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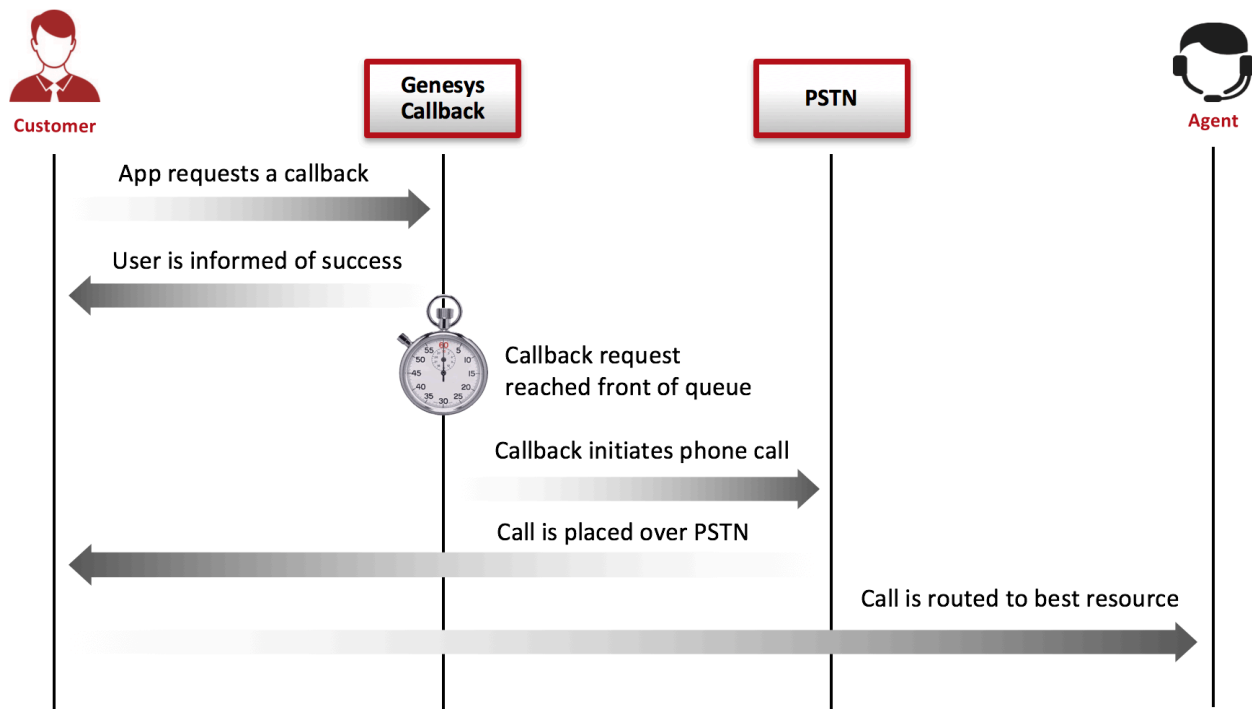
## Callback User's Guide

