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API Reference

Context Services 8.0.x

Table of Contents

| | |
|---------------------------------------|-----------|
| Context Services API Reference | 5 |
| HTTP Response Codes and Errors | 6 |
| Unauthorized Strings | 10 |
| List of Operations | 13 |
| Callback Interaction | 16 |
| Chat Interaction | 23 |
| E-mail Interactions | 27 |
| Phone Call Interaction | 35 |
| List of Interaction Operations | 39 |
| Query Interactions | 40 |
| List of Server Operations | 43 |
| Query Server Status | 44 |
| Set Server Mode | 46 |
| End Event List | 48 |
| Extension | 56 |
| State Transition Event | 59 |
| Service | 63 |
| State | 66 |
| Start Event List | 69 |
| Task | 77 |
| List of Service Operations | 80 |
| Associate Service | 82 |
| Complete Service | 86 |
| Complete State | 90 |
| Complete Task | 95 |
| Perform State Transition | 99 |
| Query Service by ID | 105 |
| Query Services | 111 |
| Query State by ID | 117 |
| Query States | 122 |
| Query Task by ID | 125 |
| Query Tasks | 129 |
| Start Service | 133 |
| Start State | 138 |
| Start Task | 143 |

| | |
|--------------------------------------|-----|
| Update Service Extension | 147 |
| Update Record In Service Extension | 149 |
| Delete Record From Service Extension | 151 |
| Update State Extension | 153 |
| Update Record In State Extension | 155 |
| Delete Record From State Extension | 157 |
| Update Task Extension | 159 |
| Update Record In Task Extension | 161 |
| Delete Record From Task Extension | 163 |
| Customer Profile | 165 |
| Profile Attribute Schema | 167 |
| Profile Extension | 171 |
| Profile Extension Schema | 173 |
| List of Profile Operations | 175 |
| Create Customer Profile | 176 |
| Identify Customer | 179 |
| Insert Extension Records | 183 |
| Query Customer Profile | 185 |
| Update Customer Profile | 188 |
| Update Record In Profile Extension | 191 |
| Delete Record From Profile Extension | 193 |
| Attribute Schema | 195 |
| Extension Schema | 198 |
| Identification Key | 202 |
| List of Schema Operations | 205 |
| Create Identification Key | 206 |
| Create Profile Extension Schema | 209 |
| Get Identification Keys | 212 |
| Query Business Attribute Schema | 214 |
| Query Profile Extension Schema | 217 |
| Query Profile Schema | 220 |
| Create Service Extension Schema | 223 |
| Query Service Extension Schema | 226 |
| Create State Extension Schema | 229 |
| Query State Extension Schema | 232 |
| Create Task Extension Schema | 235 |
| Query Task Extension Schema | 238 |

Context Services API Reference

Description

The API Reference covers all the representations and methods available through the Context Services. Each subcategory of this page presents a set of operations, and the related resources.

HTTP Response Codes and Errors



Purpose: Describes the HTTP responses that your application can receive from UCS.

Introduction

The Universal Contact Server returns HTTP status codes and messages for every operation, in the requested format. Status codes match [standard HTTP codes](#), but messages can differ and provide additional details included in the header of the response. ⚠️ Additional result and error codes may be returned due to external web servers and layers involved in your operations.

Read Log Lines

Log lines are compliant with the following syntax:

```
14:33:39.485[1] Trc[2] 29998 [let-3851106] 2010-04-02[3] 14:33:39[3] 127.0.0.1[4]
8080[5] GET[6] /cv/server/status[7] - 200[8] - 0 2[9]
http://localhost:8080[10] Apache-HttpClient/4.0-beta2 (java 1.5)[11] -
```

- [1] = timestamp
- [2] = loglevel
- [3] = date and time when the request was received
- [4] = ip address
- [5] = server port
- [6] = http method
- [7] = requested url
- [8] = http response code
- [9] = execution time in ms
- [10] = called host/port
- [11] = user agent making the call

Successful Result

A successful response to a request is marked by HTTP Status Code 200 (OK). In that case, your application may get additional information in the header and the body of the response. Refer to the

Response section of your operation's page to get the detailed list of returned information. Questions about the returned content can be submitted as comments in this wiki. The following table lists the **standard HTTP codes** used by Context Services for a successful response.

Successful results

| Code | Title | Description |
|------|------------|--|
| 200 | OK | Success! |
| 201 | Created | The request has been fulfilled and resulted in a new resource being created. |
| 204 | No Content | The operation was successful and returned with no content. |

Errors

For responses with HTTP status code 4xx or 5xx, the response body contains an application-specific description of the error instead of a representation of the requested resource. Context Services errors consist of an application-specific error code and description, and are formatted in JSON as follows:

```
error = {
  "http_method" : "POST",
  "title" : "bad parameter",
  "description" : "bad parameter 'server mode' reason : server mode has not a correct value 'something'",
  "code" : 4020,
  "uri" : "http://localhost:8080/server/mode"
}
```

The following table lists the specific errors that operations can encounter. This list is not restrictive; additional error codes could be returned due to external web servers and layers involved:

Errors

| Code | Title | Description |
|------|-------------|---|
| 303 | See Other | General error which can occur if your application refers to a URI which moved, due to API changes. |
| 400 | Bad Request | General error which can be one of the following reasons: <ul style="list-style-type: none">• Missing required parameter.• Parameter value of unexpected type.• Invalid object syntax<ref name="javascript">If you used JavaScript objects in your operation's input.</ref>.• Missing required attribute<ref |

| Code | Title | Description |
|--|------------------------|--|
| | | name="javascript"/>. |
| 401 | Not Authorized | Credentials are missing or incorrect, or the given user is not allowed to execute a given service (such as an administrative service method that changes the profile schema). |
| 403<ref name="r400">Not available for now.</ref> | Forbidden | <p>The operation is forbidden and the reason is specified in the error message. This error is returned in the following cases:</p> <ul style="list-style-type: none"> Attempt to query customer profile or service information when the server is in Maintenance Mode. Attempt to alter the schema while the server is in Production Mode. Attempt to add customer profiles prior to the definition of a profile schema. Attempt to change the server mode times out, due to maintenance operations or schema modifications to complete. |
| 404 | Not Found | The specified URI is invalid, or the requested resource (such as a customer, service, state, task, extension, or identification key) does not exist. |
| 405 | Method Not Allowed | Returned when an unsupported operation is requested. For instance, if a resource supports only PUT and GET operations, a POST request on this resource returns this error. |
| 415 | Unsupported Media Type | In the header of your request, Content-Type is not set to a valid value. Most operations of Context Services support only "application/json". Check the operation description in the API . |
| 500 | Internal Server Error | An unexpected error occurred in UCS (for instance, a runtime exception). The error message suggests to forward logs to Genesys Customer Support. |

| Code | Title | Description |
|---|---------------------|--|
| 502<ref>Context Services is not responsible for this message. This error may occur due to external proxies or cache involved in your operation.</ref> | Bad Gateway | Returned when one or more of the backend systems required to fulfill the response (the CV database or UCS, for example) are either unavailable or returned an error. |
| 503 | Service Unavailable | UCS is unable to process the given request. Example situations include: <ul style="list-style-type: none">• Requests on a whole, or for a specific client/tenant/role, are being throttled.• The server is switching from production to maintenance mode, or vice versa, and does not accept requests for the moment. |

<references />

Unauthorized Strings



Specifies the list of strings that your application cannot use to create resources and schemas.

Returned Error

Context Services operations enable your application to create resources, schemas, and extensions. However, the keywords identified on this page should not be used to create or fill in attribute values. If your application does use one of the reserved keywords in PUT or POST operations, then a HTTP 400 Bad Request is returned with a "bad parameter" message in the following format:

```
bad parameter '${parameter-name}' reason: '${unauthorized-keyword}' keyword is not authorized.
```

For instance, if a PUT operation used the 'Select' keyword as a field value for the parameter 'name', your application receives the following message:

```
bad parameter 'name' reason : 'Select' keyword is not authorized.
```

Keywords Reserved to Context Services

- extension
- none
- profile
- service
- state
- task

Keywords Reserved to Database

- alter
- by
- comment
- constraint
- create

Unauthorized Strings

- cursor
- database
- delete
- from
- having
- identity
- index
- inner
- insert
- is
- join
- left
- null
- order
- outer
- prepare
- primary
- procedure
- return
- right
- select
- set
- size
- table
- truncate
- union
- update
- when
- where

Type Keywords

- bigint
- binary

- bit
- blob
- boolean
- char
- clob
- currency
- date
- datetime
- decimal
- double
- float
- int
- integer
- long
- longvarbinary
- money
- nchar
- number
- numeric
- real
- smalldatetime
- smallint
- smallmoney
- string
- time
- timestamp
- tinyint
- varbinary
- varchar
- varchar2

List of Operations



Purpose: Entry point of the API Reference.

Contents of the API Reference

Each operation category includes a subcategory which contain the related resources.

Operations

- Interaction Operations
 - [GET /customers/{customer id}/interactions](#)
 - [GET /services/{service id}/interactions](#)
 - [GET /interactions/{interaction id}](#)
- Profile Operations
 - [POST /profiles](#)
 - [GET /profiles](#)
 - [POST /profiles/{customer id}/extensions](#)
 - [GET /profiles/{customer id}](#)
 - [PUT /profiles/{customer id}](#)
 - Since 8.0.200.00:
 - [PUT /profiles/{customer id}/extensions/{ext name}/by/unique](#)
 - [PUT /profiles/{customer id}/extensions/{ext name}/delete/by/unique](#)
- Service Operations
 - Since: 8.0.100.00
 - [POST /services/start](#)
 - [POST /customers/{customer id}/services/{service id}](#)
 - [POST /services/{service id}/end](#)
 - [GET /services/{service id}](#)
 - [GET /services/anonymous/{contact key}/active](#)
 - [GET /services/anonymous/{contact key}/completed](#)
 - [GET /services/anonymous/{contact key}](#)

- GET /customers/{customer id}/services/active
- GET /customers/{customer id}/services/completed
- GET /customers/{customer id}/services
- Since: 8.0.200.00
 - PUT /services/{service id}/extensions/{ext name}
 - PUT /services/{service id}/extensions/{ext name}/by/unique
 - PUT /services/{service id}/extensions/{ext name}/delete/by/unique
- State Operations
 - Since: 8.0.100.00
 - POST /services/{service id}/states/{state id}/end
 - POST /services/{service id}/states/transition
 - GET /services/{service id}/states
 - GET /services/{service id}/states/{state id}
 - POST /services/{service id}/states/start
 - Since: 8.0.200.00
 - PUT /services/{service id}/states/{state id}/extensions/{ext name}
 - PUT /services/{service id}/state/{state id}extensions/{ext name}/by/unique
 - PUT /services/{service id}/states/{state id}/extensions/{ext name}/delete/by/unique
- Task Operations
 - Since: 8.0.100.00
 - POST /services/{service id}/tasks/{task id}/end
 - GET /services/{service id}/tasks
 - GET /services/{service id}/tasks/{task id}
 - POST /services/{service id}/tasks/start
 - Since: 8.0.200.00
 - PUT /services/{service id}/tasks/{task id}/extensions/{extension name}
 - PUT /services/{service id}/task/{task id}extensions/{ext name}/by/unique
 - PUT /services/{service id}/task/{task id}/extensions/{ext name}/delete/by/unique
- Server Operations
 - GET /server/status
 - POST /server/mode
- Schema Operations
 - GET /metadata/profiles/
 - POST /metadata/profiles/extensions

- [GET /metadata/profiles/extensions](#)
- [GET /metadata/identification-keys](#)
- [POST /metadata/identification-keys](#)
- Since 8.0.2:
 - [POST /metadata/services/extensions](#)
 - [GET /metadata/services/extensions](#)
 - [POST /metadata/states/extensions](#)
 - [GET /metadata/states/extensions](#)
 - [POST /metadata/tasks/extensions](#)
 - [GET /metadata/tasks/extensions](#)

Resources

- Interaction Resources
 - [Chat Interaction](#)
 - [Callback Interaction](#)
 - [E-mail Interactions](#)
 - [Phone Call Interaction](#)
- Profile Resources
 - [Customer Profile](#)
 - [Extension](#)
 - [Identification Key](#)
- Service Resources
 - [End Event List](#)
 - [Extension](#)
 - [Start Event List](#)
 - [State Transition Event](#)
 - [Service](#)
 - [State](#)
 - [Task](#)
- Schema Resources
 - [Attribute Schema](#)
 - [Extension Schema](#)

Callback Interaction

Purpose

Provides context information relevant to a given multimedia callback interaction. A customer can ask for a callback if he or she is not available for the moment. In that case, based on the application's inputs, the system schedules the callback interaction at a time which meets the user's expectations.

Resource

| Field | Type | Mandatory | Description |
|-------------------------------------|---------|-----------|--|
| Callback-related information | | | |
| callback_status | integer | no | Status for the callback. <ul style="list-style-type: none"> • 0-UNKNOWN • 1-RECEIVED • 2-TIMER • 3-QUEUED • 4-DISTRIBUTED • 5-SUBMITTED_TO_AGT • 6-REJECTED_BY_AGT • 7-CANCELED_BY_AGT • 8-PROCESSED_BY_AGT • 9-FINAL • 10-NOT_QUEUED • 11-ERROR • 12-REPLACED • 13-AGT_TRANSFER • 14-ENDTIME_EXPIRED |
| desired_response_type | string | yes | Possible types: <ul style="list-style-type: none"> • Voice • VoIP • Email |

| Field | Type | Mandatory | Description |
|--------------------|-----------|-----------|---|
| start_time | date/time | yes | Time for starting the callback. |
| end_time | date/time | no | Limit time for executing the callback. |
| customer_number | string | yes | Contact information for the customer. Depends on the media type (i.e. phone number, IP address for VoIP, or email address). |
| attempts | integer | yes | The number of callback attempts that have been made. |
| dn | string | no | The DN to which the Callback server sent the request. |
| location | string | no | Name of the switch to which the DN belongs. |
| callback_server_id | string | no | Identifies the Callback server that handled the request. |
| call_result | integer | no | One of the following results: <ul style="list-style-type: none"> • 0 - OK • 1 - TRANSFERRED • 2 - CONFERENCED • 3 - GENERAL_ERROR • 4 - SYSTEM_ERROR • 5 - REMOTE_RELEASE • 6 - BUSY • 7 - NO_ANSWER • 8 - SIT_DETECTED • 9 - ANSWERING_MACHINE • 10- ALL_TRUNKS_BUSY • 11- SIT_INVALID_NUM • 12- SIT_VACANT • 13- SIT_OPER_INTERCEPT |

| Field | Type | Mandatory | Description |
|-------|------|-----------|--|
| | | | <ul style="list-style-type: none"> • 14- SIT_UNKNOWN • 15- SIT_NO_CIRCUIT • 16- SIT_REORDER • 17- SIT_FAX_DETECTED • 18- QUEUE_FULL • 19- CLEARED • 20- OVERFLOWED • 21- ABANDONED • 22- REDIRECTED • 23- FORWARDED • 24- CONSULT • 25- PICKEDUP • 26- DROPPED • 27- DROPPED_NO_ANSWER • 28- UNKNOWN • 29- COVERED • 30- CONVERSE_ON • 31- BRIDGED • 32- SILENCE • 33- ANSWER • 34- NU_TONE • 35- NO_DIAL_TONE • 36- NO_PROGRESS • 37- NO_RING_BACK • 38- NO_ESTABLISHED • 39- PAGER_DETECTED • 40- WRONG_PARTY • 41- DIAL_ERROR • 42- CALL_DROPPED_ERROR |

| Field | Type | Mandatory | Description |
|----------------------------------|---------|-----------|---|
| | | | <ul style="list-style-type: none"> • 43- SWITCH_ERROR • 44- NO_FREE_PORT_ERROR • 45- TRANSFER_ERROR • 46- STALE • 47- AGT_CALLBACK_ERROR • 48- GRP_CALLBACK_ERROR • 49- DEAFENED • 50- HELD • 51- DO_NOT_CALL • 52- CANCEL_RECORD • 53- WRONG_NUMBER |
| callback_type | integer | no | Possible types: <ul style="list-style-type: none"> • 0-UNKNOWN • 1-ASAP • 2-SCHEDULED |
| Common interaction fields | | | |
| customer_id | string | yes | The ID of the customer. |
| interaction_id | string | yes | The Genesys GUID (or Call ID) for the interaction. |
| status | integer | yes | Possible statuses: <ul style="list-style-type: none"> • 0-NEW • 1-PENDING • 2-IN_PROCESS • 3-STOPPED |
| entity_type | integer | yes | Possible types: <ul style="list-style-type: none"> • 0-EMAIL_IN • 1-EMAIL_OUT • 2-CHAT |

| Field | Type | Mandatory | Description |
|----------------|-----------|-----------|--|
| | | | <ul style="list-style-type: none"> • 3-PHONE_CALL • 5-CALLBACK • 6-COBROWSE • 7-INTERACTION (open media) |
| type | string | yes | The type of the interaction (e.g. inbound, outbound, etc.) |
| sub_type | string | no | The application-specific subtype which further classifies the attribute "type". |
| media_type | string | yes | <p>The media type of the interaction:</p> <ul style="list-style-type: none"> • voice • email • chat • callback • and so on. |
| parent_id | string | no | The ID of the parent interaction, if applicable. |
| thread_id | string | no | The ID of the thread to which this interaction should be appended, or the ID of the interaction at the root of the thread. |
| external_id | string | no | The reference identifier for an external system. |
| owner_id | integer | no | The DB ID of the Person who owns the interaction. (The Person is an object defined in the Genesys Configuration Server.) |
| creator_app_id | integer | yes | The DB ID of the application that created the interaction. |
| start_date | date/time | yes | The UTC time of the interaction's creation, using the ISO 8601 representation<ref |

| Field | Type | Mandatory | Description |
|----------------------|-----------|------------------------|--|
| | | | name="iso8601"> http://en.wikipedia.org/wiki/ISO_8601 </ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| end_date | date/time | no | The UTC time of the interaction's end, using the ISO 8601 representation<ref name="iso8601" />: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| timeshift | integer | no | The number of minutes to add to or to subtract from the specified UTC<ref name="iso8601" /> time in order to get the local time of the interaction's creation. |
| category_id | string | no | The category assigned to this interaction by the Classification Server or the desktop's manual override. |
| allow_children | Boolean | no | True if child interactions can be added. 💡 Default value is true. |
| subject | string | no | An arbitrary textual subject for the interaction. |
| stopped_reason | string | no | The application-specified reason for which the interaction ended. |
| text | text | no | Plain text for the interaction. |
| structured_text | url | no | The URL of the interaction's structured text. |
| structured_text_mime | string | yes if structured_text | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the structured text, if specified (e.g. text/html). Mandatory if the parameter "structured_text" is specified. |

| Field | Type | Mandatory | Description |
|---------------------|---------|-----------------------|--|
| binary_content | url | no | The URL of the the interaction's binary content.. |
| binary_content_mime | string | yes if binary_content | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the binary content, if specified (e.g. text/html). |
| binary_content_size | integer | yes if binary_content | The size of the binary content in bytes. Mandatory if the parameter "binary_content" is specified. |
| udata | hash | no | A hash of key value pairs for the user data attached to the interaction. |

References

<references />

Chat Interaction

Purpose

Describes chat data for a multimedia interaction.

