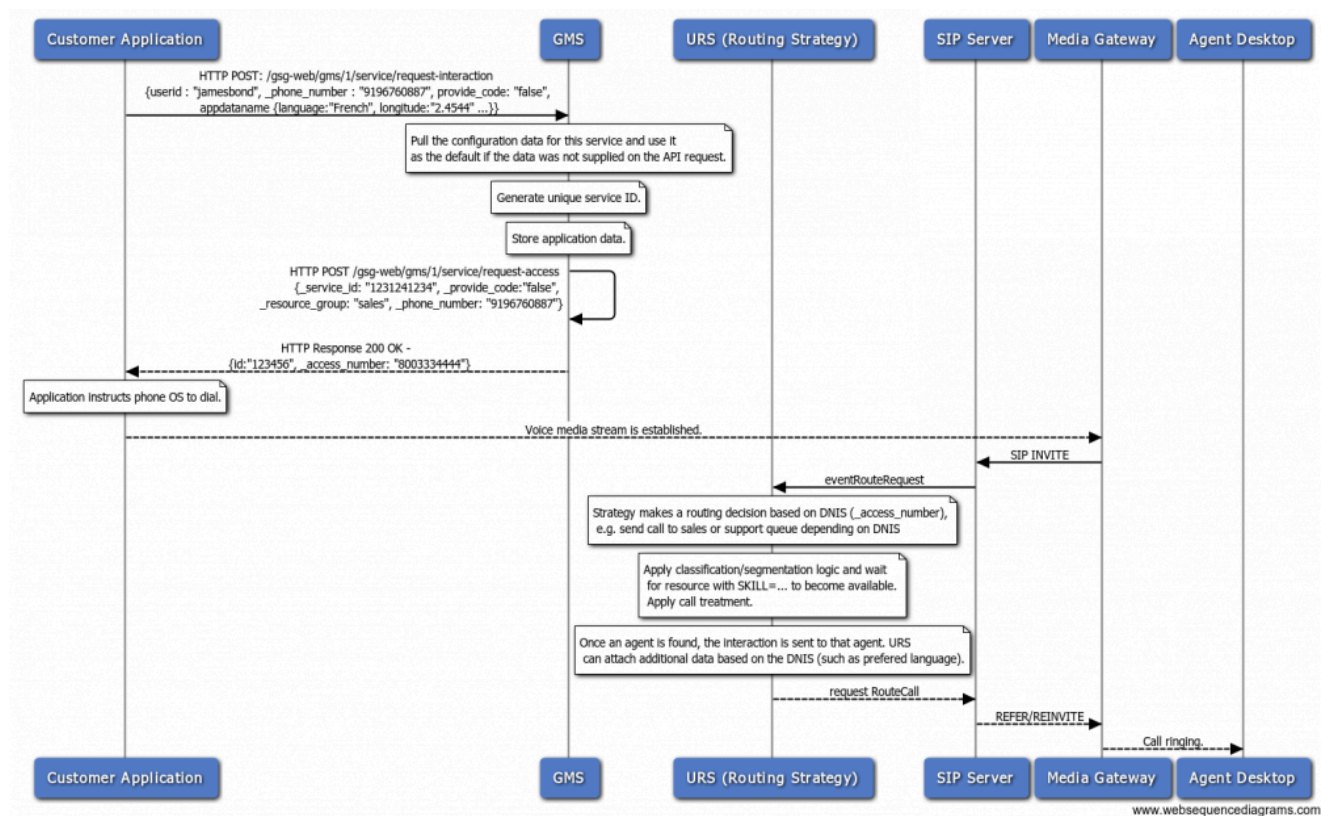
Match DNIS + ANI
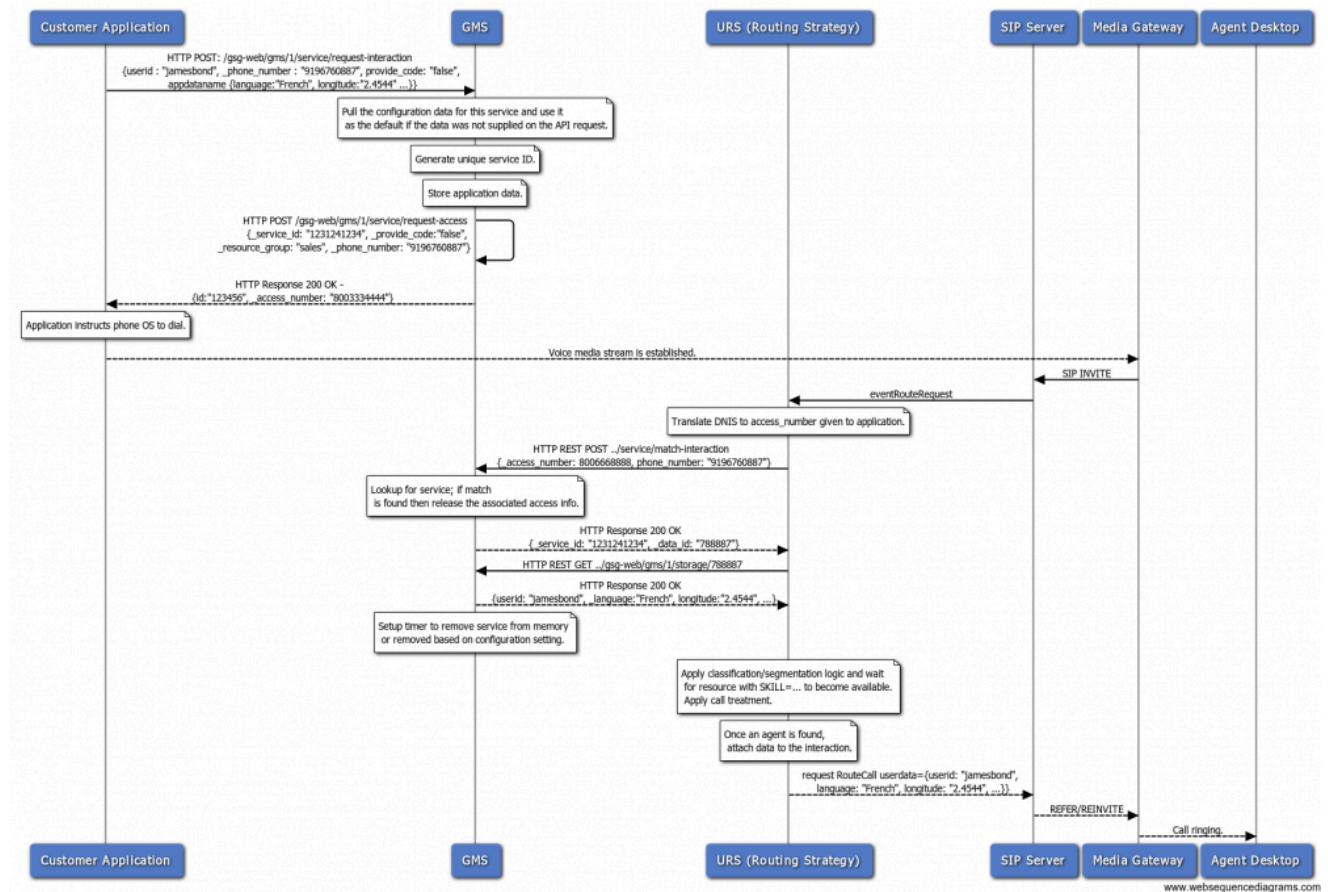
Match DNIS + Access Code
