GENESYS™

Genesys Mobile Services API Reference

Capacity API

5/5/2025

Capacity API

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 where less or more agents are available, and you can define as many Capacity services that you need to match your Callback services. This way, you can address the agent workload according to the real resources that are available.

Important

The Capacity applies to each individual _request_time_bucket time slot defined in the GMS configuration.

For example, if **_request_time_bucket**=5 (for 5 minutes), then configuring **capacity**=10 means that during a given hour, it is possible to create 10 callbacks for each of the 5 minute slots, therefore 120 callbacks for the full hour.

Configuration

Here is an example of GMS configuration:

```
[service.Capacity]
_capacity=[Mon, Tue, Wed, Thu, Fri, Sat, Sun]
_capacity_1={"1":{"0000":1,"0100":3}}
_capacity_2={"2":{"0100":3}}
_capacity_3={"3":{"1000":6,"1100":6,"1200":6,"1300":6,"1400":6,"1500":6,"1600":6,"1700":6,"1800":6,"1900":6,"20
_capacity_4={"4":{"1100":3,"0100":3}}
_capacity_5={"5":{"0100":3}}
_capacity_6={"6":{"0100":3}}
_capacity_7={"7":{"0000":1,"0100":3}}
_capacity_add={}
_service=capacity
_timezone=UTC
_type=builtin
```

Important

You can also configure a capacity service in the Service Management UI.

Capacity Service API

When you add a capacity service through the **Configured Services** interface, you can access the capacity service by its execution name and retrieve its content through the API.

In order to find the available capacity, the query provides a date and time range. The response object provides a list of time periods and available capacity for each period. Here is a list of input parameters:

GET /genesys/1/service/{capacity-execution-name}

GET /genesys/1/service/{capacity-execution-name}?start=<date and time>&end=<date and time>&timezone=<timezone> Retrieves the capacity for the given service during the given period.		
Name	**Required**	**Description**
start	yes	Start date and time in ISO-8601 format without a timezone component; for example: 2015-03-17T09:15:00.000
end	yes	End date and time in ISO-8601 format without a timezone component; for example: 2015-03-17T12:45:00.000
timezone	yes	Timezone used for "start" and "end" parameters; for example: America/Los_Angeles

For example, the following request will provide the following results:

```
GET /genesys/1/service/Capacity?start=2016-10-05T15:00:00.000Z HTTP/1.1
> Host: 127.0.0.1:8080
> User-Agent: curl/7.50.3
> Accept: */*
>
< HTTP/1.1 200 OK
< Set-Cookie: JSESSIONID=1opza084c3vszo631xnrtqw38;Path=/genesys;HttpOnly
< Expires: Thu, 01 Jan 1970 00:00:00 GMT
< Content-Type: application/json;charset=UTF-8
< Transfer-Encoding: chunked
<
{
  "error": null,
  "slots": [
    {
      "utcTime": "2016-10-05T15:00:00.000Z",
      "localTime": "2016-10-05T15:00:00.000Z",
      "durationMin": 540,
      "capacity": 6
    },
    {
      "utcTime": "2016-10-06T01:00:00.000Z",
      "localTime": "2016-10-06T01:00:00.000Z",
      "durationMin": 60,
      "capacity": 3
```

```
    },
    {
      "utcTime": "2016-10-06T11:00:00.000Z",
      "localTime": "2016-10-06T11:00:00.000Z",
      "durationMin": 60,
      "capacity": 3
    }
  ],
  "timezone": "UTC"
}
```

Capacity Provisioning API

Introduced in 8.5.212

Capacity Provisioning API is a new developer-friendly API that enables you to provision and update Capacity settings. It introduces a CRUD (Create/Read/Update/Delete) set of operations which are not limited by complex aspects of *JSON into String* option storage.

> ## Important
> This API requires Basic Authentication. Roles are not used.