Resource

| Name | Type | Mandatory | Description |
|----------------------------------|--|-----------|---|
| Chat-related information | | | |
| established_date | date/time<ref name="iso8601">UTC Time, using the ISO 8601 representation : [YYYY]-[MM]-[DD]T[HH]:[mm]:[ss].[SSS]Z</ref> | no | The date/time when the chat session was established with a contact center resource. |
| released_date | date/time<ref name="iso8601"/> | no | The date/time when the chat session was released from the contact center resource. |
| Common Interaction fields | | | |
| customer_id | string | yes | The ID of the customer. |
| interaction_id | string | yes | The Genesys GUID (or Call ID) for the interaction. |
| status | integer | yes | Possible statuses: <ul style="list-style-type: none"> • 0-NEW • 1-PENDING • 2-IN_PROCESS • 3-STOPPED |
| entity_type | integer | yes | Possible types: <ul style="list-style-type: none"> • 0-EMAIL_IN • 1-EMAIL_OUT • 2-CHAT • 3-PHONE_CALL |

| Name | Type | Mandatory | Description |
|----------------|--------------------------------|-----------|---|
| | | | <ul style="list-style-type: none"> • 5-CALLBACK • 6-COBROWSE • 7-INTERACTION (open media) |
| type | string | yes | The type of the interaction (e.g. inbound, outbound, etc.) |
| sub_type | string | no | The application-specific subtype which further classifies attribute "type". |
| media_type | string | yes | The media type of the interaction: <ul style="list-style-type: none"> • voice • email • chat • callback • and so on. |
| parent_id | string | no | The ID of the parent interaction, if applicable. |
| thread_id | string | no | The ID of the thread to which this interaction should be appended, or the ID of the interaction at the root of the thread. |
| external_id | string | no | The reference identifier for an external system. |
| owner_id | integer | no | The DB ID of the Person who owns the interaction. (The Person is an object defined in the Genesys Configuration Server.) |
| creator_app_id | integer | yes | The DB ID of the application that created the interaction. |
| start_date | date/time<ref name="iso8601"/> | yes | The UTC time of the interaction's creation. |
| end_date | date/time<ref name="iso8601"/> | no | The UTC time of the interaction's end. |
| timeshift | integer | no | The number of minutes |

| Name | Type | Mandatory | Description |
|----------------------|---------|------------------------|--|
| | | | to add to or to subtract from the specified UTC<ref name="iso8601" /> time in order to get the local time of the interaction's creation. |
| category_id | string | no | The category assigned to this interaction by the Classification Server or the desktop's manual override. |
| allow_children | boolean | no | True if child interactions can be added. 💡 Default value is true. |
| subject | string | no | An arbitrary textual subject for the interaction. |
| stopped_reason | string | no | The application-specified reason for which the interaction ended. |
| text | text | no | Plain text for the interaction. |
| structured_text | url | no | The URL of the interaction's structured text. |
| structured_text_mime | string | yes if structured_text | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the structured text, if specified (e.g. text/html). Mandatory if the parameter "structured_text" is specified. |
| binary_content | url | no | The URL of the the interaction's binary content.. |
| binary_content_mime | string | yes if binary_content | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the binary content, if specified (e.g. text/html). |
| binary_content_size | integer | yes if binary_content | The size of the binary content in bytes. |

| Name | Type | Mandatory | Description |
|-------|------|-----------|--|
| | | | Mandatory if the parameter "binary_content" is specified. |
| udata | hash | no | A hash of key value pairs for the user data attached to the interaction. |

<references />

E-mail Interactions

Purpose

Provides information for e-mail address and interaction management.

E-mail Address

E-Mail Address Fields

| Field | Type | Required | Description |
|----------|--------|----------|--|
| address | string | yes | The e-mail address. |
| personal | string | no | The personal part of the e-mail address, for instance, a displayable such as a localized name. |

Inbound E-mail

Inbound e-mails are e-mail interactions which are received by the application or the Genesys Solution.

E-mail In

| Field | Type | Required | Description |
|--------------------------------|------------------|----------|---|
| Inbound-specific fields | | | |
| from | E-mail Address | no | The sender's e-mail address. |
| reply_to | E-mail Address | no | The address used to reply. |
| to | E-mail Address[] | no | The list of recipient addresses, as an array of e-mail addresses. |
| cc | E-mail Address[] | no | The list of addresses for copied recipients, as an array of e-mail addresses. |
| sent_date | date/time | no | The UTC<ref name="iso8601">Wikipedia ISO 8601</ref> date/ |

| Field | Type | Required | Description |
|----------------------------------|---------|----------|---|
| | | | time at which the e-mail was sent. |
| Common Interaction fields | | | |
| customer_id | string | yes | The ID of the customer. |
| interaction_id | string | yes | The Genesys GUID (or Call ID) for the interaction. |
| status | integer | yes | Possible statuses: <ul style="list-style-type: none"> • 0-NEW • 1-PENDING • 2-IN_PROCESS • 3-STOPPED |
| entity_type | integer | yes | Possible types: <ul style="list-style-type: none"> • 0-EMAIL_IN • 1-EMAIL_OUT • 2-CHAT • 3-PHONE_CALL • 5-CALLBACK • 6-COBROWSE • 7-INTERACTION (open media) |
| type | string | yes | The type of the interaction (e.g. inbound, outbound, etc.) |
| sub_type | string | no | The application-specific subtype which further classifies the attribute "type". |
| media_type | string | yes | The media type of the interaction: <ul style="list-style-type: none"> • voice • email • chat • callback • and so on. |
| parent_id | string | no | The ID of the parent interaction, if |

| Field | Type | Required | Description |
|----------------|-----------|----------|--|
| | | | applicable. |
| thread_id | string | no | The ID of the thread to which this interaction should be appended, or the ID of the interaction at the root of the thread. |
| external_id | string | no | The reference identifier for an external system. |
| owner_id | integer | no | The DB ID of the Person who owns the interaction. (The Person is an object defined in the Genesys Configuration Server.) |
| creator_app_id | integer | yes | The DB ID of the application that created the interaction. |
| start_date | date/time | yes | The UTC time of the interaction's creation, using the ISO 8601 representation<ref name="iso8601"> http://en.wikipedia.org/wiki/ISO_8601 </ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| end_date | date/time | no | The UTC time of the interaction's end, using the ISO 8601 representation<ref name="iso8601" />: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| timeshift | integer | no | The number of minutes to add to or to subtract from the specified UTC<ref name="iso8601" /> time in order to get the local time of the interaction's creation. |
| category_id | string | no | The category assigned to this interaction by the Classification Server or the desktop's manual override. |
| allow_children | Boolean | no | True if child interactions can be added. 💡 Default value is true. |

| Field | Type | Required | Description |
|----------------------|---------|------------------------|--|
| subject | string | no | An arbitrary textual subject for the interaction. |
| stopped_reason | string | no | The application-specified reason for which the interaction ended. |
| text | text | no | Plain text for the interaction. |
| structured_text | url | no | The URL of the interaction's structured text. |
| structured_text_mime | string | yes if structured_text | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the structured text, if specified (e.g. text/html). Mandatory if the parameter "structured_text" is specified. |
| binary_content | url | no | The URL of the the interaction's binary content.. |
| binary_content_mime | string | yes if binary_content | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the binary content, if specified (e.g. text/html). |
| binary_content_size | integer | yes if binary_content | The size of the binary content in bytes. Mandatory if the parameter "binary_content" is specified. |
| udata | hash | no | A hash of key value pairs for the user data attached to the interaction. |

<references />

Outbound E-mail

Outbound e-mails are e-mail interactions which are sent from the application or from the Genesys

Solution.

E-mail Out

| Field | Type | Mandatory | Description |
|----------------------------------|------------------|-----------|---|
| Outbound-Specific fields | | | |
| from | E-mail Address | no | The sender's e-mail address. |
| reply_to | E-mail Address | no | The e-mail address used to send a reply. |
| to | E-mail Address[] | no | The list of recipient addresses, as an array of e-mail addresses. |
| cc | E-mail Address[] | no | The list of addresses for copied recipients, as an array of e-mail addresses. |
| bcc | E-mail Address[] | no | The list of addresses for blind-copied recipients, as an array of e-mail addresses. |
| sent_date | date/time | no | The UTC<ref> http://en.wikipedia.org/wiki/ISO_8601 </ref> date/time at which the e-mail was sent. |
| reference_id | integer | no | Contains the external identifier (message ID) of the parent interaction. |
| reviewer_id | integer | no | The application-specified ID of the Person who reviewed the e-mail. |
| standard_response_id | string | no | The ID of the standard response item from which this e-mail was generated. |
| Common Interaction fields | | | |
| customer_id | string | yes | The ID of the customer. |
| interaction_id | string | yes | The Genesys GUID (or Call ID) for the interaction. |
| status | integer | yes | Possible statuses: <ul style="list-style-type: none"> • 0-NEW • 1-PENDING • 2-IN_PROCESS |

| Field | Type | Mandatory | Description |
|-------------|---------|-----------|---|
| | | | <ul style="list-style-type: none"> 3-STOPPED |
| entity_type | integer | yes | Possible types: <ul style="list-style-type: none"> 0-EMAIL_IN 1-EMAIL_OUT 2-CHAT 3-PHONE_CALL 5-CALLBACK 6-COBROWSE 7-INTERACTION (open media) |
| type | string | yes | The type of the interaction (e.g. inbound, outbound, etc.) |
| sub_type | string | no | The application-specific subtype which further classifies the attribute "type". |
| media_type | string | yes | The media type of the interaction: <ul style="list-style-type: none"> voice email chat callback and so on. |
| parent_id | string | no | The ID of the parent interaction, if applicable. |
| thread_id | string | no | The ID of the thread to which this interaction should be appended, or the ID of the interaction at the root of the thread. |
| external_id | string | no | The reference identifier for an external system. |
| owner_id | integer | no | The DB ID of the Person who owns the interaction. (The Person is an object defined in |

| Field | Type | Mandatory | Description |
|----------------------|-----------|------------------------|--|
| | | | the Genesys Configuration Server.) |
| creator_app_id | integer | yes | The DB ID of the application that created the interaction. |
| start_date | date/time | yes | The UTC time of the interaction's creation, using the ISO 8601 representation<ref name="iso8601"> http://en.wikipedia.org/wiki/ISO_8601 </ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| end_date | date/time | no | The UTC time of the interaction's end, using the ISO 8601 representation<ref name="iso8601" />: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| timeshift | integer | no | The number of minutes to add to or to subtract from the specified UTC<ref name="iso8601" /> time in order to get the local time of the interaction's creation. |
| category_id | string | no | The category assigned to this interaction by the Classification Server or the desktop's manual override. |
| allow_children | Boolean | no | True if child interactions can be added. 💡 Default value is true. |
| subject | string | no | An arbitrary textual subject for the interaction. |
| stopped_reason | string | no | The application-specified reason for which the interaction ended. |
| text | text | no | Plain text for the interaction. |
| structured_text | url | no | The URL of the interaction's structured text. |
| structured_text_mime | string | yes if structured_text | The mime type<ref |

| Field | Type | Mandatory | Description |
|---------------------|---------|-----------------------|--|
| | | | name="mime"> http://www.iana.org/assignments/media-types </ref> for the structured text, if specified (e.g. text/html). Mandatory if the parameter "structured_text" is specified. |
| binary_content | url | no | The URL of the the interaction's binary content.. |
| binary_content_mime | string | yes if binary_content | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the binary content, if specified (e.g. text/html). |
| binary_content_size | integer | yes if binary_content | The size of the binary content in bytes. Mandatory if the parameter "binary_content" is specified. |
| udata | hash | no | A hash of key value pairs for the user data attached to the interaction. |

<references />

Phone Call Interaction



Purpose: Describes phone call fields.

Description

Provides fields for a phone call interaction.

Resource

| Field | Type | Mandatory | Description |
|----------------|---------|-----------|--|
| duration | integer | no | The duration of the call in seconds. |
| outcome | string | no | The application-specified outcome of the call. |
| phone_number | string | no | The phone number called. |
| tconnection_id | string | no | The connection ID assigned to the call by the Genesys T-Server. |
| customer_id | string | yes | The ID of the customer. |
| interaction_id | string | yes | The Genesys GUID (or Call ID) for the interaction. |
| status | integer | yes | Possible statuses: <ul style="list-style-type: none"> • 0-NEW • 1-PENDING • 2-IN_PROCESS • 3-STOPPED |
| entity_type | integer | yes | Possible types: <ul style="list-style-type: none"> • 0-EMAIL_IN • 1-EMAIL_OUT • 2-CHAT |

| Field | Type | Mandatory | Description |
|----------------|-----------|-----------|--|
| | | | <ul style="list-style-type: none"> • 3-PHONE_CALL • 5-CALLBACK • 6-COBROWSE • 7-INTERACTION (open media) |
| type | string | yes | The type of the interaction (such as inbound, outbound, and so on). |
| sub_type | string | no | The application-specific subtype which further classifies attribute "type". |
| media_type | string | yes | The media type of the interaction, including: <ul style="list-style-type: none"> • voice • email • chat • callback |
| parent_id | string | no | The ID of the parent interaction, if applicable. |
| thread_id | string | no | The ID of the thread to which this interaction should be appended, or the ID of the interaction at the root of the thread. |
| external_id | string | no | The reference identifier for an external system. |
| owner_id | integer | no | The DB ID of the Person who owns the interaction. (The Person is an object defined in the Genesys Configuration Server.) |
| creator_app_id | integer | yes | The DB ID of the application that created the interaction. |
| start_date | date/time | yes | The UTC time of the interaction's creation, using the ISO 8601 representation <ref name="iso8601"> http://en.wikipedia.o |

| Field | Type | Mandatory | Description |
|----------------------|-----------|------------------------|---|
| | | | wiki/ISO_8601 </ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| end_date | date/time | no | The UTC time of the interaction's end, using the ISO 8601 representation<ref name="iso8601" />: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z |
| timeshift | integer | no | The number of minutes to add to or subtract from the specified UTC<ref name="iso8601" /> time in order to get the local time of the interaction's creation. |
| category_id | string | no | The category assigned to this interaction by the Classification Server or the desktop's manual override. |
| allow_children | Boolean | no | Default value of true indicates that child interactions can be added. |
| subject | string | no | An arbitrary textual subject for the interaction. |
| stopped_reason | string | no | The application-specified reason for which the interaction ended. |
| text | text | no | Plain text for the interaction. |
| structured_text | url | no | The URL of the interaction's structured text. |
| structured_text_mime | string | yes if structured_text | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the structured text, if specified (text/html). Mandatory if the parameter "structured_text" is specified. |
| binary_content | url | no | The URL of the the interaction's binary |

| Field | Type | Mandatory | Description |
|---------------------|---------|-----------------------|---|
| | | | content. |
| binary_content_mime | string | yes if binary_content | The mime type<ref name="mime"> http://www.iana.org/assignments/media-types </ref> for the binary content, if specified (text/html). |
| binary_content_size | integer | yes if binary_content | The size of the binary content in bytes. Mandatory if the parameter "binary_content" is specified. |
| udata | list | no | A list of key-value pairs for the user data attached to the interaction. |

<references />

List of Interaction Operations



Purpose: Groups operations which handle multimedia interactions.

Interaction Operations

- [GET /customers/{customer id}/interactions](#)
- [GET /services/{service id}/interactions](#)
- [GET /interactions/{interaction id}](#)

Query Interactions

| | |
|-----------------------------|--|
| | <ul style="list-style-type: none"> • GET /customers/\${customer_id}/interactions • GET /services/\${service_id}/interactions • GET /interactions/\${interaction_id} |
| Available since 8.0.100.000 | |

Description

Retrieves multimedia interactions and their data.

Operation

Queries Multimedia Interactions

| | | | |
|-----------------------|---|---------------------------------|----------------------------------|
| ID | CV.WS.IXN.2 | | |
| Method | GET | | |
| URL | <ol style="list-style-type: none"> 1. By Customer: /customers/\${customer_id}/interactions 2. By Service: /services/\${service_id}/interactions 3. By Interaction ID: /interactions/\${interaction_id} | | |
| Name | Type | Mandatory | Description |
| URI Parameters | | | |
| \${customer_id} | string | yes if query is by customer. | Customer ID, required for URI 1. |
| \${service_id} | integer | yes if query is by service. | Service ID, required for URI 2. |
| \${interaction_id} | integer | yes if query is by interaction. | Service ID, required for URI 3. |

The output sample shows a "structured_text" parameter which provides a URL to the structured text content (which is not returned as part of the query): the user application performs a separate GET to the given URL.

Similarly, the following URLs are available for GETting interaction content:

- /interactions/\${interaction_id}/plain_text

- /interactions/\${interaction_id}/structured_text
- /interactions/\${interaction_id}/binary_content

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|--|
| HTTP code | 200 |
| HTTP message | OK |
| Body | An array of one or more Interaction Resources. |

Example

Operation

GET <http://ucshost:8080/interactions/00001a57JGQ00BW8>

Result

```
{
  "external_id" : "00AF4A7951D60009",
  "established_date" : "2009-08-05T09:33:15.000Z",
  "text" : "http://ucshost:8080/interactions/00001a57JGQ00BW8/plain_text",
  "media_type" : "chat",
  "udata" : {
    "RTargetTypeSelected" : "2",
    "RRequestedSkillCombination" : "",
    "ChatServerHost" : "SUITE80",
    "CustomerSegment" : "default",
    "RTargetObjectSelected" : "Agent Group Everybody",
    "RTargetRuleSelected" : "",
    "RTargetPlaceSelected" : "Place_1002",
    "RTargetAgentGroup" : "Agent Group Everybody",
    "RTargetObjSelDBID" : "123",
    "ServiceType" : "default",
    "_smsSrcNumber" : "+33298143456",
    "RTargetAgentSelected" : "1002",
    "RTenant" : "defaultTenant",
    "RVQID" : "",
    "CBR-contract_DBIDs" : "",
    "CBR-Interaction_cost" : "",
    "ChatServerPort" : "23874",
    "_smsDestNumber" : "+33298143322",
    "RTargetRequested" : "Agent Group Everybody",
    "CBR-IT-path_DBIDs" : "",
    "RStrategyDBID" : "480",
    "CBR-actual_volume" : "",
    "RStrategyName" : "sms-session-inbound"
  }
}
```

```
},
"binary_content" : "http://ucshost:8080/interactions/00001a57JGQ00BW8/binary_content",
"structred_text" : "http://ucshost:8080/interactions/00001a57JGQ00BW8/structured_text",
"status" : 3,
"subject" : "SMS chat",
"timeshift" : 1,
"type" : "Inbound",
"interaction_id" : "00001a57JGQ00BW8",
"allow_children" : true,
"end_date" : "2009-08-05T09:34:04.140Z",
"owner_id" : 124,
"sub_type" : "InboundNew",
"released_date" : "2009-08-05T09:33:59.000Z",
"entity_type" : 2,
"creator_app_id" : 175,
"thread_id" : "00001a57JGQ00BW9",
"start_date" : "2009-08-05T09:33:10.000Z",
"structred_text_mime" : "text/xml",
"customer_id" : "00001a57JGQ00BVU"
}
```

List of Server Operations




Purpose: Lists the operations that your application can perform on UCS.

Server Operations

- [GET /server/status](#)
- [POST /server/mode](#)

Query Server Status

| | |
|---|----------------------------|
|  | GET /server/status |
| | Available since 8.0.100.00 |

Description

Queries the status of the Universal Contact Server (UCS). The status that is returned includes in particular the **Server Mode** (production or maintenance), but it also includes additional information and valuable counters to analyse the activity of the UCS. 🚫 Some counters, such as "request_today", "client_errors_today", and "server_errors_today", are not persistent. They are automatically reset if the UCS is restarted.

Operation

Query Server Status

| | |
|---------------|----------------|
| ID | CV.WS.STAT |
| Method | GET |
| URL | /server/status |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTPResponseCodesandErrors](#) for further details on the possible codes that this operation can return.

Response

| | | |
|---------------------|---|-------------------------|
| HTTP code | 200 | |
| HTTP message | OK | |
| Name | Type | Description |
| Body | | |
| version | string | The version of the UCS. |
| system_time | date/time<ref name="format">The date/time format is "yyyy-MM-ddTHH:mm:ss.SSSZ".</ref> | The system time |

| HTTP code | 200 | |
|------------------|---|--|
| mode | token <ul style="list-style-type: none"> • production • maintenance | The Server Mode . |
| max_memory | long | The maximum amount of memory the JVM will attempt to use, in KB. |
| allocated_memory | integer | The amount of memory currently in use by the JVM, in KB. |
| free_memory | integer | The total memory available to the JVM, in KB. |
| started | date/time<ref name="format"/> | Start date of the UCS. |
| last_request | date/time<ref name="format"/> | The time of the last web service request. |

<references />

Example

Operation

```
GET /server/status
```

Result

```
"max_memory" : 518464,
"server_errors_today" : 0,
"client_errors_today" : 0,
"request_today" : 0,
"system_time" : "2010-02-24T15:56:46.369Z",
"used_memory" : 7947,
"allocated_memory" : 63936,
"started" : "2010-02-24T14:35:28.668Z",
"free_memory" : 55989,
"last_request" : "2010-02-24T14:35:27.964Z",
"mode" : "production",
"version" : "8.0.100.11"
```

Set Server Mode




POST /server/mode

Description

Manages the UCS Mode for the Context Services. Two modes are available: Maintenance and Production.

- If the server switches from maintenance to production mode, the system waits a configured amount of time (default 1 minute) for the completion of all schema management requests (see [Schema Operations](#)).
- If the server switches from production to maintenance mode, the system waits for outstanding profile or service-related functions to complete. While the system is attempting to switch modes, all web service requests are denied with HTTP Status Code 503 (Service Unavailable).