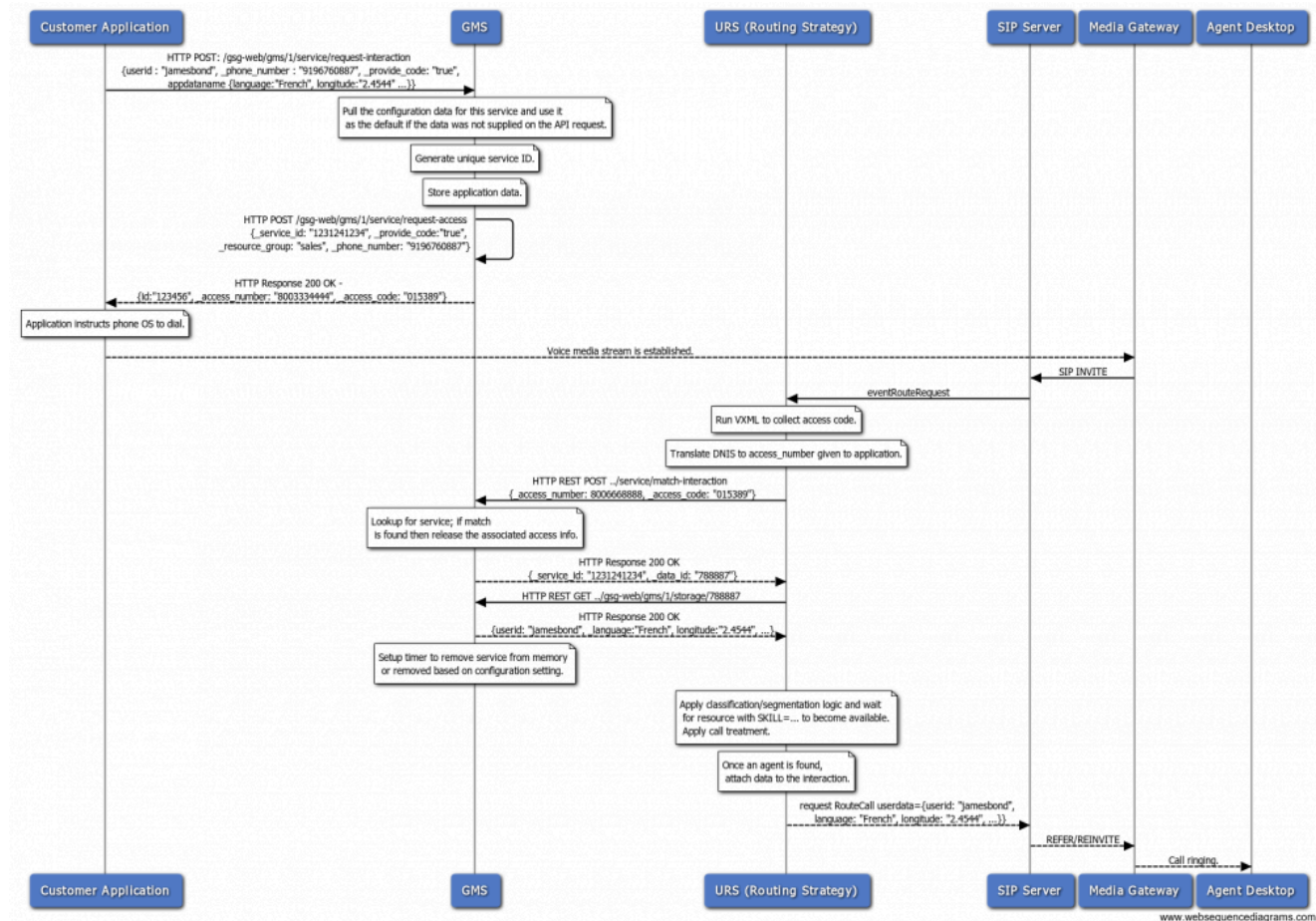
No Match
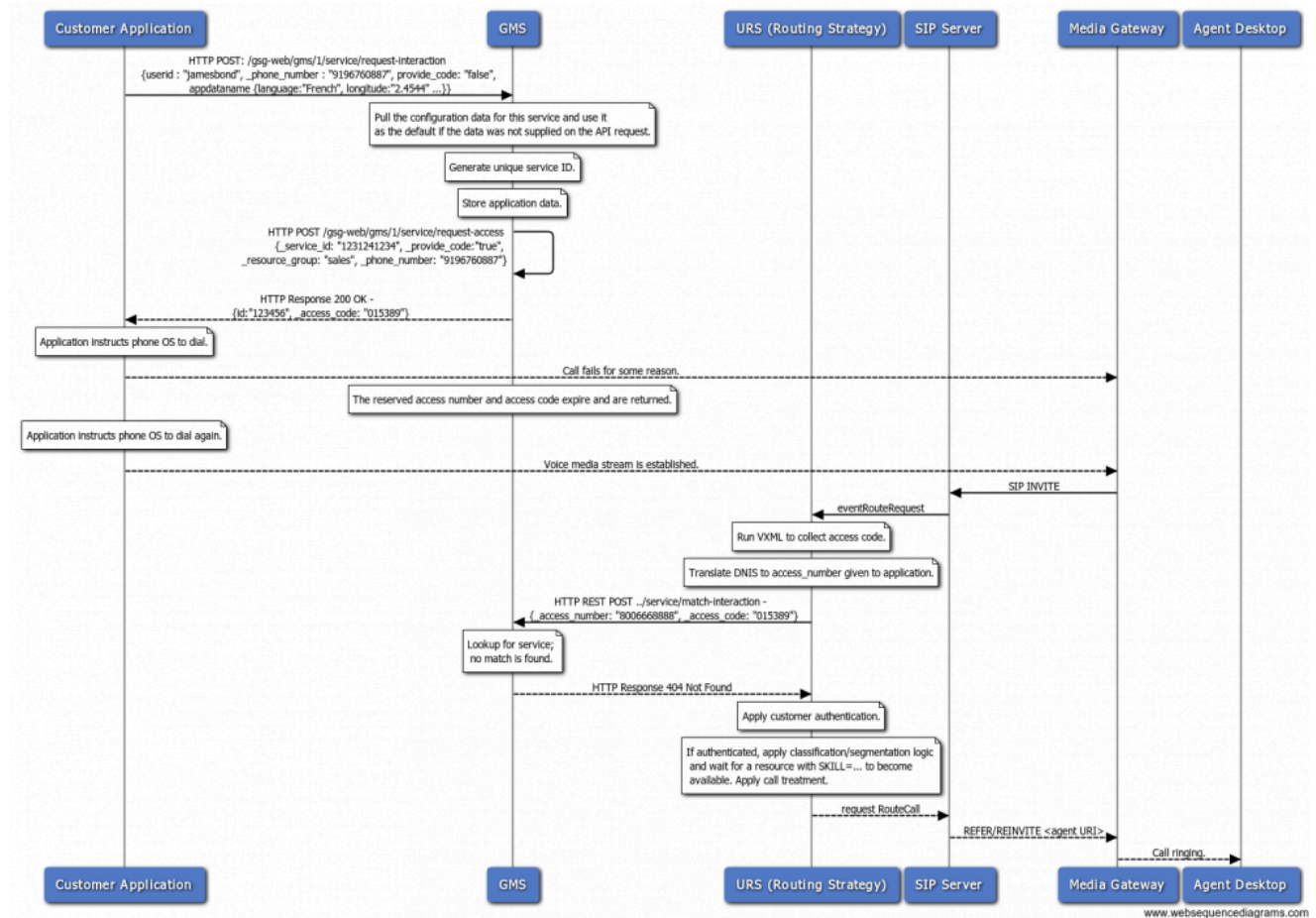
Locking