POST genesys/1/admin/config/capacities

POST /genesys/1/admin/config/capacities Creates capacity for the given service (provisioning).			
JSON Body			
Name	**Type**	**Required**	**Description**
name	string	yes	Execution name of the service as created in the Configured Services interface.
timezone	string	no	Timezone that defines the translation of days and times into UTC time; the timezone is used to calculate DST switches. By default, the timezone is set to "UTC". To get the list of supported timezones, refer to Wikipedia.
weekdays	list	yes	A list of one or multiple entries associating simplified timeslots with

POST /genesys/1/admin/config/capacities Creates capacity for the given service (provisioning).			

			a capacity for a weekday.
			
			This list can contain 1 to 7 entries only. Each entry identifies one day of the week using its 3-letter English short name.
			
			`{`
			`    "mon": {`
			`"0900": 10, "1000": 5 },`
			`    "tue": {`
			`"0900": 10 },`
			`    "wed": {`
			`"0900": 10 },`
			`    "thu": {`
			`"0900": 10 },`
			`    "fri": {`
			`"0900": 10 },`
			`    "sat": {`
			`"0900": 10 },`
			`    "sun": {`
			`"0900": 10 },`
			`}`
			
			Each weekday can be assigned 1 to 24 values representing hour slots in the form "HHmm" (24-hour format and minutes) between "0000" and "2300" and, for each hour slot, the capacity is provided. For example, "tue": { "0900": 10} means that on Tuesdays, the timeslot starting at 9:00 am allows a capacity of 10. If, in the service options, `_request_time_bucket`=5 (for 5 minutes), then provisioning `capacity`=10 means that it is possible to create 10 callbacks for each of the 5 minute slots, therefore 120 callbacks for the full hour.
			
			The maximum capacity allowed per slot is 1000 by default. You can change this value using the _max_capacity option.

adds	list	yes	A list of additional entries representing a special day. For each element, the key must

POST /genesys/1/admin/config/capacities Creates capacity for the given service (provisioning).			

			match a date in the form "YYYYMMDD" (year, month, day of the month).
			
			Each entry can be assigned 1 to 24 values representing hour slots in the form "HHmm" (24-hour format and minutes) between "0000" and "2300".
			
			`{`
			`    "20190501": { "0900": 10 },`
			`    "20190508": { "0900": 10 }`
			`}`

Response

Success	
HTTP code	200
HTTP message	OK

Error	
HTTP code	400
HTTP message	Existing service name

JSON Body	`{`
	`"exception": "com.genesyslab.gsg.services.capacity.CapacityException",`
	`"message": "Name already exists. Please choose another name."`
	`}`

Error	
HTTP code	400
HTTP message	Bad request

JSON Body	`{`
	`        "exception": "com.genesyslab.gsg.services.capacity.CapacityException",`
	`        "message": "Capacity entered is out of range. Please enter a valid value"`
	`}`
	
	`{`
	`        "exception": "com.genesyslab.gsg.services.capacity.CapacityException",`
	`        "message": "<name/weekdays/adds> is`

Error

a mandatory field."
}
 	
{
      "exception":
"com.genesyslab.gsg.services.capacity.CapacityException",
      "message": "Parameters passed for
the capacity are empty."
}
 	
{
      "exception":
"com.genesyslab.gsg.services.capacity.CapacityException",
      "message": "Timezone entered is
invalid. Please enter a valid timezone"
}
 	
{
      "exception":
"com.genesyslab.gsg.services.capacity.CapacityException",
      "message": "Timeslot entered is out
of range. Please enter a valid value"
}

Example of a successful operation

```
POST http://localhost:8080/genesys/1/admin/config/capacities

{
    "name": "capacity-test",
    "timezone": "UTC",
    "weekdays": {
        "mon": { "0900": 10, "1000": 10 },
        "tue": { "0900": 10 },
        "wed": { "0900": 10 },
        "thu": { "0900": 10 },
        "fri": { "0900": 10 },
        "sat": { "0900": 10 },
        "sun": { "0900": 10 },
    },
    "adds": {
        "20190501": { "0900": 10 },
        "20190508": { "0900": 10 }
    }
}
Result

200 OK
```

GET /genesys/1/admin/config/capacities/{service_name}

Gets the capacity settings for a given service.