 Read the [Server Mode](#) page of the developer's guide for further details about maintenance and production mode.

Operation

| ID | CV.WS.MODE | | |
|-----------|---|------------|-------------------------------------|
| Method | POST | | |
| URL | /server/mode | | |
| Parameter | Type | Mandatory | Description |
| mode | token <ul style="list-style-type: none"> • maintenance • production | yes | The mode to set (case-insensitive). |

Response

The UCS Server status is returned as a JSON object with the following fields: The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|---|
| HTTP code | 200 |
| HTTP message | OK |
| Header | Location /server/status |
| Body | <pre>{"server changed":"\${mode}"}</pre> where: <ul style="list-style-type: none">• <code>\${mode}</code> is the string for the new UCS mode (production or maintenance). |

Example

Operation

```
POST /server/mode  
{"mode":"production"}
```

Result

```
{"server changed":"production"}
```

End Event List

| | |
|---|--|
|  | Purpose: Lists the End Event resources used to describe the end of a service, state, or task. |
| Available since: 8.0.100.00 | |

Service End Event

| Field | Type | Mandatory | Description |
|------------------|----------------|-----------|---|
| service_id | integer | yes | The unique 64-bit ID of the given service. |
| session_id | string | no | The ID of the related session (for instance, the orchestration session or any other business session). Limited to 32 characters. |
| interaction_id | string | no | The ID of the interaction at the service event's creation. Limited to 50 characters. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business">fckLRRefer to Configuration Options for more details on <i>Business Attribute</i> mapping.</ref> of application which issued the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The Genesys DB ID for the application which issues the service event, such as a GVP VoiceXML application, Orchestration SCXML application, and so on. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business" /> of |

| Field | Type | Mandatory | Description |
|------------------|----------------|-----------|---|
| | | | resource providing the service (for example, GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | <p>The unique DB ID for the specific resource which provides the service. For instance:</p> <ul style="list-style-type: none"> The Genesys DB ID of a specific GVP or orchestration platform The DB ID of a given agent, according to the context |
| media_type | long or string | no | The media type<ref name="business" /> applicable to the given service, such as e-mail, voice, chat, and so on. |
| disposition | long or string | no | The unique ID for the business disposition<ref name="business" /> assigned to the given service. For instance, this can be the DB ID of a Business Attribute used to enumerate a given organization's business dispositions. |
| disposition_desc | string | no | A text description that provides additional information about the business disposition. Limited to 64 characters. |
| timestamp | date/time | no | <p>The UTC time at which the service event was raised, with a precision of milliseconds, using the ISO 8601<ref name="iso8601">See http://en.wikipedia.org/wiki/ISO_8601</ref> representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.</p> <p> If the application does not specify this timestamp, the server</p> |

| Field | Type | Mandatory | Description |
|---|--|-----------|---|
| | | | adds it when the service event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Service extension. Your application can add as many service extensions as needed, as long as you have created a corresponding Extension Schema for each one by using the Create Service Extension Schema operation. |

<references />


Related Operations

- [Complete Service](#)

State End Event

| Field | Type | Mandatory | Description |
|------------------|----------------|-----------|--|
| service_id | integer | yes | The unique 64-bit ID of the given service. |
| state_id | integer | yes | The 32-bit ID of the given state. |
| session_id | string | no | The ID of the related session (for instance, the orchestration session or any other business session). Limited to 32 characters. |
| interaction_id | string | no | The ID of the interaction at the service event's creation. Limited to 50 characters. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business">fckLRRefer to Configuration Options for more details on <i>Business Attribute</i> mapping.</ref> of application which issued the state event. May be |

| Field | Type | Mandatory | Description |
|------------------|----------------|-----------|--|
| | | | used to group related applications, potentially across resource types. |
| application_id | integer | no | The Genesys DB ID for the application which issues the state event, such as a GVP VoiceXML application, Orchestration SCXML application, and so on. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business" /> of resource providing the related service (for example, GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the related service. For instance: <ul style="list-style-type: none"> The Genesys DB ID of a specific GVP or orchestration platform The DB ID of a given agent, according to the context |
| media_type | long or string | no | The media type<ref name="business" /> applicable to the given state, such as e-mail, voice, chat, and so on. |
| disposition | long or string | no | The unique ID for the business disposition<ref name="business" /> assigned to the given state. For instance, this can be the DB ID of a Business Attribute used to enumerate a given organization's business dispositions. |
| disposition_desc | string | no | A text description that provides additional information about the business disposition. Limited to 64 |


| Field | Type | Mandatory | Description |
|---|---|-----------|--|
| | | | characters. |
| timestamp | date/time | no | The UTC time at which the service event was raised, with a precision of milliseconds, using the ISO 8601<ref name="iso8601">See http://en.wikipedia.org/wiki/ISO_8601 </ref> representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.  If the application does not specify this timestamp, the server adds it when the service event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | State extension. Your application can add as many state extensions as needed, as long as you have created a corresponding Extension Schema for each one by using the Create State Extension Schema operation. |

<references />

Related Operations

- **Complete State**

Task End Event

| Field | Type | Mandatory | Description |
|------------|---------|-----------|--|
| service_id | integer | yes | The unique 64-bit ID of the given service. |
| state_id | integer | no | The ID of the related state.  If the task is optional, you have no obligation to associate it with a state. For instance, you can associate this task with a higher service level. |

| Field | Type | Mandatory | Description |
|------------------|----------------|-----------|---|
| task_id | integer | yes | The ID of the given task. |
| session_id | string | no | The ID of the related session (for instance, the orchestration session or any other business session). Limited to 32 characters. |
| interaction_id | string | no | The ID of the interaction at the service event's creation. Limited to 50 characters. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business">fckLRRefer to Configuration Options for more details on <i>Business Attribute</i> mapping.</ref> of application which issued the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The Genesys DB ID for the application which issues the service event, such as a GVP VoiceXML application, Orchestration SCXML application, and so on. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business" /> of resource providing the service (for example, GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the service. For instance: <ul style="list-style-type: none"> The Genesys DB ID of a specific GVP or orchestration platform The DB ID of a given agent, according to |


| Field | Type | Mandatory | Description |
|---|--|-----------|--|
| | | | the context |
| media_type | long or string | no | The media type<ref name="business" /> applicable to the given task, such as e-mail, voice, chat, and so on. |
| disposition | long or string | no | The unique ID for the business disposition<ref name="business" /> assigned to the given task. For instance, this can be the DB ID of a Business Attribute used to enumerate a given organization's business dispositions. |
| disposition_desc | string | no | A text description that provides additional information about the business disposition. Limited to 64 characters. |
| timestamp | date/time | no | The UTC time at which the service event was raised, with a precision of milliseconds, using the ISO 8601<ref name="iso8601">See http://en.wikipedia.org/wiki/ISO_8601 </ref> representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.  If the application does not specify this timestamp, the server adds it when the service event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Task extension. Your application can add as many Task extensions as needed, as long as you have created a corresponding Extension Schema for each one by using the Create Task Extension Schema operation. |

<references />

Related Operations

- [Complete Task](#)

Extension

| | |
|---|--|
|  | <p>Purpose: Describes an extension.</p> <ul style="list-style-type: none"> • For Customers Available since: 8.0.100.00 • For services, states, or tasks Available since: 8.0.200.00 |
|---|--|

Description


Each extension fulfills the contract of an [Extension Schema](#) that your application created in anterior operations. Your application can create schemas for the following extensions:

- Available since: 8.0.100.00
 - Profile extensions, created through the [Create Profile Extension Schema](#) operation, which provides extensions for profiles.
- Available since: 8.0.200.00
 - Service extensions, created through the [Create Service Extension Schema](#), which provides extensions at the service level.
 - State Extension, created through the [Create State Extension Schema](#) operation, which provides extensions at the service level.
 - Task extension, created through the [Create Task Extension Schema](#) operation, which provides extensions at the task level.

Once the extension schema is defined, your application can create and add extension records when dealing with standard profile, services, states, and task operations. For instance, if **you start a task**, you can specify extension records in your operation body as shown in the example section.

Profile Extension

Profile Extension

| Field | Type | Mandatory | Description |
|-------------|--------|--------------------------------|---|
| customer_id | string | yes if not nested in a profile | The unique ID of the given customer.  This field is mandatory if the extension is not nested inside a Customer Profile . |

| Field | Type | Mandatory | Description |
|---------------|--|-----------|--|
| name | string | yes | <p>The unique, case-insensitive name of the extension.</p> <ul style="list-style-type: none"> Starts with a letter to which you can append letters, numbers, or underscores. Restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on index creation.) |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date datetime currency boolean | yes | <p>Individual attributes, defined in the Extension Schema. <attribute n> corresponds to the attribute name defined in the schema.</p> |

Service/State/Task Extension

Service/State/Task Extension

| Field | Type | Mandatory | Description |
|------------|---------|------------------------|--|
| service_id | integer | yes | The unique ID of the service associated with the extension. |
| state_id | integer | yes if state extension | The unique ID of the state associated with the extension. For task and service extensions, you do not need to specify this id. |
| task_id | integer | yes if task extension | The unique ID of the task associated with the extension. For state and service extensions, you do not need to specify |

| Field | Type | Mandatory | Description |
|---------------|---|-----------|--|
| | | | this id. |
| name | string<ref name="string">⚠️ Do not use Unauthorized Strings as attribute values.</ref> | yes | The unique, case-insensitive name of the extension. The name must start with a letter, and can be followed with letters, numbers, or underscores (_). The name is restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on creation of index). |
| <attribute n> | <ul style="list-style-type: none"> • boolean • string<ref name="string" /> • integer • long • double • date • datetime • currency | yes | Individual attributes, as defined in the extension schema. <attribute n> corresponds to the attribute name defined in the schema. Optional attributes do not need to be specified. |

<references />


State Transition Event

| | |
|---|--|
|  | Purpose: State Transition event used to describe the transition of a state. |
| Available since: 8.0.100.00 | |

Description


Combines state event resources to describe the completion of a given state and the start of a new state in a single request, rather than issuing separate start and end requests.

Resource

 When your application deals with this resource, parts of the *from* and *to* fields are shared. See below.

State Transition Event

| Field | Type | Mandatory | Description |
|------------|---------|-----------|---|
| service_id | integer | yes | The unique ID of the related service. |
| from | hash | yes | The hash of the following fields describing the state from which the service is transitioning: <ul style="list-style-type: none"> • <i>state_id</i> (<i>mandatory</i>): The 32-bit ID of the state to complete. • <i>disposition</i> (<i>optional</i>): The unique ID for the business disposition assigned to the given state. For instance, this can be the DB ID of a Business Attribute used to enumerate a given organization's business dispositions<ref |

| Field | Type | Mandatory | Description |
|---|----------------|-----------|--|
| | | | <p>name="business">.</p> <p>Refer to Configuration Options for more details on Business Attribute mapping.</ref>.</p> <ul style="list-style-type: none"> disposition_desc (optional): The text description which provides additional context on the business disposition. Limited to 64 characters. |
| to | hash | yes | <p>The hash of the following fields, which describe the state into which the service is transitioning:</p> <ul style="list-style-type: none"> state_type (mandatory): The unique ID associated with the type of service, typically the DB ID of a value in the Service Type Business Attribute<ref name="business"/>. est_duration (optional): The estimated service duration in seconds. |
| <p> The following fields apply both to the state to complete and the state to start:</p> | | | |
| session_id | string | no | The ID of the related session, for instance, the orchestration session, or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref |

| Field | Type | Mandatory | Description |
|----------------|----------------|-----------|--|
| | | | name="business"/> of application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID (e.g. Genesys DB ID) for the application issuing the service event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (for example, GVP, Agent Desktop, or Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the service. For instance: <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given service/state/task, for instance, e-mail, voice, chat, etc. |
| timestamp | date/time | no | The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z. If the application does not specify this timestamp, the server |


| Field | Type | Mandatory | Description |
|---|--|-----------|--|
| | | | does it when the event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | State extension. Your application can add as many state extensions as needed, as long as you have created corresponding Extension Schema with the Create State Extension Schema operation. |

<references />

Related Operations

- [Perform State Transition](#)

Service

| | |
|---|---|
|  | Purpose: Describes the Service resource. |
| | Available since: 8.0.100.00 |

Description

Provides a consolidated view of the service information.

Services are customer commitments defined by the business application (IVR, Orchestration, Agent, etc.) which interacts with the customer. Each service potentially spans multiple interactions over a variety of media channels. Each service can be divided into **States** which include a list of **Tasks**. The service is completed once the states and their tasks are completed. Your application is responsible for state transitions and task management. The service resources (creation, start, or end) are managed through **Service Operations**, which update the service information through service events (**Start Event** and **End Events**).

Resource

This table lists the resource fields that your application can deal with through operations. According to the operation, your application may not use the totality of the resource.

| Field | Type | Mandatory | Description |
|--------------|----------------|-----------|---|
| service_type | long or string | yes | The unique ID associated with the type of service, typically, the DB ID of a value in the Service Type Business Attribute. Refer to Configuration Options for more details about <i>Business Attribute</i> mapping. |
| service_id | integer | yes | The service's unique ID.<ref name="toplevel">Only top-level objects include this field. For instance, if your application retrieves a service which includes nested states and tasks, only the top-level service |

| Field | Type | Mandatory | Description |
|------------------|---------------------|-----------|--|
| | | | object contains this ID.</ref> |
| started | Service Start Event | yes | Start event (see Start Service). This event should not include the "est_duration" field, if it already exists at the service level. |
| completed | Service End Event | no | The related end event if the service is completed (see Complete Service). This field should not include the "disposition" and "disposition_desc" fields if they already exist at the service level. |
| customer_id | string | no | The customer's unique ID<ref name="toplevel"/>. If the service has no customer ID, the service is Anonymous Service . |
| est_duration | integer | no | The estimated time for completing the service, in seconds. |
| duration | integer | no | The total duration in milliseconds. Only relevant for completed services. |
| disposition | long or string | no | ID of the Business disposition ID. Only relevant for completed services. |
| disposition_desc | string | no | The reason for assigning the business disposition with the service element. Limited to 256 characters. |
| active_states | State[] | no | The array of the started states which are not completed. |
| completed_states | State[] | no | The array of completed states through which the service has made transitions. |
| active_tasks | Task[] | no | The array of the started tasks which are not complete. |

| Field | Type | Mandatory | Description |
|---|---|-----------|--|
| completed_tasks | Task [] | no | The array of the tasks which are complete as part of the service delivery. |
| interactions | Interaction [] | no | The array of the interactions which are associated with this service. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension [] (multi-valued) | no | Service extension. Your application can add as many service extensions as needed, as long as you have created the corresponding Extension Schema with the Create Service Extension Schema operation. |

<references />

Related Operations

- [Query Services](#)
- [Query Service by ID](#)

State



Purpose: Describes a State Resource.

Description

Describes one of the service states.

Throughout their lifecycle, services go through states such as:

- customer identification
- agent assignment
- service delivery

The exact sequence of states depends on the steps which your customer service application implements (for example, IVR, orchestration, or agent application). Your application is responsible for starting and completing states, but also for managing state transitions. Each State can also contain nested **Task** resources (zero or more) that your application should manage as well.

Resource

This table lists the resource fields that your application can deal with through operations. According to the operation, your application may not use the totality of the resource.

| Field | Type | Mandatory | Description |
|------------|----------------|-----------|---|
| state_id | integer | yes | The 32-bit integer ID of the state, assigned by the UCS when the state is started. |
| state_type | long or string | yes | The unique ID associated with the state type. For instance, this ID can be the DB ID of a value in the Service Type Business Attribute. Enumerated values could be one of the following: 1. Customer identification |

| Field | Type | Mandatory | Description |
|------------|-------------------|-----------|--|
| | | | <ol style="list-style-type: none"> 2. Service identification 3. Assign service agent 4. Waiting for service agent 5. Offering another service while waiting for agent 6. Offering callback 7. Callback pending 8. Delivering service 9. Waiting for customer input 10. Offering another service while delivering service <p>Refer to Configuration Options for more details on <i>Business Attribute</i> mapping.</p> |
| service_id | integer | yes/no | The service's unique ID if the state is not part of a top-level service resource which includes a service ID. <ref name="toplevel">Only top-level representations include this field. For instance, if your application retrieves a service which includes nested states and tasks, only the top-level service resource contains this ID.</ref> |
| started | State Start Event | yes | Related start event. This field should not repeat the "est_duration" field, if it already exists. |
| completed | State End Event | no | The related end event if the state is completed. This field should not repeat the "disposition" and "disposition_desc" fields if they already exist. |

| Field | Type | Mandatory | Description |
|---|--|-----------|--|
| est_duration | integer | no | The estimated time for completing the state, in seconds. |
| duration | integer | no | The total duration, in milliseconds. Only relevant for completed states. |
| disposition | long or string | no | ID of the Business disposition ID. Only relevant for completed states. |
| disposition_desc | string | no | The reason for assigning the business disposition with the service element. Limited to 256 characters. |
| active_tasks | Task[] | no | The array of tasks that are started but not yet complete. |
| completed_tasks | Task[] | no | The array of Task that are complete. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | State extension. Your application can add as many state extensions as needed, as long as you have created corresponding Extension Schema with the Create State Extension Schema operation. |


<references />

Start Event List

| | |
|---|--|
|  | Purpose: Lists the Start Event resources used to describe the start of a service, state, or task. |
| | Available since: 8.0.100.00 |

Service Start Event

Description This resource describes information useful to manage the start or the creation of a service.

| Field | Type | Mandatory | Description |
|--------------|----------------|------------------------------|--|
| customer_id | string | yes if no <i>contact_key</i> | The unique ID of the customer associated with the given service.  Services with no customer_id are anonymous . In this case, the event should include a contact_key. |
| contact_key | string | yes if no <i>customer_id</i> | Key for later lookup of the service. This contact_key is mandatory if no customer ID is specified. For example, the application might store a PIN, or the ANI, as the contact key when the service is first started. Later, if the customer is identified, the contact key is used to lookup the existing service record and associate it with the customer. |
| service_type | long or string | yes | The unique ID associated with the type of service, typically the DB ID of a value in the Service Type Business Attribute<ref name="business">. Refer to Configuration Options for more details on Business Attribute mapping.</ref>. |

| Field | Type | Mandatory | Description |
|------------------|----------------|-----------|--|
| session_id | string | no | The ID of the related session, for instance, the orchestration session, or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"/>application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID, for example, Genesys DB ID, for the application issuing the service event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (for example, GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the service. For instance: <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> |

| Field | Type | Mandatory | Description |
|---|---|-----------|--|
| | | | applicable to the given service, for instance, e-mail, voice, chat, etc. |
| est_duration | integer | no | The estimated service duration, in seconds. |
| timestamp | date/time | no | The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z. If the application does not specify this timestamp, the server does it when the event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Service extension. Your application can add as many service extensions as needed, as long as you have already created corresponding Extension Schema with the Create Service Extension Schema operation. |

<references />

Related Operations

- [StartService](#)
- [Associate Service](#)

State Start Event

Description This resource describes the start of the service state.

| Field | Type | Mandatory | Description |
|------------|----------------|-----------|--|
| service_id | integer | yes | The unique 64-bit ID of the service. |
| state_type | long or string | yes | The unique ID associated with the state type, typically, the DB ID of a value in the |

| Field | Type | Mandatory | Description |
|-------------------|----------------|-----------|--|
| | | | <p>Service Type Business Attribute<ref name="business">.</p> <p>Refer to Configuration Options for more details on Business Attribute mapping.</ref>. Enumerated values may be from the following:</p> <ol style="list-style-type: none"> 1. Customer identification 2. Service identification 3. Assign service agent 4. Waiting for service agent 5. Offering another service while waiting for agent 6. Offering callback 7. Callback pending 8. Delivering service 9. Waiting for customer input 10. Offering another service while delivering service |
| previous_state_id | integer | no | The ID of the previous state. |
| session_id | string | no | The ID of the related session, for instance, the orchestration session, or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of application issuing the service event. May be used to group related |

| Field | Type | Mandatory | Description |
|------------------|----------------------------------|-----------|--|
| | | | applications, potentially across resource types. |
| application_id | integer | no | The unique ID, for example, Genesys DB ID, for the application issuing the service event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (for example, GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the service, for instance: <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given state, for instance, e-mail, voice, chat, etc. |
| est_duration | integer | no | The estimated state duration in seconds. |
| timestamp | date/time | no | The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z. If the application does not specify this timestamp, the server does it when the event is processed. |
| <extension name> | Extension (single-valued) | no | State extension. Your |

| Field | Type | Mandatory | Description |
|-----------------------|---|-----------|--|
| Supported since 8.0.2 | or Extension[] (multi-valued) | | application can add as many state extensions as needed, as long as you have already created corresponding Extension Schema with the Create State Extension Schema operation. |

<references />

Related Operations

- [Complete State](#)
- [Perform State Transition](#)
- [Query State by ID](#)
- [Query States](#)
- [Start State](#)

Task Start Event

Description: Describes the start of a Task.


| Field | Type | Mandatory | Description |
|------------|----------------|-----------|---|
| service_id | integer | yes | The unique 64-bit ID of the service. |
| state_id | integer | no | The 32-bit integer ID of the state. See State . |
| task_type | long or string | yes | The unique ID associated with the type of task, typically the DB ID of a value in a Business Attribute representing customer service tasks for the given organization<ref name="business"> Refer to Configuration Options for more details on Business Attribute mapping.</ref>. |
| session_id | string | no | The ID of the related session, for instance, the orchestration session, or any other |

| Field | Type | Mandatory | Description |
|------------------|----------------|-----------|--|
| | | | business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID (e.g. Genesys DB ID) for the application issuing the event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (for example, GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the service. For instance: <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given task, for instance, e-mail, voice, chat, etc. |
| est_duration | integer | no | The estimated task duration, in seconds. |

| Field | Type | Mandatory | Description |
|---|--|-----------|--|
| timestamp | date/time | no | The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z. If the application does not specify this timestamp, the server does it when the event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Task extension. Your application can add as many task extensions as needed, as long as you have created corresponding Extension Schema with the Create Task Extension Schema operation. |

<references />

Task

| | |
|---|------------------------------------|
|  | Purpose: Represents a Task. |
| | Available since: 8.0.100.00 |

Description

Describes one task.