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.

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.

Sequence Diagrams

request-interaction - No Delay
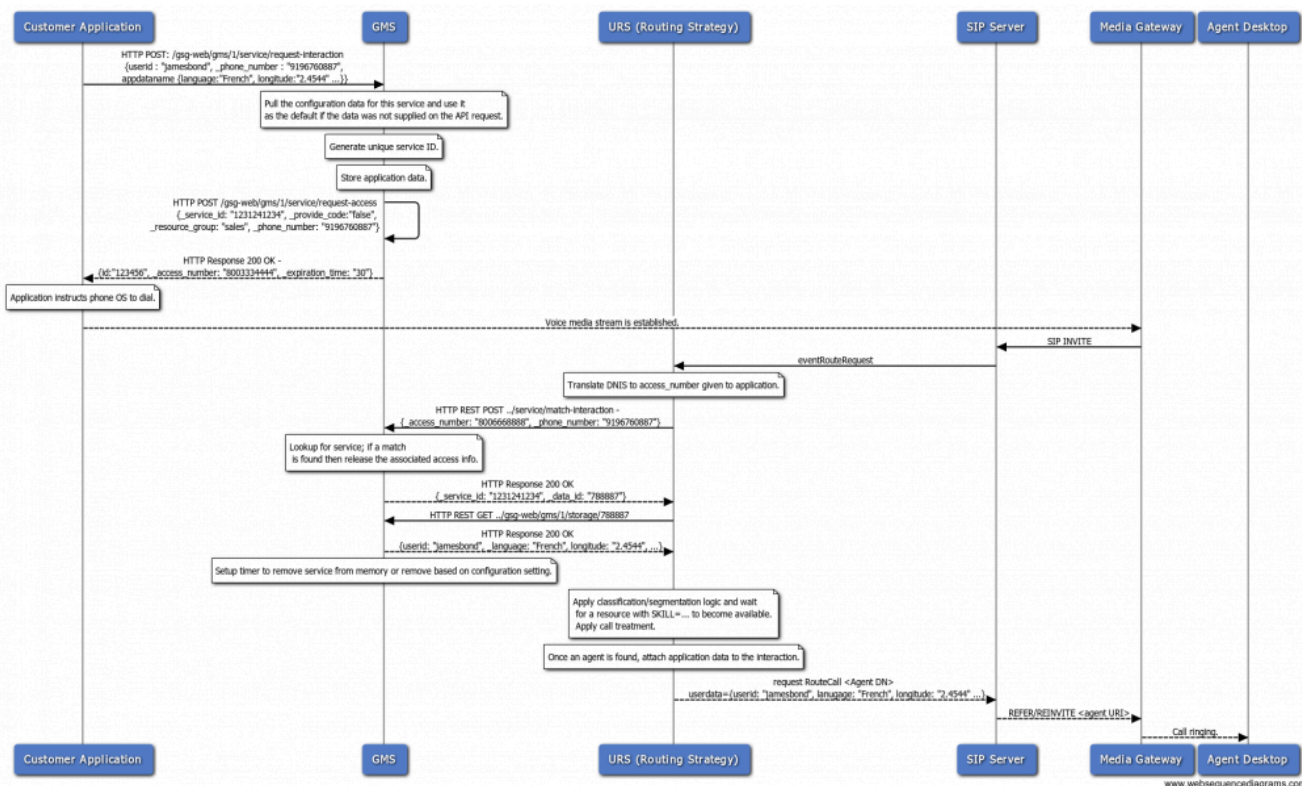
request-interaction - No Delay, access code
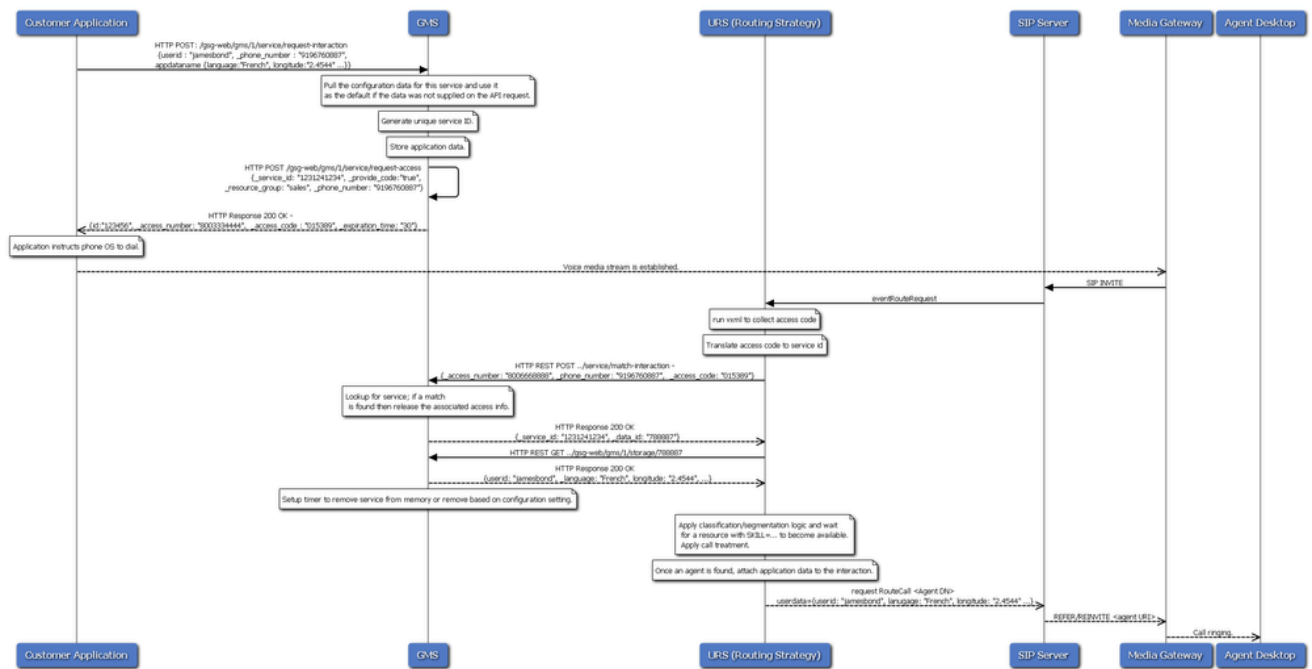
Request, Response, and Events Reference