GET /genesys/1/admin/config/capacities/{service_name} Gets the capacity provisioned for a given service.			
URI Parameters			
Name	**Type**	**Required**	**Description**
URI Parameters			
{service_name}	string	yes	Execution name of the service as created in the Configured Services interface.

Response

Success			
HTTP code		200	
HTTP message		OK	
Response Body (JSON content)			
Name	**Type**	**Required**	**Description**
name	string	yes	Execution name of the service as created in the Configured Services interface.
timezone	string	no	Timezone that defines the translation of days and times into UTC time; the timezone is used to calculate DST switches. By default, the timezone is set to "UTC". To get the list of supported timezones, refer to Wikipedia.

weekdays	list	yes	A list of one or multiple entries associating simplified timeslots with a capacity for a weekday.
			
			This list can contain 1 to 7 entries only. Each entry identifies one day of the week using its 3-letter English short name.
			
			{
			    "mon": {
			"0900": 10, "1000":
			5 },
			    "tue": {
			"0900": 10 },
			    "wed": {
			"0900": 10 },
			    "thu": {

Success			

			`"0900": 10 },`
			`    "fri": {`
			`"0900": 10 },`
			`    "sat": {`
			`"0900": 10 },`
			`    "sun": {`
			`"0900": 10 },`
			`}`
			
			Each weekday can be assigned 1 to 24 values representing hour slots in the form "HHmm" (24-hour format and minutes) between "0000" and "2300" and, for each hour slot, the capacity is provided. For example, "tue": { "0900": 10} means that on Tuesdays, the timeslot starting at 9:00 am allows a capacity of 10. If, in the service options, **_request_time_bucket**=5 (for 5 minutes), then provisioning **capacity**=10 means that it is possible to create 10 callbacks for each of the 5 minute slots, therefore 120 callbacks for the full hour.

adds	list	yes	A list of additional entries representing a special day. For each element, the key must match a date in the form "YYYYMMDD" (year, month, day of the month).
			
			Each entry can be assigned 1 to 24 values representing hour slots in the form "HHmm" (24-hour format and minutes) between "0000" and "2300".
			
			`{`
			`    "20190501": {`
			`"0900": 10 },`
			`    "20190508": {`
			`"0900": 10 }`
			`}`

Error	
HTTP code	400
HTTP message	Bad service name
JSON Body	`{` `"exception":`

Error

`"com.genesyslab.gsg.services.capacity.CapacityException",`
`"message": "Name does not exist. Please`
`choose another name."`
`}`

Example of sucessful operation

GET http://localhost:8080/genesys/1/admin/config/capacities/capacity-test

Result

200 OK

```
{
    "name": "capacity-test",
    "timezone": "UTC",
    "weekdays": {
        "mon": { "0900": 10, "1000": 10 },
        "tue": { "0900": 10 },
        "wed": { "0900": 10 },
        "thu": { "0900": 10 },
        "fri": { "0900": 10 },
        "sat": { "0900": 10 },
        "sun": { "0900": 10 },
    },
    "adds": {
        "20190501": { "0900": 10 },
        "20190508": { "0900": 10 }
    }
}
```

PUT /genesys/1/admin/config/capacities/{service_name}

Updates the capacity.

> **Warning**
>
> The request must contain all the provisioning settings, not only changes.

PUT /genesys/1/admin/config/capacities/{service_name} Updates the capacity.			
Name	**Type**	**Required**	**Description**
URI Parameters			
service_name	string	yes	Execution name of the service as created in the Configured Services

PUT /genesys/1/admin/config/capacities/{service_name} Updates the capacity.			
			interface.
Body (JSON content)			
name	string	yes	Execution name of the service as created in the Configured Services interface.
timezone	string	no	Timezone that defines the translation of days and times into UTC time; the timezone is used to calculate DST switches. By default, the timezone is set to "UTC". To get the list of supported timezones, refer to Wikipedia.

weekdays	list	yes	A list of one or multiple entries associating simplified timeslots with a capacity for a weekday.
			
			This list can contain 1 to 7 entries only. Each entry identifies one day of the week using its 3-letter English short name.
			