Tasks allow your application to divide a **State** into a collection of tasks, each with its own disposition. Zero or more tasks can be executed as part of the Service Delivery state. Your application is responsible for managing these tasks. 🚩 If the state is optional, your application can associate the task with a service instead of a state.

Resource

This table lists the resource fields that your application can deal with through operations. According to the operation, your application may not use the totality of the resource.

| Field | Type | Mandatory | Description |
|------------|---------|-----------|---|
| state_id | integer | no | The 32-bit integer ID for the state associated with the task. |
| task_id | integer | no | The 32-bit integer ID of the task, assigned by the UCS when the task is started. |
| service_id | integer | no | The service's unique ID if the task is not part of a top-level state or service resource which includes a service ID.<ref name="toplevel">Only top-level representations include this field. For instance, if your application retrieves a service which includes nested states and tasks, only the top-level service |

| Field | Type | Mandatory | Description |
|---|--|-----------|---|
| | | | representations contain this ID.</ref> |
| started | Task Start Event | yes | Related start event. This event should not include the "est_duration" field, if it already exists at the task level. |
| completed | Task End Event | no | The related end event if this task is completed. This event should not repeat the "disposition" and "disposition_desc" fields if they already exist at the task level. |
| customer_id | string | no | The customer's unique ID<ref name="oplevel" />. |
| est_duration | integer | no | The estimated time for completing the item, in seconds. |
| duration | integer | no | The total duration, in milliseconds. Only relevant for completed tasks. |
| disposition | long or string | no | ID or name of the Business Disposition ID associated with the task. See Business Attributes for further details. Only relevant for completed tasks. |
| disposition_desc | string | no | The reason for assigning the business disposition with the service element. Limited to 256 characters. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Task extension. Your application can add as many task extensions as needed, as long as you have created corresponding Extension Schema with the Create Task Extension Schema operation. |

<references />

Related Operations

- [Complete Task](#)
- [Query Task by ID](#)
- [Query Tasks](#)
- [Start Task](#)

List of Service Operations



Purpose: Groups the operations that your application can create for both services, states, tasks, and interaction resources.

- Service Operations
 - Since: 8.0.100.00
 - [POST /services/start](#)
 - [POST /customers/{customer id}/services/{service id}](#)
 - [POST /services/{service id}/end](#)
 - [GET /services/{service id}](#)
 - [GET /services/anonymous/{contact key}/active](#)
 - [GET /services/anonymous/{contact key}/completed](#)
 - [GET /services/anonymous/{contact key}](#)
 - [GET /customers/{customer id}/services/active](#)
 - [GET /customers/{customer id}/services/completed](#)
 - [GET /customers/{customer id}/services](#)
 - Since: 8.0.200.00
 - [PUT /services/{service id}/extensions/{ext name}](#)
 - [PUT /services/{service id}/extensions/{ext name}/by/unique](#)
 - [PUT /services/{service id}/extensions/{ext name}/delete/by/unique](#)
- State Operations
 - Since: 8.0.100.00
 - [POST /services/{service id}/states/{state id}/end](#)
 - [POST /services/{service id}/states/transition](#)
 - [GET /services/{service id}/states](#)
 - [GET /services/{service id}/states/{state id}](#)
 - [POST /services/{service id}/states/start](#)
 - Since: 8.0.200.00
 - [PUT /services/{service id}/states/{state id}/extensions/{ext name}](#)
 - [PUT /services/{service id}/state/{state id}extensions/{ext name}/by/unique](#)
 - [PUT /services/{service id}/states/{state id}/extensions/{ext name}/delete/by/unique](#)
- Task Operations

-
- Since: 8.0.100.00
 - `POST /services/{service id}/tasks/{task id}/end`
 - `GET /services/{service id}/tasks`
 - `GET /services/{service id}/tasks/{task id}`
 - `POST /services/{service id}/tasks/start`
 - Since: 8.0.200.00
 - `PUT /services/{service id}/tasks/{task id}/extensions/{extension name}`
 - `PUT /services/{service id}/task/{task id}extensions/{ext name}/by/unique`
 - `PUT /services/{service id}/task/{task id}/extensions/{ext name}/delete/by/unique`

Associate Service



POST
/customers/{customer_id}/services/{service_id}

Description

Your application can use this operation after the service was created with the [Start Service](#) operation to associate an [Anonymous Service](#) with a customer, or to associate the service with a different customer. This operation overrides prior associations. For example:

1. Associate 'service 1' with 'customer 1'
2. Associate 'service 1' with 'customer 2'

Result: 'service 1' no longer appears in the active or completed service history of 'customer 1'. See [Query Services](#) for further information. This operation can also update some fields of the service resource in the body of the request. In 8.0.2, your application can specify values for extensions (single-valued and multi-valued). If your application already recorded a value or a set of values for a given extension, the previous record is replaced with the new one.

Operation

Prerequisites The service is started, see [Start Service](#).

Associate a service with a customer

| | | | |
|---|--|------------------|---|
| ID | CV.WS.SRV.2 | | |
| Method | POST | | |
| URL | /customers/{customer_id}/services/{service_id} | | |
| Name | Type | Mandatory | Description |
| URI Parameters | | | |
| {customer_id} | string | yes | The ID of the customer. |
| {service_id} | integer | yes | The ID of the service. |
| Optional Body: Service Start Event<ref> This operation's body can include some fields of the Service Start Event for update (for instance, the interaction ID or the resource ID).</ref> | | | |
| service_type | long or string | no | The unique ID associated with the type of service, typically the DB ID of a value in the Service Type Business Attribute. |

| ID | CV.WS.SRV.2 | | |
|------------------|----------------|----|---|
| | | | Refer to Configuration Options for more details on <i>Business Attribute</i> mapping. |
| session_id | string | no | The ID of the related session, for instance, the orchestration session, or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | <p>The unique ID associated with the type or class<ref name="business"></p> <p>Refer to Configuration Options for more details on Business Attribute mapping.</ref> of application issuing the service event. May be used to group related applications, potentially across resource types.</p> |
| application_id | integer | no | The unique ID (e.g. Genesys DB ID) for the application issuing the service event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (e.g. GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | <p>The unique DB ID for the specific resource which provides the service. For instance:</p> <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration |

| ID | CV.WS.SRV.2 | | |
|--|---|----|--|
| | | | platform. <ul style="list-style-type: none"> the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given service/state/task, for instance, e-mail, voice, chat, etc. |
| est_duration | integer | no | The estimated service/state/task duration in seconds. |
| timestamp | date/time | no | The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH] : [mm] : [ss] . [SSS]Z. If the application does not specify this timestamp, the server does it when the event is processed. |
| <extension n> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Service extensions, where <extension n> corresponds to the unique name of the service extension. Your application can specify as many extensions as needed as long as you defined their schemas with the Create Service Extension Schema operation. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTPResponseCodesandErrors](#) for further details on the possible codes that this operation can return.

| Response | |
|------------|-----|
| HTTP code | 200 |
| HTTP Title | OK |

Example

Operation

The following code sample associates the customer with a service, and specifies records for the predefined "Feedback" single-valued extension, and for the "Satisfaction" multi-valued extension.

```
POST /customers/0004Va58A92T0018/services/1500
{
  "timestamp": "2009-05-12T12:05:12.145Z",
  "interaction_id": "123ABCAADFJ1259ACF",
  "media_type": 1,
  "resource_id": 5005,
  "resource_type": 2,
  "disposition": 10,
  "Feedback":
  {
    "FeedbackType": "survey",
    "rating": 7,
    "notes": "warm welcome at frontdesk, thanks for the nice trip"
  },
  "Satisfaction": [
    {
      "rating": 2,
      "pertinence": 8,
      "useful": true,
      "place": "Terranova mexico resort"
    },
    {
      "rating": 8,
      "pertinence": 4,
      "useful": false,
      "place": "Fancy resort Paris"
    }
  ]
}
```

Result

200 OK

Complete Service



POST /services/{service_id}/end

Description

Terminates the given service. Your application can update service information in the body of this operation. In 8.0.2, your application can specify values for extensions (single-valued and multi-valued). If your application already recorded a value or a set of values for a given extension, the previous record is replaced with the new one.

Operation

Complete a Service

| | | | |
|--|----------------------------|------------------|--|
| ID | CV.WS.SRV.3 | | |
| Method | POST | | |
| URL | /services/{service_id}/end | | |
| Field Name | Type | Mandatory | Description |
| URI Parameter | | | |
| {service_id} | integer | yes | In the request URI, the unique ID of the service. |
| Body: Service End Event<ref>The body of this operation corresponds to the Service End Event resource.</ref> | | | |
| session_id | string | no | The ID of the related session (for instance, the orchestration session or any other business session). Limited to 32 characters. |
| interaction_id | string | no | The ID of the interaction at the service event's creation. Limited to 50 characters. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"> Refer to Configuration Options |

| ID | CV.WS.SRV.3 | | |
|------------------|----------------|----|--|
| | | | for more details on <i>Business Attribute</i> mapping.</ref> of application which issued the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The Genesys DB ID for the application which issues the service event, such as a GVP VoiceXML application, Orchestration SCXML application, etc. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource providing the service (e.g. GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | <p>The unique DB ID for the specific resource which provides the service. For instance:</p> <ul style="list-style-type: none"> • The Genesys DB ID of a specific GVP or orchestration platform • The DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given service, such as e-mail, voice, chat, etc. |
| disposition | long or string | no | The unique ID for the business disposition<ref name="business"/> assigned to the given service. For instance, this can be the DB ID of a Business Attribute used to enumerate a given organization's business dispositions. |
| disposition_desc | string | no | The text description which provides additional context on |

| ID | CV.WS.SRV.3 | | |
|--|---|----|--|
| | | | the business disposition. Limited to 64 characters. |
| timestamp | date/time | no | The UTC time at which the service event was raised, with a precision of milliseconds, using the ISO 8601<ref name="iso8601">See http://en.wikipedia.org/wiki/ISO_8601 </ref> representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z. 💡 If the application does not specify this timestamp, the server adds it when the service event is processed. |
| <extension n> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Service extensions, where <extension n> corresponds to the unique name of the service extension. Your application can specify as many extensions as needed as long as you defined their schemas with the CreateServiceExtensionSchema operation. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTPResponseCodesandErrors](#) for further details on the possible codes that this operation can return.

| Response | |
|-------------------|------------|
| HTTP code | 204 |
| HTTP Title | No Content |

Example


Operation

```
POST /services/36981723/end
{
  "timestamp": "2009-05-12T12:05:12.145Z",
  "interaction_id": "123ABCAADFJ1259ACF",
  "media_type": 1,
  "resource_id": 5005,
  "resource_type": 2,
  "disposition": 10,
  "disposition_desc": "SUCCESS"
  "Feedback":
  {
    "FeedbackType": "survey",
    "rating": 7,
    "notes": "warm welcome at frontdesk, thanks for the nice trip"
  },
  "Satisfaction": [
  {
    "rating": 2,
    "pertinence": 8,
    "usefull": true,
    "place": "Terranova mexico resort"
  },
  {
    "rating": 8,
    "pertinence": 4,
    "usefull": false,
    "place": "Fancy resort Paris"
  }
  ]
}
```

Result

204 No Content

Complete State

| | |
|---|--|
|  | POST <code>/services/{service_id}/states/{state_id}/end</code> |
| | Available since: 8.0.100.00 |

Description


This operation terminates the state and updates its information with the body content.

Operation

Completes the state

| | | | |
|--|---|------------------|--|
| ID | CV.WS.SRV.6 | | |
| Method | POST | | |
| URL | <code>/services/{service_id}/states/{state_id}/end</code> | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| <code>{service_id}</code> | integer | yes | The unique 64-bit ID of the related service. |
| <code>{state_id}</code> | integer | yes | The 32-bit ID of the state to complete. |
| Body: State End Event<ref>This body can contain fields from the State End Event resource.</ref> | | | |
| session_id | string | no | The ID of the related session (for instance, the orchestration session or any other business session). Limited to 32 characters. |
| interaction_id | string | no | The ID of the interaction at the service event's creation. Limited to 50 characters. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"> Refer to Configuration Options |

| ID | CV.WS.SRV.6 | | |
|------------------|----------------|----|--|
| | | | for more details on <i>Business Attribute</i> mapping.</ref> of application which issued the state event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The Genesys DB ID for the application which issues the state event, such as a GVP VoiceXML application, Orchestration SCXML application, etc. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource providing the related service (e.g. GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | <p>The unique DB ID for the specific resource which provides the related service. For instance:</p> <ul style="list-style-type: none"> • The Genesys DB ID of a specific GVP or orchestration platform • The DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given state, such as e-mail, voice, chat, etc. |
| disposition | long or string | no | The unique ID for the business disposition<ref name="business"/> assigned to the given state. For instance, this can be the DB ID of a Business Attribute used to enumerate a given organization's business dispositions. |
| disposition_desc | string | no | The text description |

| ID | CV.WS.SRV.6 | | |
|------------------|---|----|---|
| | | | which provides additional context on the business disposition. Limited to 64 characters. |
| timestamp | date/time | no | The UTC time at which the service event was raised, with a precision of milliseconds, using the ISO 8601<ref name="iso8601">See http://en.wikipedia.org/wiki/ISO_8601 </ref> representation: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.  If the application does not specify this timestamp, the server adds it when the service event is processed. |
| <extension name> | Extension (single-valued) or Extension[] (multi-valued) | no | State extension. Your application can add as many state extensions as needed, as long as you created corresponding Extension Schema with the Create State Extension Schema operation. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|-----|
| HTTP code | 200 |
| HTTP message | OK |

Example

Operation

The following sample completes a state and updates the associated single-valued extension "Feedback". It assumes that you are using integers for values.

```
POST /services/6739/states/5362/end
{
  "interaction_id":"00001a57JGQ00BVS",
  "disposition": 10,
  "disposition_desc": "SUCCESS",
  "application_type":400,
  "application_id":40,
  "resource_type":200,
  "resource_id":20,
  "media_type":2,
  "Feedback":
  {
    "FeedbackType":"survey",
    "rating":7,
    "notes":"warm welcome at frontdesk, thanks for the nice trip"
  }
}
```

Result

200 OK

Operation

The following sample completes a state and updates the associated single-valued extension "Feedback". It assumes that you configured business values, which allow string values.

```
POST /services/6739/states/5362/end
{
  "interaction_id":"00001a57JGQ00BVS",
  "disposition": 10,
  "disposition_desc": "SUCCESS",
  "application_type":"customer_online_survey",
  "application_id":40,
  "resource_type":"html",
  "resource_id":20,
  "media_type":"webform",
  "Feedback":
  {
    "FeedbackType":"survey",
    "rating":7,
    "notes":"warm welcome at frontdesk, thanks for the nice trip"
  }
}
```

Result

200 OK

Operation

The following sample completes a state and updates the associated single-valued extension "Feedback" and multi-valued extension "Satisfaction".


```
POST /services/6739/states/5362/end
{
  "interaction_id":"00001a57JGQ00BVS",
  "disposition": 10,
```

```
"disposition_desc": "SUCCESS",
"application_type": "customer_online_survey",
"application_id": 40,
"resource_type": "html",
"resource_id": 20,
"media_type": "webform",
"Feedback":
{
  "FeedbackType": "survey",
  "rating": 7,
  "notes": "warm welcome at frontdesk, thanks for the nice trip"
},
"Satisfaction": [
{
  "rating": 2,
  "pertinence": 8,
  "usefull": true,
  "place": "Terranova mexico resort"
},
{
  "rating": 8,
  "pertinence": 4,
  "usefull": false,
  "place": "Fancy resort Paris"
}
]
}
```

Result

200 OK

Complete Task

| | |
|---|--|
|  | POST <code>/services/\${service_id}/tasks/\${task_id}/end</code> |
| | Available since: 8.0.100.00 |

Description

This operation completes the task of a given type for the given service. The type is one of the enumerated values recorded for the corresponding business attribute. See [Business Attributes in Context Services](#) for further details.

- UCS assigns auto-incrementing identifiers to tasks, similar to the case of services and tasks.
- States and tasks are assigned 32-bit identifiers.

Operation

| | | | |
|---|---|------------------|--|
| ID | CV.WS.SRV.9 | | |
| Method | POST | | |
| URL | <code>/services/\${service_id}/tasks/\${task_id}/end</code> | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| <code>\${service_id}</code> | integer | yes | The unique 64-bit ID of the service. |
| <code>\${state_id}</code> | integer | no | The unique 32-bit ID of the state. |
| <code>\${task_id}</code> | integer | yes | The unique 32-bit ID of the task. |
| Body: Task End Event<ref>This body contains fields from the Task End Event resource.</ref> | | | |
| <code>session_id</code> | string | no | The ID of the related session, for instance, the orchestration session, or any other business session. |
| <code>interaction_id</code> | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, |

| ID | CV.WS.SRV.9 | | |
|------------------|----------------|----|--|
| | | | and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business">Refer to Configuration Options for more details on Business Attribute mapping.</ref> of application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID (e.g. Genesys DB ID) for the application issuing the event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (e.g. GVP, Agent Desktop, Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the service. For instance: <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given task, for instance, e-mail, voice, chat, etc. |
| disposition | long or string | no | The unique ID for the business disposition<ref name="business"/> assigned to the given service/state/task. For |

| ID | CV.WS.SRV.9 | | |
|---|--|----|--|
| | | | instance, this can be the DB ID of a Business Attribute used to enumerate a given organization's business dispositions. |
| disposition_desc | string | no | The text description which provides additional context on the business disposition. Limited to 64 characters. |
| timestamp | date/time | no | The UTC time at which the service event was raised, with a precision of milliseconds, using the ISO 8601<ref name="iso8601">See http://en.wikipedia.org/wiki/ISO_8601 </ref> representation : [YYYY] - [MM] - [DD]T[HH] : [mm] : [ss] . [SSS]Z.  If the application does not specify this timestamp, the server adds it when the service event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Task extension. Your application can add as many task extensions as needed, as long as you created a corresponding Extension Schema with the Create Task Extension Schema operation. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example


Operation

```
POST /services/95/tasks/3/end
{
  "interaction_id":0000CSS0FXZUP6UR,
  "state_id":24,
  "disposition": 10,
  "disposition_desc": "SUCCESS",
  "Survey":
  {
    "url":"http://ourServer/storage/userAnswers",
    "question1":7,
    "question2":true,
    "question3":"will be better with cable tv and on-demand video"
  },
  "Proposal": [
    {
      "car type":"cabriolet",
      "price":25 000,
      "seats":2,
      "comments":"200 cv, hardtop"
    },
    {
      "car type":"S.U.V.",
      "price":70 000,
      "seats":8,
      "comments":"4wd, leather seats"
    }
  ]
}
```

Result

204 No Content

Perform State Transition


| | |
|---|--|
|  | POST /services/\${service_id}/states/transition |
| | Available since: 8.0.100.00 |

Description

Performs a state transition for a given service. In many cases, your application is responsible for completing a given state and starting a new state, both in the context of a single interaction. In that context, your application can use this operation (instead of two separate [Start State](#) and [Complete State](#) operations) to reduce both the data duplication and the overall UCS services workload.