Create Request Data

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

Parameters	Mandatory	Description
_phone_number	Yes	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 the value will be false.

Parameters	Mandatory	Description
_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

Customers can customize their own services based on the request-interaction service. The way you do this is by defining your custom service in Configuration Manager. You create a section under the services section in the GMS application object as the name of your service. You then specify the configuration options and appropriate value for your service. Most of these options are parameters that will be passed to an 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: You can create an iPhoneService section under the services section and set the following configuration options:

Option	Value
_type	built-in
_name	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
------WebKitFormBoundaryy16qocbN6tmPORZL
```

Configuration Options

The following are the configuration options that can be defined for a customized service based on the request-interaction service: Note: if one of the request-interaction parameters is passed on Create API for a customized version of the service, the configuration option value will supercede the passed

value (that is, it will be ignored).

Option	Type	Mandatory	Value	Description
_type	string	true	builtin	This is the type of service that will be used. The values can be either built-in or ors.
_service	string	true	request-interaction	This will always be "request-interaction" for basic related services.
_ttl	int	false	user defined - if not provided, the default will be 30	This specifies the default time to live for all stored data.
_resource_group	string	true	{none}	Specifies the name of the resource group from which to select a resource.
_provide_code	boolean	false	user defined - if not provided, the default will be false	If enabled, the service returns an access code that may be used to identify the inbound call

Get and Basic Get Services

Get Service

This is a *Get* service that returns node information. You can use the *Get* service (with 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
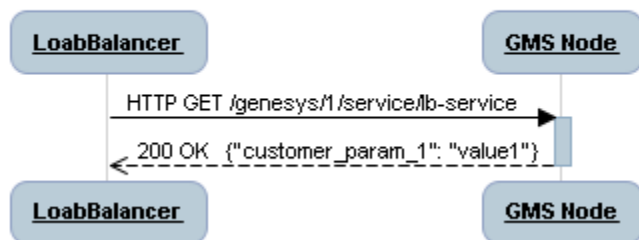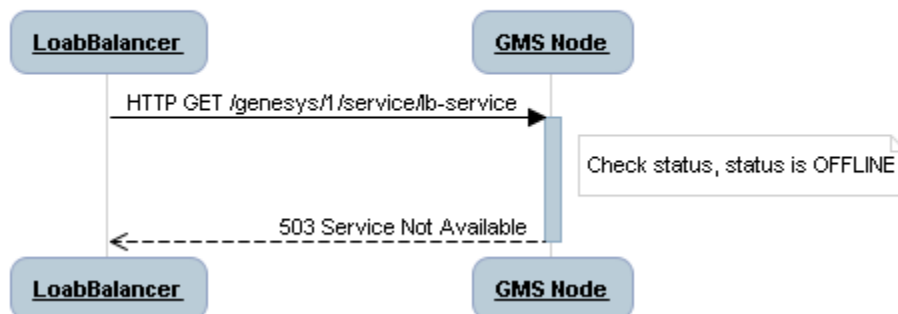
Change GMS status
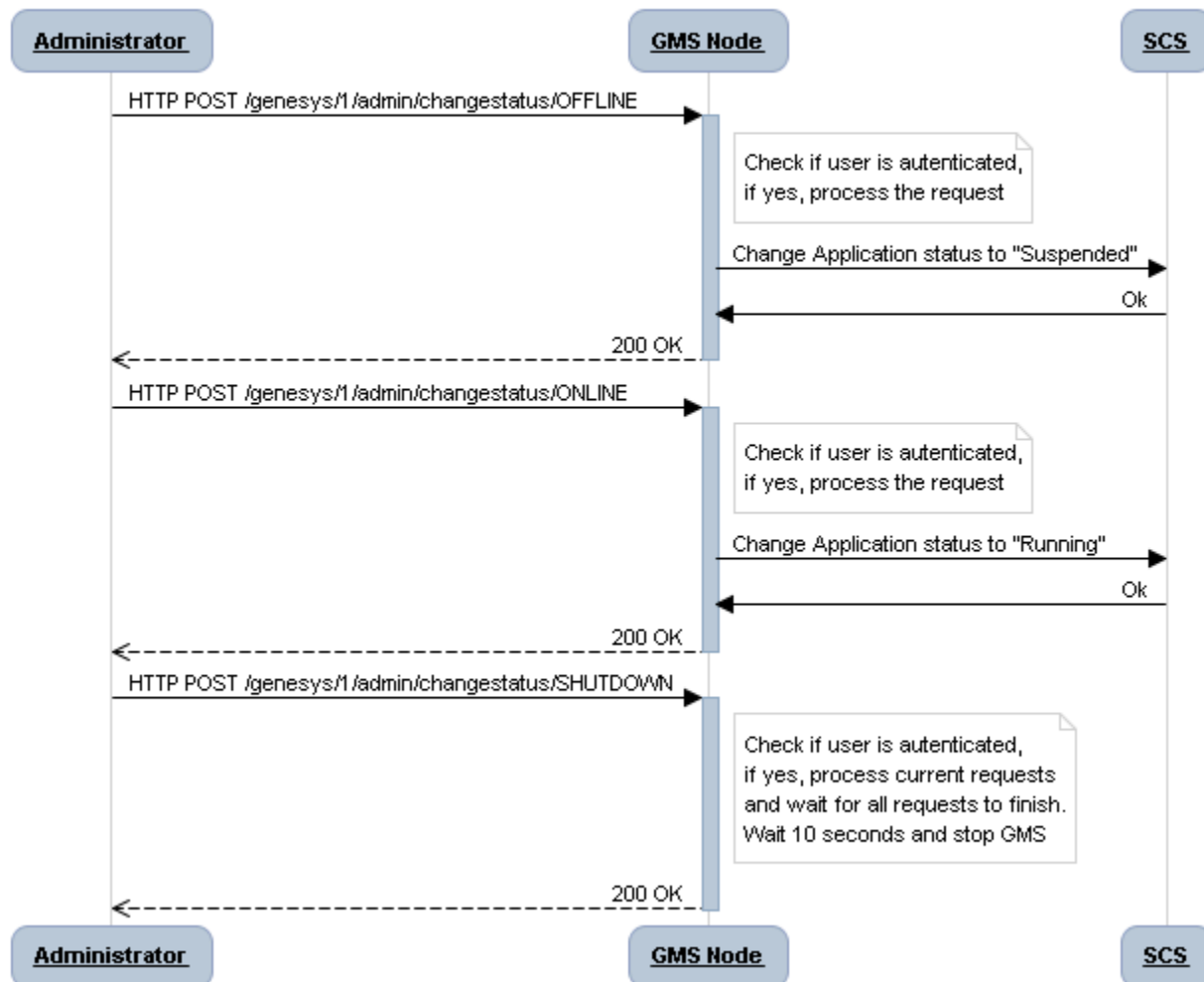
Configuration

Using the GMS Service Management User Interface, load the Get service template, and configure the Get service.

Required get Options

Option Name	Option Value	Description
_type	builtin	Type of service.
_offline_code	503	HTTP code to return when GMS is OFFLINE (default is 503).

Option Name	Option Value	Description
_online_code	200	HTTP code to return when GMS is ONLINE (default is 200).
_service	get	Service name.
custom_parameter_1	value1	Available for custom values. Note: Do not use a leading underscore with the custom parameters. Custom parameters with leading underscores will not be returned in responses from the service.
custom_parameter_2	value2	Available for custom values. Note: Do not use a leading underscore with the custom parameters. Custom parameters with leading underscores will not be returned in responses from the service.

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.

Note: 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

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

Response

HTTP code	200
HTTP message	OK

Get Node Status

Operation

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

Response

HTTP code	200
HTTP message	OK
Body	A JSON object with list of defined parameters

Example

```
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
Server: Jetty(7.6.0.v20120127)
{"custom_parameter_1":"value1","custom_parameter_2":"value2"}
```

Basic Get Service

(Introduced in GMS 8.5.000.08.)

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
_service	`basic_get`	Service name.
_type	builtin	Genesys Mobile Services-based services.
error_code	404 Not Found	HTTP error code.
result	404	HTTP response code.

Where:

Option name	Option type	Restriction on value	Description
result	String	Mandatory Valid values: 200,401,403,404,503, and so on.	A valid HTTP response code (http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html). If result=200, the response body will contain a JSON list of options defined in Configuration Manager (options that do not have a leading underscore, for example, `error_code` or `result`).

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"
}
```

Match-interaction

Overview

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.
- The service will always release, the matched service access information will be unreserved (access resources returned).

Note: The user of this service must 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
_phone_number	No	This is the phone number of the party that is calling and will be matched against the _phone_number property of the services.
_access_number	Yes	This is the number that the party called and will be matched against the _access_number property associated with the services.
_access_code	No	This is the code assigned to the party that is calling will be matched against the _access_code property assigned to the services.

Create Response Data

Parameters	Mandatory	Description
_id	Yes	This is the id of the matching service.
_data_id	Yes	This is the id of the matching service's data that is in GMS Storage.

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	Type	Mandatory	Default	Description
_type	string	true	builtin	This is the type of service that will be used. This will always be builtin.
_name	string	true	match-interaction	This is the name of the matching service.

Request-access

Overview

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 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.