User Terminated Delayed

# User Terminated Delayed

## Call flow

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



## Start Callback

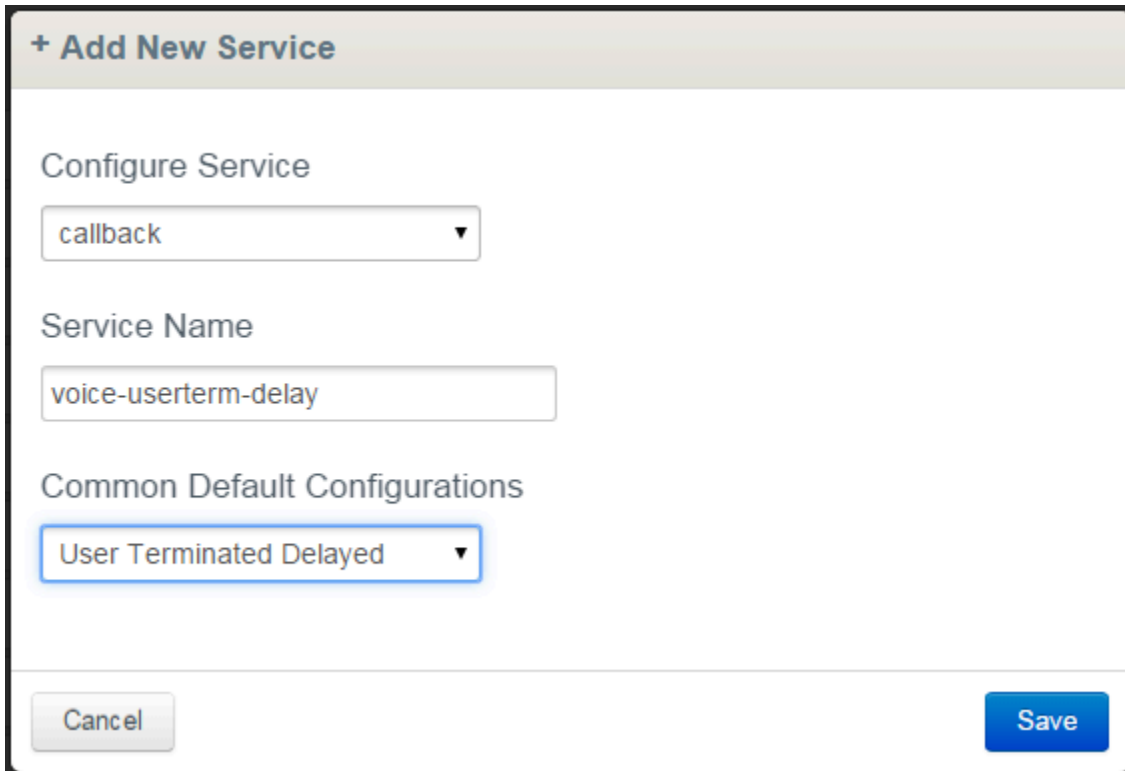
- Callback service: Returns session id to the user.
- Callback service: Waits for an agent to be available.
- Callback service: When an agent is available, notifies mobile device that agent is available.
- Next: Mobile device is expected to send connect request to confirm user's availability.

## Connect

- Callback service: Returns a message to expect a call, to the mobile device.

- Callback service: Calls the mobile device.
- Mobile device: Accepts the call.
- Callback service: Identifies that a human has answered the call.
- Callback service: Reserves target to route call.
- Callback service: Routes the call to the target.
- Callback service terminates.

## Create your Scenario



**+ Add New Service**

Configure Service

callback ▼

Service Name

voice-userterm-delay

Common Default Configurations

User Terminated Delayed ▼

Cancel Save

In the **Admin UI > Services > Configured Services** tab, add a Callback service with User-Terminated-Delayed as the **Common Default Configuration** (see [Adding a Service](#) for details).

Enter a service name. This name is the callback execution name of your service and will be used in URLs to access this service. For example, if you set this name to voice-userterm-delay, your service URL will be:  
`http://host:port/genesys/1/service/callback/voice-userterm-delay`

When you add this service and default configuration, many options are automatically populated with the appropriate default values.

## Configuration Options

The table below lists the key options applicable to this scenario. Some options, however, will require you to enter your own values. See the **Comments** column in the following table for these details.

### Pre-defined Values

The following options are the default values, which are automatically populated when selecting the pre-defined *User-Terminated-Delayed* service. You do not need to change their values.

Option	Description
<code>_call_direction = USERTERMINATED</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>_media_type = voice</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 = 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 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>

Option	Description
	<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>_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>

## Additional Required Options

You must configure the following options. See the [Universal Routing Server \(URS\)](#) documentation for additional information about URS targets.

Option	Description
<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: <code>&lt;Target String&gt;@&lt;StatServer name&gt;.&lt;Target Type&gt;</code> where <code>Target Type</code> 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><code>&lt;Target String&gt;</code> can be a skill expression. In that case, <code>&lt;Target String&gt;</code> must start with <code>'?:'</code>.</p>

Option	Description
	<p>For example:</p> <ul style="list-style-type: none"> <li>• <code>Billing@StatServer.GA</code>—Routes to Agent Group "Billing".</li> <li>• <code>?:English=20&amp;;Loans=2@StatServer.GA</code>—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>• <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</li> </ul>

Option	Description
	<p>the next target.</p> <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> <p>more...</p> </div>
<code>_urs_virtual_queue="MyVirtualQueue"</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 IRD. If you changed one of these names, update the corresponding option to reflect the correct name.

## Customization

The options shown here and all of the options of the **Voice User Terminated** section are applicable for this scenario. You can use the default values, or you can set your own values. For the route point option, you must select a value from the drop-down list in the UI.