Operation

| | | | |
|---|--|------------------|---|
| ID | CV.WS.SRV.7 | | |
| Method | POST | | |
| URL | /services/\${service_id}/states/transition | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| service_id | integer | yes | The unique ID of the related service. |
| Body: State Transition Event<ref>This body contains fields from the State Transition Event .</ref> | | | |
| from | hash | yes | <p>The hash of the following fields describing the state from which the service is transitioning:</p> <ul style="list-style-type: none"> state_id (mandatory) : The 32-bit ID of the state to complete. disposition (optional): The unique ID for the business disposition assigned to the given state. For instance, this can be the DB ID of a |

| ID | CV.WS.SRV.7 | | |
|--|-------------|-----|---|
| | | | <p>Business Attribute used to enumerate a given organization's business dispositions<ref name="business"></p> <p>Refer to Configuration Options for more details on Business Attribute mapping.</ref>.</p> <ul style="list-style-type: none"> disposition_desc (optional): The text description which provides additional context on the business disposition. Limited to 64 characters. |
| to | hash | yes | <p>The hash of the following fields, which describe the state into which the service is transitioning:</p> <ul style="list-style-type: none"> state_type (mandatory): The unique ID associated with the type of service, typically the DB ID of a value in the Service Type Business Attribute<ref name="business"/>. est_duration (optional): The estimated service duration in seconds. |
|  The following fields apply both to the state to complete and the state to start: | | | |
| session_id | string | no | The ID of the related session. For example, the orchestration session or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, |

| ID | CV.WS.SRV.7 | | |
|------------------|----------------|----|---|
| | | | and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID (Genesys DB ID) for the application issuing the service event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (such as GVP, Agent Desktop, or Orchestration). |
| resource_id | integer | no | <p>The unique DB ID for the specific resource which provides the service. For instance:</p> <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given state. For example: e-mail, voice, chat, etc. |
| timestamp | date/time | no | The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH] : [mm] : [ss] . [SSS]Z. |

| ID | CV.WS.SRV.7 | | |
|---|--|----|---|
| | | | If the application does not specify this timestamp, the server does it when the event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | State extension. Your application can add as many state extensions as needed, as long as you created corresponding Extension Schema with the Create State Extension Schema operation. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

Response

| | |
|---------------------|--|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: /service/\${service_id}/states/\${state_id} where: <ul style="list-style-type: none"> • \${service_id} is the service ID. • \${state_id} is the ID of the created state. |
| Body | {"state_id": \${state_id}} where: \${state_id} is the created state ID. |

Example

Operation

```
POST /services/735692/states/transition
{
  "timestamp": "2009-05-07T12:05:20.157",
  "session_id": "11000ABC-80236C1A-1010",
}
```

```

"interaction_id": "123ABC908ABFFD8080",
"from": {
  "state_id": 1001,
  "disposition": 1,
  "disposition_desc": "SUCCESS",
  "Feedback": {
    "FeedbackType": "survey", "rating": 7,
    "notes": "warm welcome at frontdesk, thanks for the nice trip"
  },
  "Satisfaction": [
    {
      "rating": 2,
      "pertinence": 8,
      "usefull": true,
      "place": "Terranova mexico resort"
    },
    {
      "rating": 8,
      "pertinence": 4,
      "usefull": false,
      "place": "Fancy resort Paris"
    }
  ]
},
"to": {
  "state_type": 8,
  "est_duration": 500,
  "Sponsoring": { "Rank": "first", "expire": 7,
    "notes": "give customer free meal" }
}
}

```

POST /services/735692/states/transition

```

{
  "timestamp": "2009-05-07T12:05:20.157",
  "session_id": "11000ABC-80236C1A-1010",
  "interaction_id": "123ABC908ABFFD8080",
  "from": {
    "state_id": 1001,
    "disposition": 1,
    "disposition_desc": "SUCCESS",
    "Feedback": { "FeedbackType": "survey", "rating": 7,
      "notes": "warm welcome at frontdesk, thanks for the nice trip" },
    "Sponsoring": { "Rank": "first", "expire": 7,
      "notes": "give customer free meal" }
  },
  "to": {
    "state_type": 8,
    "est_duration": 500,
    "Satisfaction": [
      {
        "rating": 7,
        "pertinence": 3,
        "usefull": false,
        "place": "Australian beach resort complex"
      },
      {
        "rating": 9,
        "pertinence": 8,
        "usefull": true,
        "place": "Caribbean beach complex"
      }
    ]
  }
}

```

```
}  
}
```

Result

```
201 Created  
{ "state_id": 15158 }
```


Query Service by ID



GET /services/\${service_id}

Description

Enables your application to query a service if its ID is known. By default, no tasks or states are returned. The example below shows how your application can use optional parameters to customize its request to specify which nested tasks and states of the service should be part of the response.

Operation

| | | | |
|-----------------------|--------------------------|------------------|--|
| ID | CV.WS.SRV.14 | | |
| Method | GET | | |
| URL | /services/\${service_id} | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| \${service_id} | integer | yes | The service ID. |
| active_states | bool | no | <ul style="list-style-type: none"> "true" to include information on this service's active states in the results "false" (default) |
| completed_states | bool | no | <ul style="list-style-type: none"> "true" to include information on this service's completed states in the results "false" (default) |
| active_tasks | bool | no | <ul style="list-style-type: none"> "true" to include information on this service's active tasks in the results "false" (default) |

| ID | CV.WS.SRV.14 | | |
|-------------------------------------|--------------|----|---|
| completed_tasks | bool | no | <ul style="list-style-type: none"> "true" to include information on this service's completed tasks in the results "false" (default) |
| extensions Supported since 8.0.2 | string | no | Extension name to retrieve with the results. Your application can specify several names separated by commas, as long as you created corresponding Extension Schema with the Create Service Extension Schema operation. For example: <i>extensions=Feedback,SpecialOffer.</i> |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

Response

| HTTP code | 200 | | |
|---|----------------|-----------|--|
| HTTP message | OK | | |
| Field Name | Type | Mandatory | Description |
| Body: Service<ref>This response includes the representation of the Service associated with the service ID.</ref> | | | |
| service_type | long or string | yes | The unique ID associated with the service type, typically the DB ID of a value in the Service Type Business Attribute. Refer to Configuration Options for more details about <i>Business Attribute</i> mapping. |
| service_id | integer | yes | The service's unique ID.<ref name="toplevel">Only top-level objects include this field. For instance, if your application |

| HTTP code | 200 | | |
|------------------|---------------------|--|--|
| | | | retrieves a service which includes nested states and tasks, only the top-level service object contains this ID.</ref> |
| started | Service Start Event | yes | Start event (see Start Service). This event does not include the "est_duration" field, if "est_duration" is specified at the service level of the response. |
| completed | Service End Event | no | The related end event if the service is completed (see Complete Service). This event does not include the "disposition" and "disposition_desc" fields if they are specified at the service level of the response. |
| customer_id | string | no | The customer's unique ID<ref name="toplevel"/>. If the service has no customer ID, the service is Anonymous Service . |
| est_duration | integer | no | The estimated time for completing the service, in seconds. |
| duration | integer | no | The total duration in milliseconds. Only relevant for completed services. |
| disposition | integer | no | ID of the Business disposition ID. Only relevant for completed services. |
| disposition_desc | string | no | The reason for assigning the business disposition with the service element. Limited to 256 characters. |
| active_states | State[] | no<ref name="option">The field is returned if the corresponding option was set to true in the request.</ref> | The array of the started states which are not completed. |

| HTTP code | 200 | | |
|---|--|------------------------|---|
| completed_states | State[] | no<ref name="option"/> | The array of completed states through which the service has made transitions. |
| active_tasks | Task[] | no<ref name="option"/> | The array of the started tasks which are not completed. |
| completed_tasks | Task[] | no<ref name="option"/> | The array of the tasks which are completed as part of the service delivery. |
| interactions | Interaction[] | no<ref name="option"/> | The array of the interactions which are associated with this service. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Service extension matching the parameter passed in the operation. |

<references />

Example

Operation The following operation retrieves the given service (ID=2000) with its active states and tasks to resume the activity.

```
GET /services/
3005?active_states=trueCleted_states=true~tive_tasks=trueCleted_tasks=true&extensions=ClientInfo,relatedOffers
```

Result

```
{
  "completed_tasks" : [ {
    "service_id" : 3005,
    "duration" : 82937,
    "disposition_desc" : "normal ending",
    "task_id" : 2001,
    "task_type" : 55,
    "est_duration" : 540,
    "started" : {
      "timestamp" : "2010-06-03T08:49:53.053Z",
      "interaction_id" : "587"
    },
    "disposition" : 5,
    "completed" : {
      "timestamp" : "2010-06-03T08:51:15.990Z",
      "interaction_id" : "587"
    }
  } ],
  "service_id" : 3005,
  "active_states" : [ {
    "service_id" : 3005,
```

```

    "state_id" : 4000,
    "state_type" : 100,
    "est_duration" : 60,
    "started" : {
      "timestamp" : "2010-06-03T08:48:18.257Z",
      "application_type" : 400,
      "resource_id" : 20,
      "media_type" : 2,
      "resource_type" : 200,
      "application_id" : 40,
      "interaction_id" : "51"
    }
  } ],
  "ClientInfo" : {
    "userAgent" : "Mozilla/5.0 (Windows; U; Windows NT 5.1; fr; rv:1.9.2) Gecko/20100115
Firefox/3.6 (.NET CLR 3.5.30729)",
    "clientIp" : "192.168.1.1",
    "contentType" : "Content-Type : application/json;charset=UTF-8"
  },
  "active_tasks" : [ {
    "service_id" : 3005,
    "state_id" : 4001,
    "task_id" : 2000,
    "task_type" : 55,
    "est_duration" : 540,
    "started" : {
      "timestamp" : "2010-06-03T08:49:45.943Z",
      "interaction_id" : "587"
    }
  } ],
  "service_type" : 100,
  "est_duration" : 300,
  "started" : {
    "timestamp" : "2010-09-07T07:58:16.313Z",
    "application_type" : 400,
    "resource_id" : 10,
    "media_type" : 2,
    "resource_type" : 200,
    "application_id" : 40,
    "interaction_id" : "56"
  },
  "completed_states" : [ {
    "service_id" : 3005,
    "state_id" : 4001,
    "duration" : 182907,
    "disposition_desc" : "normal ending",
    "state_type" : 200,
    "est_duration" : 300,
    "started" : {
      "timestamp" : "2010-06-03T08:48:51.473Z",
      "application_type" : 400,
      "resource_id" : 6000,
      "media_type" : 3,
      "resource_type" : 100,
      "application_id" : 40,
      "interaction_id" : "8001"
    },
    "disposition" : 5,
    "completed" : {
      "timestamp" : "2010-06-03T08:51:54.380Z",
      "interaction_id" : "1587"
    }
  } ],
} ],

```

```
"relatedOffers" : [ {
  "offer_name" : "VIP credit card black ed.",
  "type" : "9",
  "comments" : "proposed to all client"
}, {
  "offer_name" : "3 times payment GOLD",
  "type" : "4",
  "comments" : "limited offer"
}, {
  "offer_name" : "life insurance",
  "type" : "3",
  "comments" : "healt check to be done before approval"
} ],
"contact_key" : "bob"
}
```

- The service=2000 does not contain 'completed' values. It is an active service.
- There was no active states for this service.
- There is a single active task.

Query Services



- **GET** /services/anonymous/{contact_key}
- **GET** /customers/{customer_id}/services

Description

The operations on this page allow users to query for active and/or completed services, either for a specific customer or for anonymous services matching a contact key. The latter case primarily addresses service resumption use cases for services in which the customer is not yet identified. For example, consider the following:

- The customer calls in from phone number 408-832-7799.
- The application starts a service, noting contact key "408-832-7799" for further reference.
- The application is not able to identify the caller based on the phone number.
- IVR identifies that the customer is calling to set up a new wireless account.
- The customer is placed in an agent queue. After 10 minutes, the call is dropped.
- The customer calls back in from the same number. The application still cannot identify the customer based on that number.
- The application looks up whether there are any outstanding services with identification token "408-832-7799"--one is returned.
- The application asks the customer whether he or she is calling back in regards to the previous request or for a new wireless request. Upon confirmation, the customer is placed back in the agent queue.

Operations

Query Anonymous Services

 This operation queries **anonymous services** only.


| | |
|---------------|--|
| ID | CV.WS.SRV.10 |
| Method | GET |
| URI | <ol style="list-style-type: none"> 1. Active: /services/anonymous/{contact_key}/active 2. Completed: /services/anonymous/{contact_key}/completed |

| ID | CV.WS.SRV.10 | | |
|-----------------------|--|-----------|---|
| | 3. All: /services/anonymous/{contact_key} | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| {contact_key} | string | yes | The "contact key" is supplied at the service creation if the service is started before the customer's identification. This key can be used to look up the service with this method, or for further association once the customer is identified (see Associate Service). |
| started_from | date/time<ref name="ISO 8601"> http://en.wikipedia.org/wiki/ISO_8601 representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z</ref> | no | Filters the services started on or after the given date/time. |
| started_to | date/time | no | Filters the services started prior to the given date/time. |
| completed_from | date/time<ref name="ISO 8601"/> | no | Filters the services that were completed on or after the given date/time. Only applicable when querying service history. |
| completed_to | date/time<ref name="ISO 8601"/> | no | Filters the services completed prior to the given date/time. Only applicable when querying service history. |
| service_types | integer | no | Filters the services by the application-defined service type<ref name="business"> Refer to Configuration Options for more details on Business Attribute mapping.</ref>. your application can specify several types separated by a comma, as follows: <i>service_types=1,3,45</i> |
| active_states | bool | no | <ul style="list-style-type: none"> "true" to include |

| ID | CV.WS.SRV.10 | | |
|-------------------------------------|--------------|----|---|
| | | | <p>information on the service's active states in the results.</p> <ul style="list-style-type: none"> "false" by default. |
| active_tasks | bool | no | <ul style="list-style-type: none"> "true" to include information on the service's active tasks in the results. "false" (default). |
| completed_states | bool | no | <ul style="list-style-type: none"> "true" to include information on the service's completed states in the results. "false" (default). |
| completed_tasks | bool | no | <ul style="list-style-type: none"> "true" to include information on the service's completed tasks in the results. "false" (default). |
| extensions Supported since 8.0.2 | string | no | <p>Name or list of names for the service extension to return with the matching service resources. You can specify as multiple extension names separated by commas, as follows: <i>extensions=Purchase,Feedback.</i></p> <p>By default, no extensions are returned.</p> |

<references />

Query Customer Services

 This operation queries services which are not anonymous, that is, services which are associated with a customer id.

| | | | |
|-----------------------|---|------------------|---|
| ID | CV.WS.SRV.10 | | |
| Method | GET | | |
| URIs | <ol style="list-style-type: none"> Active Services: /customers/\${customer_id}/services/active Completed Services: /customers/\${customer_id}/services/completed All Services: /customers/\${customer_id}/services | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| \${customer_id} | string | yes | The Customer ID, to get associated active or completed services. Note that a customer can be associated with a service either at the service creation or later in the process (see Associate Service). |
| started_from | date/time<ref name="ISO 8601"> http://en.wikipedia.org/wiki/ISO_8601 representation : [YYYY] - [MM] - [DD]T[HH] : [mm] : [ss] . [SSS]Z</ref> | no | Filters the services started on or after the given date/time. |
| started_to | date/time<ref name="ISO 8601"/> | no | Filters the services started prior to the given date/time. |
| completed_from | date/time<ref name="ISO 8601"/> | no | Filters the services that were completed on or after the given date/time. Only applicable when querying service history. |
| completed_to | date/time<ref name="ISO 8601"/> | no | Filters the services completed prior to the given date/time. Only applicable when querying service history. |
| service_type | long or string | no | Filters the services by the application-defined service type<ref name="business"> Refer to Configuration Options for more details on Business Attribute mapping.</ref>. |
| active_states | bool | no | <ul style="list-style-type: none"> "true" to include information on the |

| ID | CV.WS.SRV.10 | | |
|-------------------------------------|--------------|----|--|
| | | | service's active states in the results. <ul style="list-style-type: none"> "false" by default. |
| active_tasks | bool | no | <ul style="list-style-type: none"> "true" to include information on the service's active tasks in the results. "false" (default). |
| completed_states | bool | no | <ul style="list-style-type: none"> "true" to include information on the service's completed states in the results. "false" (default). |
| completed_tasks | bool | no | <ul style="list-style-type: none"> "true" to include information on the service's completed tasks in the results. "false" (default). |
| extensions Supported since 8.0.2 | string | no | Name or list of names for the service extension to return with the matching service resources. You can specify several extension names separated by commas, as follows: <i>extensions=Purchase,Feedback.</i> By default, no extensions are returned. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|-------------|
| HTTP code | 200 |
| HTTP message | OK |
| Body | Service[.]. |

Example

Operation


GET /customers/ABC1234/services/active?active_states=true

Response

```
[ // returned in an array
  { "customer_id": "ABC1234",
    "service_id": 4692834,
    "est_duration": 86400,
    "started": {
      "timestamp": "2009-05-07T12:05:20.157",
      // additional [[Start Event List#Service_Start_Event|Start Event]] fields
    },
    "active_states":
      [// included given specification of "results" attribute
        { // array of one or more State objects
          "state_id": 5005,
          "state_type": 8, // service delivery
          "started": {
            "timestamp": "2009-05-07T12:08:53.298",
            // additional [[Start Event List#Service_Start_Event|Start Event]] fields
          }
        }
      ]
  }
]
```

Note that, in the above example, the inline State objects do not include active/completed tasks.

Query State by ID

| | |
|---|---|
|  | GET <code>/services/{service_id}/states/{state_id}</code> |
| | Available since: 8.0.100.00 |

Description

This operation allows you to retrieve a single state for a given service. By default, no task information is returned with the state representation. Optional URI parameters enable to include the state's nested tasks in the response.