Create Request Data

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

Parameters	Mandatory	Description
_id	Yes	This is the identifier of the service which the allocated access information should be associated with.
_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. The default is false.
_phone_number	No	This is the phone number that is to be associated with the reserved access information.
_resource_group	Yes	This is the resource group from which an available access number will be taken.
_booking_expiration_timeout	No	This is the resource _booking_expiration_timeout used to book the resource. This parameter will override the value in Resource options and in CME options.

Create Response Data

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	Yes	This is the amount time 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.

Configuration

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

Option	Type	Mandatory	Default	Description
_access_code_length	int	false	6	This is the length of the access code which can be allocated.

User Originated Immediate

Overview

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

Start Callback

- Callback service: Returns access information immediately to the mobile device.

- Callback service: Waits for voice call to arrive.

- Next: 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 target is available.

- Callback service: Reserves target to route call.

- Callback service: Routes the call to the target.

- Callback service terminates.

Configuration Options

The table below lists 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 *User-Originated-Immediate* as the Common Default Configuration (see Adding a 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.

Category	Option	Value	Comment
General	_call_direction	USERORIGINATED	These are the default values, which are automatically populated when using the pre-defined *User-Originated-Immediate* service. You must not change these values.
	_media_type	voice	
	_wait_for_agent	false	
	_wait_for_user_confirm	false	
URS Queuing	_target	<string>	You must enter a string value for this option. This option is the routing target that specifies the agent/queue resource that will process this request. Format the string according to the URS target specification: `<Target String>@<StatServer name>.<Target Type>` Where `Target Type` is one of the following: • A (Agent) • AP (Agent Place) • GA (Group of Agents) • GP (Group of Places) • Q (Queues [real and virtual]) • DN (DN) • GA (Skill) • GC (Campaign Group) • RP (Routing Points [real and virtual]) • DL (Destination Label) For example: • `Billing@StatServer.GA` - routes to Agent Group "Billing" • `English=20&Loans=2@StatServer.GA` - routes to any agent

Category	Option	Value	Comment
			matching the skill expression See the Universal Routing Server (URS) documentation for additional information about URS targets.
	_urs_server_url	http://<urs primary hostname:port>	You must enter the URL for your primary Universal Routing Server (URS).
	_urs_virtual_queue	<virtual queue to be used by strategy>	You must enter the virtual queue to which the service request will be added.
	_urs_prioritization_strategy	WaitForTarget	The default value shown here matches the name of the URS strategy that you imported into IRD. If you changed the name of the strategy, update this value to reflect the correct name.
	_urs_strategy_update_sub_routine	SetRouteDelay	The default value shown here matches the name of the URS subroutine that you imported into IRD. If you changed the name of the subroutine, update this value to reflect the correct name.
Voice-User Originated	_booking_expiration_timeout	30	All options in this category are applicable. You can use the default values, or you can set your own values.
	_provide_code	false	
	_resource_group	DNIS	
	_userorig_connect_limit	3	
Voice Treatment	_treatment_find_agent_fail	GMSApplications/<treatment file>	Enter the value shown here if you are using Genesys Media Server. If you are using a different media server, enter the path where you have placed your voice treatment files.
	_treatment_waiting_for_agent	GMSApplications/<treatment file>	