			`{`
			`    "mon": { "0900": 10, "1000": 5 },`
			`    "tue": { "0900": 10 },`
			`    "wed": { "0900": 10 },`
			`    "thu": { "0900": 10 },`
			`    "fri": { "0900": 10 },`
			`    "sat": { "0900": 10 },`
			`    "sun": { "0900": 10 },`
			`}`
			
			Each weekday can be assigned 1 to 24 values representing hour slots in the form "HHmm" (24-hour format and minutes) between "0000" and "2300" and, for each hour slot, the capacity is provided. For example, "tue": { "0900": 10} means that on Tuesdays, the timeslot starting

PUT /genesys/1/admin/config/capacities/{service_name} Updates the capacity.			
			at 9:00 am allows a capacity of 10. If, in the service options, **_request_time_bucket**=5 (for 5 minutes), then provisioning **capacity**=10 means that it is possible to create 10 callbacks for each of the 5 minute slots, therefore 120 callbacks for the full hour. The maximum capacity allowed per slot is 1000 by default. You can change this value using the _max_capacity option.

adds	list	yes	A list of additional entries representing a special day. For each element, the key must match a date in the form "YYYYMMDD" (year, month, day of the month).
			
			Each entry can be assigned 1 to 24 values representing hour slots in the form "HHmm" (24-hour format and minutes) between "0000" and "2300".
			
			`{`
			`    "20190501": {`
			`"0900": 10 },`
			`    "20190508": {`
			`"0900": 10 }`
			`}`

Response

Success	
HTTP code	200
HTTP message	OK

Error	
HTTP code	400
HTTP message	Bad service name

Capacity API

Error	

JSON Body	`{`
	`"exception":`
	`"com.genesyslab.gsg.services.capacity.CapacityException",`
	`"message": "Name does not exist. Please`
	`choose another name."`
	`}`

Error	
HTTP code	400
HTTP message	Bad request

JSON Body	`{`
	`        "exception":`
	`"com.genesyslab.gsg.services.capacity.CapacityException",`
	`        "message": "Capacity entered is out`
	`of range. Please enter a valid value"`
	`}`
	
	`{`
	`        "exception":`
	`"com.genesyslab.gsg.services.capacity.CapacityException",`
	`        "message": "Parameters passed for`
	`the capacity are empty."`
	`}`
	
	`{`
	`        "exception":`
	`"com.genesyslab.gsg.services.capacity.CapacityException",`
	`        "message": "Timeslot entered is out`
	`of range. Please enter a valid value"`
	`}`
	
	`{`
	`        "exception":`
	`"com.genesyslab.gsg.services.capacity.CapacityException",`
	`        "message": "Date entered is out of`
	`range. Please enter a valid date"`
	`}`

Example of successful operation

```
PUT http://localhost:8080/genesys/1/admin/config/capacities/capacity-test

{
   "name": "capacity-test",
   "timezone": "UTC",
   "weekdays": {
      "mon": { "0900": 10, "1000": 10 },
      "tue": { "0900": 10 },
      "wed": { "0900": 10 },
      "thu": { "0900": 10 },
      "fri": { "0900": 10 },
      "sat": { "0900": 10 },
```

```
      "sun": { "0900": 10 },
   },
   "adds": {
      "20190501": { "0900": 10 },
      "20190508": { "0900": 10 }
   }
}
```

Result

200 OK

DELETE /genesys/1/admin/config/capacities/{service_name}

Deletes the capacity provisioning for a given service.

DELETE /genesys/1/admin/config/capacities/{service_name} Deletes the capacity provisioning.			
Name	**Type**	**Required**	**Description**
URI Parameters			
service_name	string	yes	Execution name of the service as created in the Configured Services interface.

Response

Success	
HTTP code	200
HTTP message	OK

Error	
HTTP code	400
HTTP message	Bad service name

JSON Body	{
	    "exception": "com.genesyslab.gsg.services.capacity.CapacityException",
	    "message": "Name does not exist. Please choose another name."
	}

Example of successful operation

DELETE http://localhost:8080/genesys/1/admin/config/capacities/capacity-test

```
Result
200 OK
```