Operation

| | | | |
|--|---|------------------|---|
| ID | CV.WS.SRV.15 | | |
| Method | GET | | |
| URL | <code>/services/{service_id}/states/{state_id}</code> | | |
| Field name | Type | Mandatory | Description |
| URI Parameters | | | |
| <code>{service_id}</code> | integer | yes | The service ID. |
| <code>{state_id}</code> | integer | yes | The state ID. |
| <code>active_tasks</code> | bool | no | <ul style="list-style-type: none"> <code>true</code> to include information on the service's active tasks in the results. <code>false</code> (default) |
| <code>completed_tasks</code> | bool | no | <ul style="list-style-type: none"> <code>true</code> to include information on the service's completed tasks in the results. <code>false</code> (default) |
| <code>extensions</code> Supported since 8.0.2 | string | no | Names (separated by commas) of the state extensions to return with the matching state resources. You can |

| ID | CV.WS.SRV.15 |
|----|--|
| | specify as many extension names as needed, as long as you created them previously with the Create State Extension Schema . By default, no extension is returned. |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

Response

| HTTP code | 200 | | |
|---|----------------|-----------|---|
| HTTP message | OK | | |
| Field Name | Type | Mandatory | Description |
| Body: State<ref>This response includes the State representation with the state ID.</ref> | | | |
| state_id | integer | yes | The 32-bit integer ID of the state, assigned by the UCS when the state is started. |
| state_type | long or string | yes | The unique ID associated with the state type. For instance, this ID can be the DB ID of a value in the Service Type Business Attribute. Enumerated values could be one of the following: <ol style="list-style-type: none"> 1. Customer identification 2. Service identification 3. Assign service agent 4. Waiting for service agent 5. Offering another service while waiting for agent 6. Offering callback 7. Callback pending |

| HTTP code | 200 | | |
|--------------|-------------------|---------------------------------------|---|
| | | | 8. Delivering service 9. Waiting for customer input 10. Offering another service while delivering service Refer to Configuration Options for more details on <i>Business Attribute</i> mapping. |
| service_id | integer | yes if not nested in service resource | The service's unique ID if the state is not part of a top-level service resource which includes a service ID. <ref name="toplevel">Only top-level representations include this field. For instance, if your application retrieves a service which includes nested states and tasks, only the top-level service resource contains this ID.</ref> |
| started | State Start Event | yes | Related start event. This event should not contain the "est_duration" field, if it already exists at the state level. |
| completed | State End Event | no | The related end event if the state is completed. This event should not repeat the "disposition" and "disposition_desc" fields if they already exist at the state level. |
| customer_id | string | no | The customer's unique ID<ref name="toplevel"/>. |
| est_duration | integer | no | The estimated time for completing the state, in seconds. |
| duration | integer | no | The total duration in milliseconds. Only relevant for completed states. |

| HTTP code | 200 | | |
|---|---|---|--|
| disposition | long or string | no | ID of the Business Disposition ID. Only relevant for completed states. |
| disposition_desc | string | no | The reason for assigning the business disposition with the service element. Limited to 256 characters. |
| active_tasks | Task[] | no<ref name="option">This field is returned if the corresponding option is set to true in the URI parameters.</ref> | The array of tasks that are started but not yet completed. |
| completed_tasks | Task[] | no<ref name="option"/> | The array of Tasks that are completed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | State extension matching the parameter passed in the operation. |

<references />

Example

Operation

```
GET /services/2/states/1?active_tasks=true&completed_tasks=true&extensions=Feedback,Satisfaction
```


Result

```
200 OK
[ // array of one or more state object
{
  "service_id" : 1,
  "state_id" : 0,
  "state_type" : 100,
  "est_duration" : 60,
  "started" : {
    "timestamp" : "2010-05-18T15:23:34.447Z",
    "application_type" : 400,
    "resource_id" : 20,
    "media_type" : 2,
    "resource_type" : 200,
    "application_id" : 40,
    "interaction_id" : "51"
  },
  "Feedback":
  { "FeedbackType": "survey",
    "rating": 7,
    "notes": "warm welcome at frontdesk, thanks for the nice trip" }
},
```

```
"Satisfaction": [
  {
    "rating":2,
    "pertinence":8,
    "usefull":true,
    "place":"Terranova mexico resort"
  },
  {
    "rating":8,
    "pertinence":4,
    "usefull":false,
    "place":"Fancy resort Paris"
  }
],

"active_tasks": [
  // included given specification of "results" attribute
  { // array of one or more Task objects
    "task_id": 25080,
    "task_type": 5, // application-defined task type
    "est_duration": 300,
    "started": {
      "timestamp": "2009-05-07T12:08:53.298",
    }
  }
]
"completed_tasks": [
  { "task_id": 24027,
    "task_type": 2, // e.g. task for processing quote
    "disposition": 10, // e.g. quote completed
    "disposition_desc": "<text describing quote result>",
    "started": {
      "timestamp": "2009-05-07T12:02:23.715",
      "interaction_id": "123ABC908ABFFD8080"
    },
    "completed": {
      "timestamp": "2009-05-07T12:06:23.715",
      "interaction_id": "157C9A208AFD523D01"
    }
  }
]
},
{
  "service_id" : 1,
  "state_id" : 1,
  "state_type" : 100,
  "est_duration" : 60,
  "started" : {
    "timestamp" : "2010-05-18T15:23:41.977Z",
    "application_type" : 400,
    "resource_id" : 20,
    "media_type" : 2,
    "resource_type" : 200,
    "application_id" : 40,
    "interaction_id" : "51"
  }
}
]
```

Query States

| | |
|---|--|
|  | GET /services/{service_id}/states |
| | Available since: 8.0.100.00 |

Description

This operation queries the states for a given service. By default, all the states are returned, but your application can filter the results to retrieve only active or completed states, based on the specified URI. Additional URI parameters enable to include task information in the response.

Operation

Query states

| | | | |
|-----------------------|--|------------------|--|
| ID | CV.WS.SRV.12 | | |
| Method | GET | | |
| URL | <ol style="list-style-type: none"> All (default): /services/{service_id}/states Active States: /services/{service_id}/states/active Completed States: /services/{service_id}/states/completed | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | string | yes | The service ID generated from the Start Service operation. |
| state_types | integer | no | Filters specific service state types. The possible enumerated values are available in the filter field of the State resources . You can specify several state_type values separated by commas. |
| active_tasks | bool | no | <ul style="list-style-type: none"> <i>true</i> to include information the service's active |

| ID | CV.WS.SRV.12 | | |
|-------------------------------------|--------------|----|--|
| | | | tasks in the results. • <i>false</i> (default) |
| completed_tasks | bool | no | • <i>true</i> to include information on the service's completed tasks in the results. • <i>false</i> (default) |
| extensions Supported since 8.0.2 | string | no | Names separated by commas of the state extensions to return with the matching state resources. By default, no extensions are returned. |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|----------------------|
| HTTP code | 200 |
| HTTP message | OK |
| Body | <code>State[]</code> |

Example

Operation

```
GET /services/ABC1235XZY/states/active~tive_tasks=trueCleted_tasks=true&extensions=Feedback
```


Result The following output shows a possible response for the previous request:

```
200 OK
[ // array of one or more state object
  {
    "service_id" : 1,
    "state_id" : 0,
    "state_type" : 100,
    "est_duration" : 60,
    "started" : {
```

```
"timestamp" : "2010-05-18T15:23:34.447Z",
"application_type" : 400,
"resource_id" : 20,
"media_type" : 2,
"resource_type" : 200,
"application_id" : 40,
"interaction_id" : "51"
"Feedback":
  { "FeedbackType":"survey",
    "rating":7,
    "notes":"warm welcome at frontdesk, thanks for the nice trip"}
},

"active_tasks": [
  // included given specification of "results" attribute
  // array of one or more Task objects
  { "task_id": 25080,
    "task_type": 5, // application-defined task type
    "est_duration": 300,
    "started": {
      "timestamp": "2009-05-07T12:08:53.298",
    }
  }
]
"completed_tasks": [
  { "task_id": 24027,
    "task_type": 2, // e.g. task for processing quote
    "disposition": 10, // e.g. quote completed
    "disposition_desc": "<text describing quote result>",
    "started": {
      "timestamp": "2009-05-07T12:02:23.715",
      "interaction_id": "123ABC908ABFFD8080"
    },
    "completed": {
      "timestamp": "2009-05-07T12:06:23.715",
      "interaction_id": "157C9A208AFD523D01"
    }
  }
]
},
{
  "service_id" : 1,
  "state_id" : 1,
  "state_type" : 100,
  "est_duration" : 60,
  "started" : {
    "timestamp" : "2010-05-18T15:23:41.977Z",
  }
  "application_type" : 400,
  "resource_id" : 20,
  "media_type" : 2,
  "resource_type" : 200,
  "application_id" : 40,
  "interaction_id" : "51"
}
}
```

Query Task by ID

| | |
|---|---|
|  | GET /services/{service_id}/tasks/{task_id} |
| | Available since: 8.0.100.00 |

Description

Queries a task by its ID for the given service.

Operation

| | | | |
|-----------------------|--|------------------|---|
| ID | CV.WS.SRV.16 | | |
| Method | GET | | |
| URL | /services/{service_id}/tasks/{task_id} | | |
| Name | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | integer | yes | The service ID. |
| {task_id} | integer | yes | The task ID. |
| extensions | string | no | Names (separated by commas) of the task extensions to return with the matching task resources. You can specify as many extension names as needed as long as you previously created the corresponding schema with Create Task Extension Schema . By default, no extension is returned. |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTPResponseCodesandErrors](#) for further details on the possible codes that this operation can return.

Response

| HTTP code | 200 | | |
|--|-------------------------|---|---|
| HTTP message | OK | | |
| Field Name | Type | Mandatory | Description |
| Body: Task<ref>This response includes the Task representation associated with the task ID.</ref> | | | |
| state_id | integer | no | The 32-bit integer ID for the state service associated with the task. |
| task_id | integer | yes | The 32-bit integer ID of the task, assigned by the UCS when the task is started. |
| task_type | long or string | yes | The unique ID associated with the type of service<ref name="business">Refer to Configuration Options for more details on Business Attribute mapping.</ref>. For instance, this ID can be the DB ID of a value in the Service Type Business Attribute. |
| service_id | integer | yes if not specified in top-level resources<ref name="toplevel">Only top-level representations include this field. For instance, if your application retrieves a service which includes nested states and tasks, only the top-level service representations contains this ID.</ref> | The service's unique ID if the task is not part of a top-level state or service resource which includes a service ID. |
| started | Task Start Event | yes | Related start event. This start event does not contain the "est_duration" field, if this field is already specified at the task level. |
| completed | Task End Event | no | The related end event if this task is completed. This end event does not include the "disposition" and "disposition_desc" fields if they are already specified at the task |

| HTTP code | 200 | | |
|---|--|----|--|
| | | | level. |
| customer_id | string | no | The customer's unique ID<ref name="toplevel"/>. |
| est_duration | integer | no | The estimated time for completing the item, in seconds. |
| duration | integer | no | The total duration in milliseconds. Only relevant for completed tasks. |
| disposition | long or string | no | ID of the Business Disposition ID<ref name="business"/>. Only relevant for completed tasks. |
| disposition_desc | string | no | The reason for assigning the business disposition with the service element. Limited to 256 characters. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Task extension if specified in parameter of the operation. |

<references />

Example

Operation


GET /services/942/tasks/12?extensions=Survey,Proposal

Result

```
{
  "interaction_id":42,
  "est_duration":460,
  "state_id":24,
  "task_type":55,
  "Survey":
  {
    "url":"http://ourServer/storage/userAnswers",
    "question1":7,
    "question2":true,
    "question3":"will be better with cable tv and on-demand video"
  },
  "Proposal": [
  {
    "car type":"cabriolet",
    "price":25 000,
  }
  ]
}
```

```
"seats":2,  
"comments":"200 cv, hardtop"  
},  
{  
"car type":"S.U.V.",  
"price":70 000,  
"seats":8,  
"comments":"4wd, leather seats"  
}  
]
```


Query Tasks

| | |
|---|---|
|  | GET /services/{service_id}/tasks |
| | Available since: 8.0.100.00 |

Description

This operation queries the tasks for a given service. By default, all the tasks are returned, but your application can filter the results to retrieve only active or completed tasks, based on the specified URI. Your application can also filter the returned tasks with additional URI parameters to select one or more task type and a given state.

Operation

| | | | |
|-----------------------|---|------------------|--|
| ID | CV.WS.SRV.13 | | |
| Method | GET | | |
| URL | <ol style="list-style-type: none"> All (default): /services/{service_id}/tasks Active Tasks: /services/{service_id}/tasks/active Completed Tasks: /services/{service_id}/tasks/completed | | |
| Field Names | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | string | yes | The service ID generated from the service creation . |
| state_id | integer | no | Used to filter tasks by state ID. To filter both on the state id and the task_type, your application can also use this field identically to task_type. For example: /services/{service_id}/tasks/completed?task_types=1,3&state_id=700 |
| task_types | long or string | no | Filters specific service task types separated by commas. |

| ID | CV.WS.SRV.13 | | |
|------------|--------------|----|--|
| extensions | string | no | Names, separated by commas, of the task extensions to return with the matching task resources. You can specify as many extension names as needed, as long as you previously created the corresponding schema with Create Task Extension Schema . By default, no extension is returned. |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|--------------------------|
| HTTP code | 200 |
| HTTP message | OK |
| Body | Task[] . |

Example

Retrieve completed tasks

Operation Retrieve completed tasks for service 6001:

```
GET /services/15/tasks/completed?task_types=STT-DefineCustomerNeed%2CSTT-FillCustomerInfo&state_id=5&extensions=Survey
```

Result

```
[ {
  "service_id" : 1,
  "state_id" : 2,
  "task_id" : 0,
  "task_type" : 55,
  "est_duration" : 55,
  "started" : {
    "timestamp" : "2010-05-20T15:41:52.380Z",
    "interaction_id" : "65"
  },
}
```

```

"Survey":
  {"url":"http://ourServer/storage/userAnswers",
  "question1":7, "question2":true,
  "question3":"will be better with cable tv and on-demand video"
  },
"Proposal": [
  {
    "car type":"cabriolet",
    "price":25 000,
    "seats":2,
    "comments":"200 cv, hardtop"
  },
  {
    "car type":"S.U.V.",
    "price":70 000,
    "seats":8,
    "comments":"4wd, leather seats"
  }
]
}, {
  "service_id" : 1,
  "state_id" : 1,
  "task_id" : 1,
  "task_type" : 12,
  "est_duration" : 900,
  "started" : {
    "timestamp" : "2010-05-20T15:42:57.207Z",
    "interaction_id" : "954"
  }
},
} ]

```

Retrieve active tasks

Operation Retrieve active tasks for service 6001:

```
GET /services/6001/tasks/active
```

Result

```

[ {
  "service_id" : 6001,
  "task_id" : 15001,
  "task_type" : 1433,
  "started" : {
    "timestamp" : "2010-04-25T16:07:12.133Z",
    "application_type" : 1426,
    "media_type" : 1010,
    "resource_type" : 1423
  }
} ]

```

Operation Retrieve all tasks for service 6001:

```
GET /services/6001/tasks
```

Result


```

[ {
  "service_id" : 6001,
  "duration" : 0,

```

```
"task_id" : 15000,
"task_type" : 1433,
"started" : {
  "timestamp" : "2010-04-25T16:07:12.133Z",
  "application_type" : 1426,
  "media_type" : 1010,
  "resource_type" : 1423
},
"completed" : {
  "timestamp" : "2010-04-25T16:07:12.133Z",
  "application_type" : 1426,
  "media_type" : 1010,
  "resource_type" : 1423
}
}, {
  "service_id" : 6001,
  "task_id" : 15001,
  "task_type" : 1433,
  "started" : {
    "timestamp" : "2010-04-25T16:07:12.133Z",
    "application_type" : 1426,
    "media_type" : 1010,
    "resource_type" : 1423
  }
}
} ]
```

Start Service

| | |
|---|-----------------------------|
|  | POST /services/start |
| | Available since: 8.0.200.00 |

Description

Starts a service based on:

- The service type passed in the body.
- The contact information available (customer ID or contact key for later lookup).


If your application does not assign a customer ID, your service is anonymous. In that case, your application must assign a contact key. For further information, read the following pages:

- [Documentation:CS:Developer:Anonymous Service](#)
- [Service Start Event](#)

 Your application is not responsible for the service ID creation. UCS automatically assigns 64-bit integer IDs to the created services.

Operation

Start Service

| | | | |
|---|-----------------|------------------------------|---|
| ID | CV.WS.SRV.1 | | |
| Method | POST | | |
| URL | /services/start | | |
| Field Name | Type | Mandatory | Description |
| Body: Service Start Event<ref>The body of this operation is mandatory and makes use of the Service Start Event .</ref> | | | |
| customer_id | string | yes if no <i>contact_key</i> | The unique ID of the customer associated with the given service.  Services with no <i>customer_id</i> are anonymous . In this case, the event should include a <i>contact_key</i> . |
| contact_key | string | yes if no <i>customer_id</i> | Key for later lookup of |

| ID | CV.WS.SRV.1 | | |
|------------------|----------------|-----|---|
| | | | the service. This <i>contact_key</i> is mandatory if no customer ID is specified. For example, the application might store a PIN or ANI as the contact key when the service is first started. Later, if the customer is identified then the contact key is used to lookup the existing service record and associate it with the customer. |
| service_type | long or string | yes | The unique ID associated with the type of service, typically the DB ID of a value in the Service Type Business Attribute<ref name="business"> Refer to Configuration Options for more details on Business Attribute mapping.</ref>. |
| session_id | string | no | The ID of the related session, for instance, the orchestration session, or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business" />application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID (Genesys DB ID) for the application issuing the service event, such as a GVP VoiceXML |

| ID | CV.WS.SRV.1 | | |
|--|---|----|--|
| | | | application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (such as GVP, Agent Desktop, or Orchestration). |
| resource_id | integer | no | <p>The unique DB ID for the specific resource which provides the service. For instance:</p> <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given service, for instance, e-mail, voice, chat, etc. |
| est_duration | integer | no | The estimated service duration in seconds. |
| timestamp | date/time | no | <p>The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH] : [mm] : [ss] . [SSS]Z.</p> <p>If the application does not specify this timestamp, the server does it when the event is processed.</p> |
| <extension n> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Service extensions, where <extension n> corresponds to the unique name of the service extension. Your application can specify as many extensions as needed as long as they |

| | | | |
|-----------|-------------|--|---|
| ID | CV.WS.SRV.1 | | were previously defined with the Create Service Extension Schema operation. |
|-----------|-------------|--|---|

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTPResponseCodesandErrors](#) for further details on the possible codes that this operation can return.

Response

| | |
|---------------------|--|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: <code>\${base_uri}/service/\${service_id}</code> where: <ul style="list-style-type: none"> <code>\${base_uri}</code> is the URI of the created service. <code>\${service_id}</code> is the service ID. |
| Body | <code>{"service_id": \${service_id}}</code> where: <ul style="list-style-type: none"> <code>\${service_id}</code> is the service ID. |

Example

Operation


```
POST /services/start
{
  "timestamp": "2009-05-12T12:05:12.145Z",
  "interaction_id": "123ABCAADFJ1259ACF",
  "application_type":400,
  "application_id":40,
  "est_duration":60,
  "contact_key":"42",
  "service_type":100,
  "media_type": 1,
  "resource_id": 5005,
  "resource_type": 2,
  "disposition": 10,
  "coupon": {
```

```
      "coupon_name": "DISCOUNTCODE15"
    },
    "satisfaction": {
      "score": 85,
      "agentID": 2025
    },
    "relatedOffers": [
      {
        "offer_name": "VIP credit card black ed.",
        "type": 9,
        "comments": "proposed to all client"
      },
      {
        "offer_name": "3 times payment GOLD",
        "type": 4,
        "comments": "limited offer"
      },
      {
        "offer_name": "life insurance",
        "type": 3,
        "comments": "healt check to be done before approval"
      }
    ]
  }
}
```

Result

```
HTTP 201 Created
location: /services/12349857
{"service_id": 12349857}
```

Start State

| | |
|---|---|
|  | POST /services/\${service_id}/states/start |
| | Available since: 8.0.100.00 |

Description

Starts a service state of a given type for a given service. UCS assigns auto-incrementing identifiers to the states, just like to services and tasks. States and tasks are assigned 32-bit identifiers.

Operation

| | | | |
|---|---------------------------------------|------------------|---|
| ID | CV.WS.SRV.5 | | |
| Method | POST | | |
| URL | /services/\${service_id}/states/start | | |
| Name | Type | Mandatory | Description |
| URI Parameters | | | |
| \${service_id} | integer | yes | The service ID is specified in the request URI. |
| Body: State Start Event<ref>This body contains fields from the State Start Event resource.</ref> | | | |
| state_type | long or string | yes | <p>The unique ID associated with the state type. Typically, the DB ID of a value in the Service Type Business Attribute<ref name="business"></p> <p>Refer to Configuration Options for more details on Business Attribute mapping.</ref>. Enumerated values could be one of the following:</p> <ol style="list-style-type: none"> 1. Customer identification 2. Service identification 3. Assign service agent 4. Waiting for service |

| ID | CV.WS.SRV.5 | | |
|-------------------|----------------|----|--|
| | | | agent 5. Offering another service while waiting for agent 6. Offering callback 7. Callback pending 8. Delivering service 9. Waiting for customer input 10. Offering another service while delivering service |
| previous_state_id | integer | no | The ID of the previous state. |
| session_id | string | no | The ID of the related session; for instance, the orchestration session or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID (Genesys DB ID) for the application issuing the service event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of |

| ID | CV.WS.SRV.5 | | |
|---|---|----|---|
| | | | resource which provides the service (such as GVP, Agent Desktop, or Orchestration). |
| resource_id | integer | no | <p>The unique DB ID for the specific resource which provides the service. For instance:</p> <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given state; for instance, e-mail, voice, or chat. |
| est_duration | integer | no | The estimated state duration in seconds. |
| timestamp | date/time | no | <p>The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH] : [mm] : [ss] . [SSS]Z. If the application does not specify this timestamp, the server does it when the event is processed.</p> |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | State extension. Your application can add as many state extensions as needed, as long as you created corresponding Extension Schema with the Create State Extension Schema operation. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTPResponseCodesandErrors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|--|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: <code>\${base_uri}/service/\${service_id}/states/\${state_id}</code> where: <ul style="list-style-type: none"> • <code>\${base_uri}</code> is the URI of the created service. • <code>\${service_id}</code> is the service ID. • <code>\${state_id}</code> is the ID of the created state. |
| Body | <code>{"state_id": \${state_id}}</code> where: <ul style="list-style-type: none"> • <code>\${state_id}</code> is the stateID. |

Example

Operation


```
POST /services/12345/states/start
{
  "interaction_id": "51",
  "application_type": 400,
  "application_id": 40,
  "resource_type": 200,
  "resource_id": 20,
  "media_type": 2,
  "est_duration": 60,
  "state_type": 100,
  "Feedback":
  {
    "FeedbackType": "survey",
    "rating": 7,
    "notes": "warm welcome at frontdesk, thanks for the nice trip"
  },
  "Satisfaction": [
  {
    "rating": 2,
    "pertinence": 8,
    "usefull": true,
    "place": "Terranova mexico resort"
  },
  {
```

```
"rating":8,  
"pertinence":4,  
"usefull":false,  
"place":"Fancy resort Paris"  
}  
]  
}
```

Result

```
{"state_id": 1258276}
```

Start Task

| | |
|---|--|
|  | POST /services/\${service_id}/tasks/start |
| | Available since: 8.0.100.00 |

Description

This operation starts a task of a given type for the given service. The type is one of the enumerated values recorded for the corresponding business attribute. See [Business Attributes in Context Services](#) for further details. UCS assigns auto-incrementing identifiers to states, services, and tasks. For states and tasks, the assigned identifiers are 32-bit integers; for services the identifier is a 64-bit integer.