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=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
------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
Server:Jetty(7.6.0.v20120127)
Set-Cookie:JSESSIONID=5lpxopl7oanu50iexlwaqrvg;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"
}
```

Sequence Diagram

Click on the diagram to access full resolution.

User Originated Delayed

Overview

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 mobile device that agent is available.

- Next: Mobile device is expected to send connect request to confirm user's availability.

Connect

- Callback service: Returns access information immediately to the mobile device.

- Callback service: Waits for voice call to arrive.

- Next: 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.

Configuration Options

The table below lists 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 *User-Originated-Delayed* as the Common Default Configuration (see Adding a 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.

Category	Option	Value	Comment
General	_call_direction	USERORIGINATED	These are the default values, which are automatically populated when using the pre-defined *User-Originated-Delayed* service. You must not change these values.
	_media_type	voice	
	_wait_for_agent	true	
	_wait_for_user_confirm	true	
URS Queuing	_target	<string>	You must enter a string value for this option. This option is the routing target that specifies the agent/queue resource that will process this request. Format the string according to the URS target specification: `<Target String>@<StatServer name>.<Target Type>` Where `Target  Type` is one of the following: • A (Agent) • AP (Agent Place) • GA (Group of Agents) • GP (Group of Places) • Q (Queues [real and virtual]) • DN (DN) • GA (Skill) • GC (Campaign Group) • RP (Routing Points [real and virtual]) • DL (Destination Label) For example:

Category	Option	Value	Comment
			`Billing@StatServer.GA` - routes to Agent Group "Billing" `English=20&Loans=2@StatServer.GA` - routes to any agent matching the skill expression See the Universal Routing Server (URS) documentation for additional information about URS targets.
	_urs_server_url	http://<urs primary hostname:port>	You must enter the URL for your primary Universal Routing Server (URS).
	_urs_virtual_queue	<virtual queue to be used by strategy>	You must enter the virtual queue to which the service request will be added.
	_urs_prioritization_strategy	WaitForTarget	The default value shown here matches the name of the URS strategy that you imported into IRD. If you changed the name of the strategy, update this value to reflect the correct name.
	_urs_strategy_update_sub_name	SetRouteDelay	The default value shown here matches the name of the URS subroutine that you imported into IRD. If you changed the name of the subroutine, update this value to reflect the correct name.
Voice-User Originated	_booking_expiration_timeout	30	All options in this category are applicable. You can use the default values, or you can set your own values.
	_provide_code	false	
	_resource_group	DNIS	
	_userorig_connect_limit	3	
Voice Treatment	_treatment_find_agent_fail	GMSApplications/<treatment file>	Enter the value shown here if you are using Genesys Media Server. If you are using a different media server, enter the path where you have placed your voice
	_treatment_waiting_for_agent	GMSApplications/<treatment file>	

Category	Option	Value	Comment
			treatment files.

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=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
------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
Server:Jetty(7.6.0.v20120127)
Set-Cookie:JSESSIONID=fbnacjg4ginj1xlbzkcv5j7wq;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=----WebKitFormBoundarylgOFYFBusYz5okcj
Cookie:JSESSIONID=febiiafprxso1n7bokxbrqwqv; 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
------WebKitFormBoundarylgOFYFBusYz5okcj--
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
Server:Jetty(7.6.0.v20120127)
Set-Cookie:JSESSIONID=1t65gbvy9mrwdwysh123gpb0f;Path=/genesys

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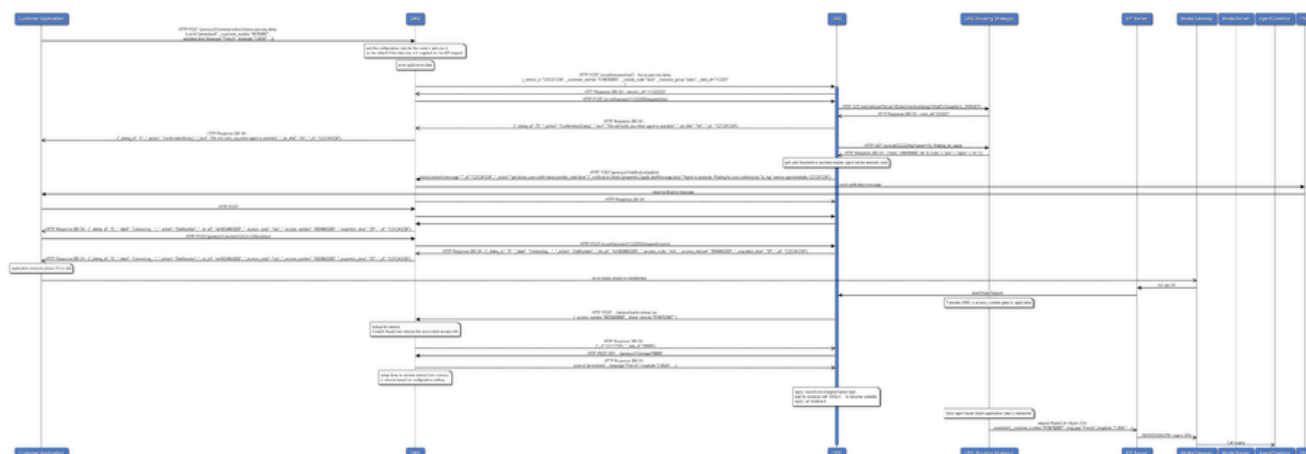
```
    "_access_number": "6504663205",
    "_expiration_time": "29",
    "_id": "369-90f389cf-ae63-46ec-a3f7-7b76c0522e2f"
}
```

Sequence Diagram

Click on the diagram to access full resolution.

Chat Immediate

Overview

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

Start Callback

- 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.

Configuration Options

The table below lists 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 Adding a 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.

Category	Option	Value	Comment