Option	Description
<b>Section: Voice User Terminated</b>	
<code>_on_user_confirm_timeout=CONNECT-ANYWAY</code>	<p>Selects the action to perform if the user does not submit his or her confirmation in response to the push notification.</p> <ul style="list-style-type: none"> <li>CONNECT-ANYWAY will continue with the call.</li> <li>CANCEL cancels the service request.</li> </ul>
<code>_prefix_dial_out=91</code>	Prefix required to perform a user-terminated (outbound) call from the system.
<code>_route_point={Route Point}@{Telephony Switch}</code>	<p>Route point from which the system can create a user-terminated (outbound) call.</p> <p><b>This option is mandatory.</b></p>
<b>Section: Voice Treatment</b>	

Option	Description
<code>_treatment_call_failure_answering_machine</code>	<p>URI of the music file to play when a call is not answered by the customer and is forwarded to the answering machine.</p> <p>JSON-formatted strings can be used to specify hints to the <code>RequestApplyTreatment</code>.</p> <p>The following example makes the music start playing after the answering machine beep is detected: { "file": "file_url", "hints": { "am-beep-detection": "on" } }</p> <p>By default, the value of this option is empty and Callback uses the <code>&lt;GMS installation&gt;/../Resources/SampleTreatments/call_fail_ans_machine.wav</code> file from the Callback template.</p> <p>To deactivate the play treatment, set the value of this option to { }.</p>
<code>_treatment_find_agent_fail = GMSApplications/&lt;treatmentfile1&gt;</code>	<p>Music file to be played when the service fails to find the agent in the time specified by the <code>Max Time To Wait For Agent</code> on the <code>Call</code> 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.</p>
<code>_treatment_waiting_for_agent = GMSApplications/&lt;treatmentfile2&gt;</code>	<p>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.</p>
<code>_treatment_customer_connect = GMSApplications/&lt;treatmentfile3&gt;</code>	<p>URI of the music file to play when the customer answers the callback.</p> <p>The JSON-formatted strings can be used to specify hints to the <code>RequestApplyTreatment</code>. For example:</p> <pre>{ "file": "file_url", "hints": { "hint1": "value" }}</pre>

### 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 outbound delay service

For instance, if your callback service is named `voice-userterm-delay`, create the following POST request:

## User Terminated Delayed

---

```
Request URL:http://localhost:8080/genesys/1/service/callback/voice-userterm-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:662
Content-Type:multipart/form-data; boundary=---WebKitFormBoundaryABpcDouIWQ5inBWl
Cookie:JSESSIONID=4ieeqn8sa8nilo2u2nd1br8a4; 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
-----WebKitFormBoundaryABpcDouIWQ5inBWl
Content-Disposition: form-data; name="_customer_number"

916504661232
-----WebKitFormBoundaryABpcDouIWQ5inBWl
Content-Disposition: form-data; name="usr_customer_name"

Bob Markel
-----WebKitFormBoundaryABpcDouIWQ5inBWl
Content-Disposition: form-data; name="usr_reason"

billing question
-----WebKitFormBoundaryABpcDouIWQ5inBWl
Content-Disposition: form-data; name="_device_notification_id"

b16416334828b1d26ef14f329628b55b5a8c631d8928a371a5584722dd7fb673
-----WebKitFormBoundaryABpcDouIWQ5inBWl
Content-Disposition: form-data; name="_device_os"

comet
-----WebKitFormBoundaryABpcDouIWQ5inBWl--
Response Headersview source
Cache-Control:no-cache
Cache-Control:no-store
Content-Type:application/json;charset=UTF-8
```

---

## User Terminated Delayed

---

```
Content-Type:application/json;charset=UTF-8
Date:Tue, 30 Jul 2013 07:04:31 GMT
Expires:Thu, 01 Jan 1970 00:00:00 GMT
Pragma:no-cache
Set-Cookie:JSESSIONID=1b81btxjbrblwybz5a93i24io;Path=/genesys
Transfer-Encoding:chunked
```

Response Body:

```
{
  "_id": "369-b100700a-4ce8-48f7-b1b0-1944b12359b9",
  "_text": "We will notify you when agent is available"
}
```

Push notification data:

```
{
  "_dialog_id": "0",
  "_action": "ConfirmationDialog",
  "_text": "You will receive the call shortly",
  "_ok_title": "Ok",
  "_id": "369-b100700a-4ce8-48f7-b1b0-1944b12359b9"
}
```

User Terminated Delayed

---

Connect (user confirmation)

## User Terminated Delayed

---

```
Request URL:http://localhost:8080/genesys/1/service/369-b100700a-4ce8-48f7-b1b0-1944b12359b9/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": "0",
  "_action": "ConfirmationDialog",
  "_text": "You will receive the call shortly",
  "_ok title": "Ok",
  "_id": "369-b100700a-4ce8-48f7-b1b0-1944b12359b9"
}
```

## Sequence Diagram

Click the diagram to access full resolution.