Operation

| | | | |
|--|--------------------------------------|------------------|--|
| ID | CV.WS.SRV.8 | | |
| Method | POST | | |
| URL | /services/\${service_id}/tasks/start | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| \${service_id} | integer | yes | The unique 64-bit ID of the service. |
| Body: Task Start Event<ref>This body contains fields from the Task Start Event resources.</ref> | | | |
| state_id | integer | no | The 32-bit integer ID of the state. See ServiceState . |
| task_type | long or string | yes | The unique ID associated with the type of task, typically the DB ID of a value in a Business Attribute representing customer service tasks for the given organization<ref name="business"> Refer to Configuration Options for more details on Business Attribute mapping.</ref> |
| session_id | string | no | The ID of the related session, for instance, |

| ID | CV.WS.SRV.8 | | |
|------------------|----------------|----|--|
| | | | the orchestration session or any other business session. |
| interaction_id | string | no | The ID of the related Genesys interaction. This ID can be used by other Genesys reporting products such as Stat Server, URS, Composer, and GVP. |
| application_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of application issuing the service event. May be used to group related applications, potentially across resource types. |
| application_id | integer | no | The unique ID (Genesys DB ID) for the application issuing the event, such as a GVP VoiceXML application or an Orchestration SCXML application. |
| resource_type | long or string | no | The unique ID associated with the type or class<ref name="business"/> of resource which provides the service (such as GVP, Agent Desktop, or Orchestration). |
| resource_id | integer | no | The unique DB ID for the specific resource which provides the service. For instance: <ul style="list-style-type: none"> the Genesys DB ID of a specific GVP or orchestration platform. the DB ID of a given agent, according to the context. |
| media_type | long or string | no | The media type<ref name="business"/> applicable to the given task; for instance, e-mail, voice, or chat. |

| ID | CV.WS.SRV.8 | | |
|---|---|----|--|
| est_duration | integer | no | The estimated task duration in seconds. |
| timestamp | date/time | no | The UTC time at which the event was raised, with a precision of milliseconds, using the ISO 8601 representation : [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z. If the application does not specify this timestamp, the server does it when the event is processed. |
| <extension name> Supported since 8.0.2 | Extension (single-valued) or Extension[] (multi-valued) | no | Task extension. Your application can add as many task extensions as needed, as long as you created corresponding Extension Schema with the Create Task Extension Schema operation. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTPResponseCodesandErrors](#) for further details on the possible codes that this operation can return.

Response

| | |
|---------------------|--|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: \${base_uri}/service/\${service_id}/tasks/\${task_id} where: <ul style="list-style-type: none"> • \${base_uri} is the URI of the created service. • \${service_id} is the service ID. • \${task_id} is the created ID for the new task. |
| Body | {"task_id": \${task_id}} where: |

| HTTP code | 201 |
|-----------|--|
| | <ul style="list-style-type: none">• <code>\${task_id}</code> is the task ID. |

Example

The following example prerequisites are the creation of an **Extension Schema** for the "Survey" single-valued extension and one for the "Proposal" multi-valued extension. **Operation**

POST /services/21456878/tasks/start

```
{
  "interaction_id":42,
  "est_duration":460,
  "state_id":24,
  "task_type":customer info,
  "Survey":
  {
    "url":"http://ourServer/storage/userAnswers",
    "question1":7,
    "question2":true,
    "question3":"will be better with cable tv and on-demand video"
  },
  "Proposal": [
    {
      "car type":"cabriolet",
      "price":25 000,
      "seats":2,
      "comments":"200 cv, hardtop"
    },
    {
      "car type":"S.U.V.",
      "price":70 000,
      "seats":8,
      "comments":"4wd, leather seats"
    }
  ]
}
```

Result

```
{"task_id": 15928}
```

Update Service Extension



PUT
/services/{service_id}/extensions/{ext_name}

Description

This operation replaces the extension value with a new extension value. The former value of the extension is lost. This operation supports the update of multi-valued extensions.

Operation

Updates a service's extension value

| | | | |
|----------------------------------|--|------------------|---|
| ID | CV.WS.SRV.4 | | |
| Method | PUT | | |
| URL | /services/{service_id}/extensions/{ext_name} | | |
| Name | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | integer | yes | The ID of the service. |
| {ext_name} | string | yes | The name of the extension |
| Body | | | |
| <attribute n> or <attribute n>[] | value | yes | Attributes for single-valued extensions, or array of attributes for multi-valued extensions (previously defined through the Create Service Extension Schema operation). |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|-----|
| HTTP code | 200 |
| HTTP message | OK |

Example

Operation

The following operation updates the single-valued extension "score".

```
PUT /services/8389/extensions/score
{
  "score": 85,
  "agentID": 2025
}
```

Operation


The following operation updates the multi-valued extension "relatedOffers".

```
PUT /services/8389/extensions/relatedOffers
[
  {
    "offer_name": "VIP credit card black ed.",
    "type": 9,
    "comments": "proposed to all client"
  },
  {
    "offer_name": "3 times payment GOLD",
    "type": 4,
    "comments": "limited offer"
  },
  {
    "offer_name": "life insurance",
    "type": 3,
    "comments": "health check to be done before approval"
  }
]
```

Result

```
200 OK
```

Update Record In Service Extension

| | |
|---|---|
|  | PUT /services/{service_id}/extensions/{ext_name}/by/unique |
| | Available since: 8.0.200.00 |

Description

Updates the content of a single record in a multi-valued extension. The attributes which are part of the 'unique' list specified at the [Extension Schema](#) creation are passed in the body and are used to find the correct record to update. 🚫 This update cannot change the values of the attributes which are part of the 'unique' list specified at the [Extension Schema](#) creation. 'Unique' attributes identify which record should be updated.

Operation

Prerequisites: The extension record exists.

| | | | |
|--|---|------------------|--|
| ID | CV.WS.SRV.19 | | |
| Method | PUT | | |
| URL | /services/{service_id}/extensions/{ext_name}/by/unique | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | string | yes | The service ID. |
| {ext_name} | string | yes | The name of the Service Extension to update. |
| Body <ref>Record attributes for the Service Extension .</ref> | | | |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date datetime currency | yes | Individual attributes defined in the Service Extension Schema . <attribute n> corresponds to the attribute name defined in the schema. <ul style="list-style-type: none"> If the attribute is unique, its value is used to select the record to update. It is not updated. |

| ID | CV.WS.SRV.19 | | |
|----|---|--|---|
| | <ul style="list-style-type: none"> boolean | | <ul style="list-style-type: none"> If the attribute is not unique, its value is updated. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example

Operation The following operation updates the "3 times payment GOLD" record of the extension *relatedOffers* in the service 8389.

```
PUT /services/8389/extensions/relatedOffers/by/unique
{
  "offer_name":"3 times payment GOLD",
  "type":4,
  "comments":"extented offer time"
}
```

Result

204 No Content

Delete Record From Service Extension

| | |
|--|--|
| | PUT /services/\${service_id}/extensions/\${ext_name}/delete/by/unique |
| | Available since: 8.0.200.00 |

Description

Deletes a single record in a multi-valued extension. In the operation's body, you must specify the unique attributes that identify the record in the given extension. See [Unique Attributes](#) for further information.

Operation

Prerequisites: The extension record exists.

| | | | |
|---|--|------------------|---|
| ID | CV.WS.SRV.22 | | |
| Method | PUT | | |
| URL | /services/\${service_id}/extensions/\${ext_name}/delete/by/unique | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| \${service_id} | long | yes | The service ID. |
| \${ext_name} | string | yes | The name of the Service Extension to modify. |
| Body <ref>Unique attributes of the Service Extension .</ref> | | | |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date datetime currency boolean | yes | Unique attributes (names and values) which identify the record to delete. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example


Operation The following operation deletes the relatedOffers record identified by the attribute "offer_name" of service 8389.

```
PUT /services/8389/extensions/relatedOffers/by/unique
{
  "offer_name": "3 times payment GOLD"
}
```

Result

204 No Content

Update State Extension

| | |
|---|---|
|  | PUT <code>/services/{service_id}/states/{state_id}/extensions/{ext_name}</code> |
| | Available since: 8.0.200.00 |

Description

This operation replaces the extension value with a new extension value. The former value of the extension is lost.

Operation

Updates a state's extension value

| | | | |
|----------------------------------|---|------------------|---|
| ID | CV.WS.SRV.17 | | |
| Method | PUT | | |
| URL | <code>/services/{service_id}/states/{state_id}/extensions/{ext_name}</code> | | |
| Name | Type | Mandatory | Description |
| URI Parameters | | | |
| <code>{service_id}</code> | integer | yes | The ID of the service. |
| <code>{state_id}</code> | integer | yes | The ID of the state. |
| <code>{ext_name}</code> | string | yes | The name of the extension. |
| Body | | | |
| <code><attribute n></code> | value | yes | Values for one or more extension attributes (previously defined through the Create State Extension Schema operation). |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| | Response |
|--------------|----------|
| HTTP code | 200 |
| HTTP message | OK |

Example

Operation: Update a multi-valued extension

```
PUT /services/8389/states/1/extensions/Satisfaction
[
  {
    "rating":2,
    "pertinence":8,
    "usefull":true,
    "place":"Terranova mexico resort"
  },
  {
    "rating":8,
    "pertinence":4,
    "usefull":false,
    "place":"Fancy resort Paris"
  }
]
```

Result

200 OK


Operation: Update a single-valued extension

```
PUT /services/8389/states/1/extensions/Feedback
{
  "FeedbackType":"survey",
  "rating":7,
  "notes":"warm welcome at frontdesk, thanks for the nice trip"
}
```

Result

200 OK

Update Record In State Extension

| | |
|---|---|
|  | PUT /services/{service_id}/state/{state_id}extensions/{ext_ unique |
| | Available since: 8.0.200.00 |

Description

Updates the content of a single record in a multi-valued extension for a given state of a given service. The attributes which are part of the 'unique' list specified at the [Extension Schema](#) creation are passed in the body and are used to find the correct record to update. ⚠️ This update cannot change the values of the attributes which are part of the 'unique' list specified at the [Extension Schema](#) creation. 'Unique' attributes identify which record should be updated.

Operation

Prerequisites: The extension record exists.

| | | | |
|--|---|------------------|--|
| ID | CV.WS.SRV.20 | | |
| Method | PUT | | |
| URL | /services/{service_id}/states/{state_id}/extensions/{ext_name}/by/unique | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | long | yes | The service ID. |
| {state_id} | integer | yes | The state ID. |
| {ext_name} | string | yes | The name of the State Extension to update. |
| Body <ref>Record attributes for the State Extension .</ref> | | | |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date datetime | yes | Individual attributes defined in the State Extension Schema . <attribute n> corresponds to the attribute name defined in the schema. <ul style="list-style-type: none"> If the attribute is unique, its value is |

| ID | CV.WS.SRV.20 | | |
|----|---|--|--|
| | <ul style="list-style-type: none"> • currency • boolean | | <p>used to select the record to update. It is not updated.</p> <ul style="list-style-type: none"> • If the attribute is not unique, its value is updated. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example

Operation The following operation updates the 'Tons of Hill, Paris' record of extension relatedOffers in service 8389.

```
PUT /services/8389/states/1/extensions/Satisfaction/by/unique
{
  "rating":2,
  "pertinence":8,
  "usefull":true,
  "place":"Tons of Hill, Paris"
}
```

Result

204 No Content

Delete Record From State Extension

| | |
|--|--|
| | PUT /services/{service_id}/states/{state_id}/extensions/{ext_name}/by/unique |
| | Available since: 8.0.200.00 |

Description

Deletes a single record in a multi-valued extension for a given state. In the operation's body, you must specify the unique attributes which identify the record to delete. See [Unique Attributes](#) for further information.

Operation

Prerequisites: The extension record exists.

| | | | |
|--|---|------------------|---|
| ID | CV.WS.SRV.23 | | |
| Method | PUT | | |
| URL | /services/{service_id}/states/{state_id}/extensions/{ext_name}/delete/by/unique | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | long | yes | The service ID. |
| {state_id} | integer | yes | The state ID. |
| {ext_name} | string | yes | The name of the State Extension to modify. |
| Body <ref>"Unique" record attributes of the State Extension .</ref> | | | |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date datetime currency | yes | Unique attributes (names and values) which identify the record to delete. |

| | | | |
|-----------|---|--|--|
| ID | CV.WS.SRV.23 | | |
| | <ul style="list-style-type: none">boolean | | |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example


Operation The following operation deletes the Satisfaction record of state 1 in service 8389. The concerned record is identified by the "place" attribute.

```
PUT /services/8389/states/1/extensions/Satisfaction/by/unique
{
  "place": "Tons of Hill, Paris"
}
```

Result

204 No Content

Update Task Extension

| | |
|---|---|
|  | PUT <code>/services/{service_id}/tasks/{task_id}/extensions/{extension_name}</code> |
| | Available since: 8.0.200.00 |

Description

This operation replaces the extension value with a new extension value. The former value of the extension is lost.

Operation

Updates a state's extension value

| | | | |
|-------------------------------|--|------------------|--|
| ID | CV.WS.SRV.18 | | |
| Method | PUT | | |
| URL | <code>/services/{service_id}/tasks/{task_id}/extensions/{extension_name}</code> | | |
| Name | Type | Mandatory | Description |
| URI Parameters | | | |
| <code>{service_id}</code> | integer | yes | The ID of the service. |
| <code>{task_id}</code> | integer | yes | The ID of the task. |
| <code>{extension_name}</code> | string | yes | The name of the extension |
| Body | | | |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date datetime currency boolean | yes | Values for one or more extension attributes (previously defined through the Create Task Extension Schema operation). |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|-----|
| HTTP code | 200 |
| HTTP message | OK |

Example

Operation

Update a multi-valued extension.

```
PUT /services/8389/tasks/42/extensions/Proposal
[
  {
    "car type":"cabriolet",
    "price":25 000,
    "seats":2,
    "comments":"200 cv, hardtop"
  },
  {
    "car type":"S.U.V.",
    "price":70 000,
    "seats":8,
    "comments":"4wd, leather seats"
  }
]
```

Result

200 OK

Operation


Update a single-valued extension.

```
PUT /services/8389/tasks/42/extensions/Survey
{
  "url":"http://ourServer/storage/userAnswers",
  "question1":7,
  "question2":true,
  "question3":"will be better with cable tv and on-demand video"
}
```


Result

200 OK

Update Record In Task Extension

| | |
|---|---|
|  | PUT /services/\${service_id}/task/\${task_id}extensions/\${ext_name}unique |
| | Available since: 8.0.200.00 |

Description

Updates the content of a single record in a multi-valued extension for a given state of a given service. The attributes which are part of the 'unique' list specified at the [Extension Schema](#) creation are in the body and are used to find the correct record to update.  This update cannot change the values of the attributes which are part of the 'unique' list specified at the [Extension Schema](#) creation. 'Unique' attributes identify which record should be updated.

Operation

Prerequisites: The extension record exists.

| | | | |
|---|---|------------------|---|
| ID | CV.WS.SRV.21 | | |
| Method | PUT | | |
| URL | /services/\${service_id}/tasks/\${state_id}/extensions/\${ext_name}/by/unique | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| \${service_id} | long | yes | The service ID. |
| \${task_id} | integer | yes | The state ID. |
| \${ext_name} | string | yes | The name of the Task Extension to update. |
| Body <ref>Record attributes for the Task Extension .</ref> | | | |
| <attribute n> | <ul style="list-style-type: none"> • string • integer • long • double • date • datetime | yes | Individual attributes defined in the Task Extension Schema . <attribute n> corresponds to the attribute name defined in the schema. |

| ID | CV.WS.SRV.21 | | |
|----|---|--|--|
| | <ul style="list-style-type: none"> • currency • boolean | | |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example

Operation The following operation updates the "cabriolet" record of the *Proposal* extension in the task 1 of service 8389.

```
PUT /services/8389/tasks/1/extensions/Proposal/by/unique
{
  "car type":"cabriolet",
  "price":25 000,
  "seats":3,
  "comments":"250 cv, hardtop"
}
```

Result

204 No Content

Delete Record From Task Extension

| | |
|--|--|
| | PUT /services/{service_id}/task/{task_id}/extensions/{ext_name}/by/unique |
| | Available since: 8.0.200.00 |

Description

Deletes a single record in a multi-valued extension for a given task. In the body of the operation, you must specify the unique attributes which identify the record to delete. See [Unique Attributes](#) for further information.

Operation

Prerequisites: The extension record exists.

| | | | |
|--|---|------------------|--|
| ID | CV.WS.SRV.24 | | |
| Method | PUT | | |
| URL | /services/{service_id}/task/{task_id}/extensions/{ext_name}/delete/by/unique | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| {service_id} | long | yes | The service ID. |
| {task_id} | integer | yes | The task ID. |
| {ext_name} | string | yes | The name of the Task Extension to modify. |
| Body <ref>Unique attributes of the Task Extension record .</ref> | | | |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date datetime currency | yes | Attribute names and values of the task extension, marked as unique in the Extension Schema , and used to identify the record to delete. |

| | | | |
|-----------|---|--|--|
| ID | CV.WS.SRV.24 | | |
| | <ul style="list-style-type: none">boolean | | |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example

Operation The following operation removes the "car type" Proposal record of task 1 in service 8389.

```
PUT /services/8389/tasks/1/extensions/Proposal/by/unique
{
  "car type":"cabriolet"
}
```

Result

204 No Content

Customer Profile

Description

Describes a customer profile. Available since: 8.0.100.00. Customer profiles are built on top of legacy UCS Contact Attributes. They are multi-valued and support the primary attributes. If an attribute has several values, the first one of the JSON array is the primary attribute, the others are non-primary. Each customer profile consists in a list of attributes defined via business attributes, see [the configuration options](#) for further details. These attributes share the same level with the customer_id field (provided by the UCS to identify the customer).

In addition to these attributes, your application can add extensions (whose schema is defined with [Schema Operations](#)). See the table and example below.

Resource

| Field | Type | Mandatory | Description |
|---------------|--|-----------|--|
| customer_id | string | yes | The unique ID of the given customer. Limited to 16 characters. |
| <attribute n> | <ul style="list-style-type: none"> string datetime | yes | <p>Customer attributes, where <attribute n> is the attribute name<ref>See the configuration options for further details.</ref>. Attributes are not part of a separated array, see the example below.</p> <p>The date/time formats are ISO 8601<ref>Wikipedia ISO 8601</ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSSS]Z.</p> |
| <extension n> | Extension or Extension[] | no | <p>Profile extensions, where <extension n> corresponds to the unique name of the profile extension resource.</p> <ul style="list-style-type: none"> For single-valued extensions, the result is a single Extension. |

| Field | Type | Mandatory | Description |
|-------|------|-----------|--|
| | | | <ul style="list-style-type: none">For multi-valued extensions, the field value is an array of zero or more Extension. |

<references />

Example

The following output sample presents the representation for the customer *John Doe*. It includes 2 attributes : `FirstName` and `LastName`. The `EmailAddress` is an extension which contains two contact records.

```
{
  "FirstName": "John",
  "LastName": "Doe",
  "EmailAddress": [
    "john.doe@genesyslab.com",
    "jd34@hotmail.dom"
  ]
}
```

Profile Attribute Schema



Purpose: Describes a Profile Attribute schema.