General	_media_type	chat	These are the default values, which are automatically populated
	_wait_for_agent	false	

Category	Option	Value	Comment
	_wait_for_user_confirm	false	when using the pre-defined *Chat-Immediate* service. You must not change these values.
URS Queuing	_target	<string>	You must enter a string value for this option. This option is the routing target that specifies the agent/queue resource that will process this request. Format the string according to the URS target specification: `<Target String>@<StatServer name>.<Target Type>` Where `Target Type` is one of the following: • A (Agent) • AP (Agent Place) • GA (Group of Agents) • GP (Group of Places) • Q (Queues [real and virtual]) • DN (DN) • GA (Skill) • GC (Campaign Group) • RP (Routing Points [real and virtual]) • DL (Destination Label) For example: • `Billing@StatServer.GA` - routes to Agent Group "Billing" • `English=20&Loans=2@StatServer.GA` - routes to any agent matching the skill expression See the Universal Routing Server (URS) documentation

Category	Option	Value	Comment
			for additional information about URS targets.
	_urs_server_url	http://<urs primary hostname:port>	You must enter the URL for your primary Universal Routing Server (URS).
	_urs_virtual_queue	<virtual queue to be used by strategy>	You must enter the virtual queue to which the service request will be added.
	_urs_prioritization_strategy	WaitForTarget	The default value shown here matches the name of the URS strategy that you imported into IRD. If you changed the name of the strategy, update this value to reflect the correct name.
	_urs_strategy_update_sub_routine	SetRouteDelay	The default value shown here matches the name of the URS subroutine that you imported into IRD. If you changed the name of the subroutine, update this value to reflect the correct name.

Sample Request and Response Sequence

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=f3d8-3vwgdclvyroghjsaf87i1c60
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
Server:Jetty(7.6.0.v20120127)
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 on the diagram to access full resolution.

Chat Delayed

Overview

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 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.

Configuration Options

The table below lists 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-Delayed* as the Common Default Configuration (see Adding a 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.

Category	Option	Value	Comment
General	_media_type	chat	These are the default values, which are automatically populated when using the pre-defined *Chat-Delayed* service. You must not change these values.
	_wait_for_agent	true	
	_wait_for_user_confirm	true	
URS Queuing	_target	<string>	You must enter a string value for this option. This option is the routing target that specifies the agent/ queue resource that will process this request. Format the string according to the URS target specification: `<Target String>@<StatServer name>.<Target Type>` Where `Target Type` is one of the following: • A (Agent) • AP (Agent Place) • GA (Group of Agents) • GP (Group of Places) • Q (Queues [real and virtual]) • DN (DN) • GA (Skill) • GC (Campaign Group) • RP (Routing Points [real and virtual]) • DL (Destination Label) For example: • `Billing@StatServer.GA` - routes to Agent Group

Category	Option	Value	Comment
			"Billing" • `English=20&Loans= 2@StatServer.GA` – routes to any agent matching the skill expression See the Universal Routing Server (URS) documentation for additional information about URS targets.
	_urs_server_url	http://<urs primary hostname:port>	You must enter the URL for your primary Universal Routing Server (URS).
	_urs_virtual_queue	<virtual queue to be used by strategy>	You must enter the virtual queue to which the service request will be added.
	_urs_prioritization_strategy	WaitForTarget	The default value shown here matches the name of the URS strategy that you imported into IRD. If you changed the name of the strategy, update this value to reflect the correct name.
	_urs_strategy_update_sub_routine	SetRouteDelay	The default value shown here matches the name of the URS subroutine that you imported into IRD. If you changed the name of the subroutine, update this value 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=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
------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
Server:Jetty(7.6.0.v20120127)
Set-Cookie:JSESSIONID=kwe77jz60uum1u16urvv8vubd;Path=/genesys
Transfer-Encoding:chunked

Response Body:
{
    "_id": "369-166652d2-aed6-443c-9781-6bdff370f9a9",
    "_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-9781-6bdff370f9a9"
    },
    "tag": "service.agentavailable.369-166652d2-aed6-443c-9781-6bdff370f9a9"
}
```

Connect (user confirmation)

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

```
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=1b81btxjbrb1wybz5a93i24io; 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
------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
Server:Jetty(7.6.0.v20120127)
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=61voqouznyas1vrp9fjljmbwr; BAYEUX_BROWSER=f3d8-3vwgdclvyroghjsaf87i1c60
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
Server:Jetty(7.6.0.v20120127)
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-9781-6bdff370f9a9/
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=kwe77jz60uum1u16urvv8vubd; 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
------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
Server:Jetty(7.6.0.v20120127)

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=kwe77jz60uum1u16urvv8vubd; 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
------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
Server:Jetty(7.6.0.v20120127)
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-9781-6bdff370f9a9/
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=z1lrha8utmxw1xslu08z473ty; 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
------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
```

```
Server:Jetty(7.6.0.v20120127)
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-9781-6bdff370f9a9",
  "_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-9781-6bdff370f9a9",
  "_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-9781-6bdff370f9a9/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=----WebKitFormBoundaryyN11ULST36Tmhzro
Cookie:JSESSIONID=18gvvxkjquop1x8er65g7ferp; 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
------WebKitFormBoundaryyN11ULST36Tmhzro
Content-Disposition: form-data; name="_display_message"

Message to be displayed to agent
------WebKitFormBoundaryyN11ULST36Tmhzro
Content-Disposition: form-data; name="_application_message"

MESSAGE_FOR_AGENT_DESKTOP_INTERNAL_USE
------WebKitFormBoundaryyN11ULST36Tmhzro--
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
Server:Jetty(7.6.0.v20120127)
```

```
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-9781-6bdff370f9a9/
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=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
------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
Server:Jetty(7.6.0.v20120127)
Set-Cookie:JSESSIONID=1x5o3d8bkgczy1pxjb3dac0mmp;Path=/genesys

Response Body:
[
    {
        "message": "{\"_id\":\"369-166652d2-aed6-443c-9781-6bdff370f9a9\",
\"_internal_message\":\"MESSAGE_FOR_AGENT_DESKTOP_INTERNAL_USE\",
\"_display_message\":\"Message to be displayed to agent\"}",
        "tag": "agent.message.369-166652d2-aed6-443c-9781-6bdff370f9a9"
    }
]
```

Sequence Diagram

Click on the diagram to access full resolution.
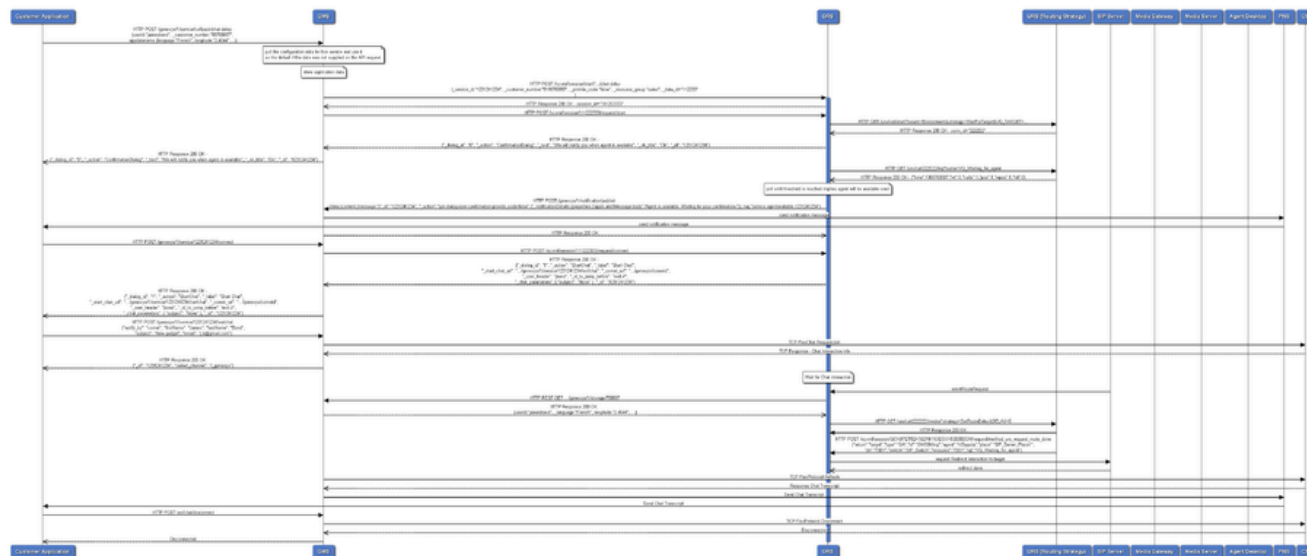
Lab Javascript (Web) Sample

You can access this sample through the GMS Service Management UI.

You can download the sample application source code via a zip file:

Genesys Mobile Services JavaScript Sample Source Code

Overview

The Genesys Mobile Services (GMS) Javascript 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.

This sample can also be used to test an existing GMS deployment.

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.
- `StartChat` - The app starts a chat conversation. Asynchronous HTTP notifications (CometD messages) are used for receiving Chat Server events.
- `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, and the chat-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.

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.

Running the Sample

1. Download the zip file from the above link.

2. Extract the zip into the following directory: `<gms install folder>`/webapps/webcallback.

3. Access the app at the following URL: http://`<gmshost>`:`<gmsport>`/webcallback/index.html.

4. Set the `Settings > Contact#`.

5. Select `Scenario` and then click the Connect button (located in the top right in the GMS tab of the application).

Notes:

- 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.

- `Chat` - Allows exchange of chat messages between client and agent. Notices relating to agent status and connections are also displayed.

- `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.

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