Description

Describes a Profile Attribute. Each attribute field of the profile corresponds to a recorded schema which details the attribute name, type, and content. 💡 In 8.0.1 release, the configuration of a new attribute schema is performed in the Configuration Manager. Select in "Tenant" the item *specific configuration*, and under "Business Attributes" 'Contact Attributes'. Then, create a new Business Attribute Value. By default the new Attribute is of type string. To assign another type to the schema, in Annex, create a section "settings", and a key "type" with value "string" or "date".

Predefined Attributes Schema

Default Attributes visible in the Configuration Server are the following:

- First Name (string)
- Last Name (string)
- Phone Number (string)
- E-mail Address (string)
- Title (string)

Default 'internal' Attributes (not visible in the Configuration Server) are the following:

- LastCalledAgent_EmployeeID (string)
- LastCalledAgent_TimeStamp (date)
- PreferredAgent_EmployeeID (string)

Additional attributes are available for each active media defined in the Business Attribute "Media Type" of the Configuration Manager:

- LCA_EmplID_<media> (string)
- LCA_TimeStamp_<media> (date)
- Pref_EmplID_<media> (string)

Attributes of type date/time are formatted in UTC ISO 8601: "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'"
Example: "1981-03-17T02:00:00.000Z"

Resource

| Field | Type | Mandatory | Description |
|-------|--------|-----------|---|
| name | string | yes | <p>The name is unique for each attribute within the given profile.</p> <ul style="list-style-type: none"> Starts with a letter, and can be followed with letters, numbers, or underscores. Is restricted to a maximum of 30 characters (Maximum RDBMS<ref name="RDBMS">http://en.wikipedia.org/wiki/Relational_database_management_shared limit) <p> In profile attribute schemas, the name is not case-sensitive.</p> |
| type | token | yes | <p>The attribute type, which can be one of the following types:</p> <ul style="list-style-type: none"> Boolean String Integer Long Double Date DateTime Currency <p>Notes:</p> <ol style="list-style-type: none"> The constraints on these types (the minimum and maximum values supported for the integer type) vary with the RDBMS<ref name="RDBMS" |

| Field | Type | Mandatory | Description |
|-----------|-------------------|-----------|---|
| | | | <p>/ > [1] < / ref ></p> <p>2. Customer profiles are built on top of UCS' Contact Attributes, and support only String and DateTime attribute types. However, all attribute types are supported for profile extensions.</p> |
| default | numeric or string | no | <p>Provides a default value for the attribute. For numeric attributes, you do not need quotation marks. Quotation marks are for string, date, and datetime attributes. By default, the date/time format is ISO 8601 UTC Wikipedia ISO 8601: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.</p> |
| length | integer | no | <p>Reserved to attributes of type String. Defines the maximum number of characters for the string.</p> <ul style="list-style-type: none"> • Default length is 256; • Maximum length is 4000. |
| encrypt | Boolean | no | <ul style="list-style-type: none"> • <code>false</code> by default. • <code>true</code> if the server must encrypt the attribute value before saving it to the UCS database. |
| mandatory | Boolean | no | <ul style="list-style-type: none"> • <code>false</code> by default; • <code>true</code> if the attribute is mandatory when inserting a new Profile Extension |

| Field | Type | Mandatory | Description |
|-------|------|-----------|-------------|
| | | | record. |

<references />

Related Operation

- [Query Profile Schema](#)

Profile Extension




Purpose: Presents an extension for a customer profile.

Description

Extends the [customer profile](#) with additional attribute resources. Note that for each extension resource, you must define first a profile extension schema. Extensions, like profiles, consist of a series of one or more Profile Attribute resources, which are defined with a predefined [Profile Extension Schema](#).

Resource

Profile Extension

| Field | Type | Mandatory | Description |
|---------------|---|-------------------------------|--|
| customer_id | string | yes if not part of a profile. | The unique ID of the given customer.  This field is mandatory if the extension is not nested inside a Customer Profile . |
| name | string | yes | The unique, case-insensitive name of the extension. <ul style="list-style-type: none"> Starts with a letter to which you can append letters, numbers, or underscores. Restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on index creation.) |
| <attribute n> | string integer long double date | yes | Individual attributes, defined in the Profile Extension Schema . <attribute n> corresponds to the |

| Field | Type | Mandatory | Description |
|-------|----------------------|-----------|--|
| | datetime currency | | attribute name defined in the schema. |

Profile Extension Schema




Purpose: Describes a type of extension available for the customer profiles.

Description

Describes one of the **Profile Extension** resources. Before your application can start adding extensions to a given profile, your application must define this extension's schema, which includes its nested attributes.

Resource

| Field | Type | Mandatory | Description |
|-------|--------|-----------|--|
| name | string | yes | <p>The unique, case-insensitive name of the extension. The name must start with a letter, and can be followed with letters, numbers, or underscores.</p> <p>The name is restricted to a maximum of 26 characters (Maximum RDBMS shared limit on creation of index).</p> |
| type | token | yes | <p>Extensions come in the following forms:</p> <ul style="list-style-type: none"> • Single-valued: a single extension record is associated with a given customer. • Multi-valued: multiple extension records can be associated with any given customer. • Classifier: the single-valued extension has no attribute. |

| Field | Type | Mandatory | Description |
|------------|-------|-----------|--|
| | | |  Only single-valued profile extensions are supported for now. |
| attributes | array | no | The array of <i>zero or more</i> attribute objects. Empty when type="classifier". |

Example

The following schema describes the Address extension.

```
"name": "Address",
"type": "single-valued",
"attributes": [
  {"name": "AddressType", "type": "integer", "default": 0},
  {"name": "Address", "type": "string", "length": 256},
  {"name": "City", "type": "string", "length": 32},
  {"name": "County", "type": "string", "length": 32},
  {"name": "PostCode", "type": "string", "length": 10},
  {"name": "Country", "type": "string", "length": 32}
]
```


Related Operations

- [Create Profile Extension Schema](#)
- [Query Profile Extensions Schema](#)

List of Profile Operations

- - [POST /profiles](#)
 - [GET /profiles](#)
 - [POST /profiles/\\${customer id}/extensions](#)
 - [GET /profiles/\\${customer id}](#)
 - [PUT /profiles/\\${customer id}](#)
- Since 8.0.200.00:
 - [PUT /profiles/\\${customer id}/extensions/\\${ext name}/by/unique](#)
 - [PUT /profiles/\\${customer id}/extensions/\\${ext name}/delete/by/unique](#)

Create Customer Profile


| | |
|---|-----------------------------|
|  | POST /profiles |
| | Available since: 8.0.100.00 |

Description

Creates a Customer Profile and returns the ID created by UCS. In 8.0.1, profiles are built on top of legacy UCS Contact Attributes. They are multi-valued and support the primary attributes. If an attribute has several values, the first value in the JSON array is the primary attribute and additional values are non-primary attributes. In 8.0.2, standard multi-valued extensions are available.

Operation

Prerequisites: The Customer Profile Schema exists.

| | | | |
|---|--|------------------|---|
| ID | CV.WS.PROF.3 | | |
| Method | POST | | |
| URL | /profiles | | |
| Parameter | Type | Mandatory | Description |
| Body: Customer Profile<ref>See Customer Profile for more information about the Customer Profile.</ref> | | | |
| customer_id | string | yes | The unique ID of the given customer. Limited to 16 characters. |
| <attribute n> | <ul style="list-style-type: none"> string datetime | yes | <p>Customer attributes, where <attribute n> is the attribute name<ref>See the configuration options for further details.</ref>. Attributes are not part of a separated array, see the example below.</p> <p>The date/time formats are ISO 8601<ref>Wikipedia ISO 8601</ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSSS]Z.  Do not use Unauthorized Strings as attribute values.</p> |
| <extension n> | Extension or Extension[] | no | Extensions, where |

| ID | CV.WS.PROF.3 | | |
|----|--------------|--|--|
| | | | <p data-bbox="1149 289 1388 426"><extension n> corresponds to the unique name of the profile extension resource.</p> <ul data-bbox="1161 457 1433 779" style="list-style-type: none"> <li data-bbox="1161 457 1433 621">• For single-valued extensions, the extension's value is a single extension object (see Extension). <li data-bbox="1161 642 1433 779">• For multi-valued extensions, the extension's value is an array of zero or more Extensions. |

<references />

Response

The Context Management Service API answers every request with an HTTP code. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|--|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: /profiles/ \${customer_id} where: <ul style="list-style-type: none"> • \${customer_id} is the created customer ID. |
| Body | {"customer_id": \${customer_id} } where: <ul style="list-style-type: none"> • \${customer_id} is the customer ID. |

Example

Operation The following operation would create the customer profile for "Bruce Banner," as well as three associated telephone records that are grouped in the "Phone" extension. The e-mail address


bruce.banner@marvelous.com is the primary e-mail attribute, while the other e-mail address is non-primary.

```
POST /profiles/
{
  "FirstName": "Bruce",
  "LastName": "Banner",
  "DOB": "1962-05-10",
  "EmailAddress": [
    "bruce.banner@marvelous.com",
    "b.banner@hulk.dom"
  ],
  "Phone": [
    {
      "PhoneType":0,
      "prefix":"+33",
      "PhoneNumber":"3145926535",
      "description":"family phone",
      "start_availability":"2009-12-18T18:30:00.000Z",
      "end_availability":"2009-12-18T21:40:00.000Z"
    },
    {
      "PhoneType":2,
      "prefix":"+33",
      "PhoneNumber":"6543210",
      "description":"business calls only, no sales",
      "start_availability":"2009-12-18T09:30:00.000Z",
      "end_availability":"2009-12-18T17:45:00.000Z"
    },
    {
      "PhoneType":5,
      "prefix":"+33",
      "PhoneNumber":"951357456",
      "description":""
    }
  ]
}
```

Result

```
Content-Location      http://ucsserver.mycompany.com:8080/path/profiles/00038b5SCVPU0007
{"customer_id":"0004Va58A92T0017"}
```

Identify Customer

| | |
|---|-----------------------------|
|  | GET /profiles |
| | Available since: 8.0.100.00 |

Description

Identifies a customer based on the **Identification Key** information submitted with the query. In addition to the identified customer ID, your application can retrieve profile and extension information based on the query fields. Query strings should be URL Encoded<ref>http://en.wikipedia.org/wiki/URL_encoding</ref>. If the "id_key" parameter is not specified, then UCS<ref name="ucs">**Universal Contact Server**</ref> uses the following algorithm:

1. Starting with the identification key with the lowest ID, UCS determines the number of attributes in the key which are covered by the data specified in the "expr" parameter.
2. If all attributes are covered, then use this key. Otherwise, record the number of sequential attributes covered, starting from the left. For example, if key 1 consists of attributes (a, b, c), and "expr" contains (a, b) then the score is 2.
3. If no key is selected after iterating through all the defined keys, choose the key with the highest score from Step 2. In the event of a tie, UCS selects the key with the smallest ID.

Operation



Prerequisites

- The identification keys exist.
- The UCS is in **production mode**.



Use the **Create Identification Key** operation to create Identification Keys.

| | | | |
|-----------------------|----------------|------------------|---------------------------------------|
| ID | CV.WS.CUSTID.1 | | |
| Method | GET | | |
| URL | /profiles | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| id_key | string | no | The key name used for identification. |

| ID | CV.WS.CUSTID.1 | | |
|--------------------|----------------|-----|---|
| | | |  UCS can infer the key based on the attributes included in the "expr" parameter. However, explicitly specifying the identification key with your application improves performance. |
| include_profile | token | no | <ul style="list-style-type: none"> "no" (default) to return the list of customers IDs without their profile attributes. "yes" to return all the profile attributes of the identified customers. |
| extensions | string | no | The names of the extension to return with the customer profiles. Your application can specify multiple values separated with comas, such as: <i>extensions=contacts,purchases</i> |
| include_extensions | token | no | <ul style="list-style-type: none"> "always" (default) to return the extensions specified with the field "extension" if one or more customers are identified. "unique" to return the extensions identified in parameter "extensions" if a unique customer is identified. |
| <attribute name> | string | yes | One or more identification keys used to identify the customer, for instance: <i>last_name=Doe&first_name=Jane</i>  Attribute names with no prefix are supposed to be profile attributes. To refer to the attributes of an extension, |

| ID | CV.WS.CUSTID.1 |
|----|---|
| | your application must use the extension name as a prefix for the attribute: <ext-name>.<attribute-name> |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|--|
| HTTP code | 200 |
| HTTP message | OK |
| Body | <ul style="list-style-type: none"> One result: Customer Profile Several results: Customer Profile[] No result: [] |

Example

Operation

```
GET /profiles/
contacts.phone_number=408-888-3214&extensions=contacts,purchases&exclude_profile=yes
&exclude_extensions=unique
```

Result: Multiple profiles

If multiple customers called from the specified phone number, then the output contains profiles for each matched customer:

```
200 OK
[{"customer_id": "2DC255C02AF", "name": "Doe, John", "birthdate": "1976-05-10"},
{"customer_id": "DDF295802AF", "name": "Doe, Jane", "birthdate": "1978-02-25"}]
```

Result: One profile

If a single customer is called from the specified phone number, then the complete profile for that customer is returned.

```
200 OK
{ "customer_id": "0004Va58A92T0017 ",
  "name": "Doe, John",
  "birthdate": "1976-05-10",
  "EmailAddress": [
    "john.doe@genesyslab.com",
```

```
"jd34@hotmail.dom"],
"contacts": [
  {"phone": "408-555-1234", "ext": "1234"},
  {"phone": "408-832-7712"} ],
"preferences": { "newsletter": "y", "new_offers": "n", "email": "html" }
}
```


Result: No result

If no customers match the specified criteria, then the output is an empty array:

```
[]
```

<references />

Insert Extension Records

| | |
|---|--|
|  | POST /profiles/\${customer_id}/extensions |
| | Available since: 8.0.100.00 |

Description

This operation inserts one or more extension records, which replace former records if they already exist.

Operation

| | | | |
|-----------------------|--------------------------------------|------------------|--|
| ID | CV.WS.PROF.4 | | |
| Method | POST | | |
| URL | /profiles/\${customer_id}/extensions | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| \${customer_id} | string | yes | The unique ID of the given customer. Limited to 16 characters. |
| Body | | | |
| <extension n> | Extension or Extension[] | no | <p>Profile extensions, where <extension n> corresponds to the unique name of the profile extension resource.</p> <ul style="list-style-type: none"> For single-valued extensions, the extension's value is a single Extension. For multi-valued extensions, the extension's value is an array of zero or more Extension. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|-----|
| HTTP code | 200 |
| HTTP message | OK |

Example

Operation


```
POST /profiles/0004Va58A92T0017/extensions
{
  "customer_id": "0004Va58A92T0017",
  "Phone": [
    { "PhoneType": 0,
      "prefix": "+33",
      "number": "3145926535",
      "description": "family phone",
      "start_availability": "2009-12-18T18:30:00.000Z",
      "end_availability": "2009-12-18T21:40:00.000Z" },
    { "PhoneType": 2,
      "prefix": "+33",
      "number": "6543210",
      "description": "business calls only, no sales",
      "start_availability": "2009-12-18T09:30:00.000Z",
      "end_availability": "2009-12-18T17:45:00.000Z" },
    { "PhoneType": 5,
      "prefix": "+33",
      "number": "951357456",
      "description": "" },
  ] }
}
```

Result


200 OK

UCS added the phone extension to the extensions of the specified customer.

Query Customer Profile

| | |
|---|--------------------------------------|
|  | GET /profiles/\${customer_id} |
| | Available since 8.0.100.00 |

Description

Queries the Customer Profile based on the customer ID parameter. According to the query's fields, your application can retrieve profile and extension attributes in addition to the identified customer ID. The response always contains all attributes of the customer profile resource, and all attributes of the specified extensions, to avoid ambiguity in further updates (see [Update Customer Profile](#)).  To get the schema of the profile and extension attributes, use the [Query Profile Schema](#) operation.

Operation

Prerequisites: A Customer Profile Schema (a list of [Attribute Schema](#)) is available.

| | | | |
|-----------------------|---------------------------|------------------|--|
| ID | CV.WS.PROF.1 | | |
| Method | GET | | |
| URL | /profiles/\${customer_id} | | |
| Field Name | Type | Mandatory | Description |
| URI Parameters | | | |
| \${customer_id} | string | yes | Specified in the URI, the ID of the customer. |
| extensions | string | no | The list of extensions to return within the result. Your application can specify multiple extension names, separated with comas. For instance: <i>extensions=contacts,purchases</i> |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

Response

| HTTP code | 200 | | |
|---|--|-----------|--|
| HTTP message | OK | | |
| Field Name | Type | Mandatory | Description |
| Body: Customer Profile<ref>The returned result contains parts of the profile or the complete profile according to the parameters of the request. See Customer Profile for further information on the resource.</ref> | | | |
| customer_id | string | yes | The unique ID of the given customer. Limited to 16 characters. |
| <attribute n> | <ul style="list-style-type: none"> string datetime | yes | Customer attributes, where <attribute n> is the attribute name<ref>See the configuration options for further details.</ref>. Attributes are not part of a separated array, see the example below. The date/time formats are ISO 8601<ref> Wikipedia ISO 8601 </ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z. |
| <extension n> | Extension or Extension[] | no | By default, no extension is returned. The returned extensions are specified in the parameters of the request. For further details, see Extension . |

<references />

Example

For example, the customer profile (id=0004Va58A92T0017) has three attributes: "name", "birthdate" and "EmailAddress". This profile also has two defined extensions:

- contacts: one or more phone numbers (a multi-valued extension).
- preferences: a single-valued extension representing customer preferences for receiving a weekly newsletter, receiving notification of new offers, and the desired e-mail type.


Operation

GET /profiles/0004Va58A92T0017?extensions=contacts,preferences

Result

```
200 OK
{ "customer_id": "0004Va58A92T0017 ",
  "name": "Doe, John",
  "birthdate": "1976-05-10",
  "EmailAddress": [
    "john.doe@genesyslab.com",
    "jd34@hotmail.dom"],
  "contacts": [
    {"phone": "408-555-1234", "ext": "1234"},
    {"phone": "408-832-7712"} ],
  "preferences": { "newsletter": "y", "new_offers": "n", "email": "html" }
}
```

Update Customer Profile

| | |
|---|--------------------------------------|
|  | PUT /profiles/\${customer_id} |
| | Available since 8.0.1 |

Description

Overrides the attributes of the customer profile: prior attribute values are lost and replaced with the attribute list specified in the body of the request. This operation uses the standard convention for HTTP PUT, which requires you to update the profile with the complete profile to avoid losing information. Your application should use this operation in conjunction with the [Query Customer Profile](#) operation:

1. Query the Customer Profile,
2. Modify the Customer Profile data,
3. Update the Customer Profile.

Extensions can be part of the profile used for the update:



- If your application does not include any extensions in the body, no modification occurs on extensions.
- If your application specifies extension values, extension information is overridden. Your application must specify the complete extension set to avoid losing data.

Operation

Prerequisites

- The profile schema exists (see [Query Profile Schema](#)).
- Your application retrieved the Customer Profile (see [Query Customer Profile](#)).
- The UCS<ref name="ucs">Universal Contact Server</ref> is in [production mode](#).

| | | | |
|-----------------------|---------------------------|------------------|-------------------------|
| ID | CV.WS.PROF.2 | | |
| Method | PUT | | |
| URL | /profiles/\${customer_id} | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| \${customer_id} | string | yes | The ID of the customer. |

| ID | CV.WS.PROF.2 | | |
|---|--|-----|---|
| | | | Limited to 16 characters. |
| Body: The customer profile information <ref>The complete Customer Profile representation, compliant with the defined profile schema (see Query Profile Schema).</ref> | | | |
| customer_id | string | yes | The unique ID of the given customer. |
| <attribute n> | <ul style="list-style-type: none"> string datetime | yes | <p>The complete set of customer attributes, where <attribute n> is the attribute name<ref>See the configuration options for further details.</ref>. The date/time formats are ISO 8601<ref>Wikipedia ISO 8601</ref>: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.</p> <p> Attributes will be overridden. This representation must contain all the profile attributes' values, including those that weren't modified.</p> |
| <extension n> | Profile Extension or Profile Extension[] | no | <p>Extensions, where <extension n> corresponds to the unique name of the profile extension resource.</p> <p> If you specify extensions, extensions are overridden. If you wish to modify an extension value, this representation must contain all the profile extensions, including those that weren't modified.</p> |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|-----|
| HTTP code | 200 |
| HTTP message | OK |

Example

The following example assumes that:

- FirstName, LastName, DOB are existing attributes.
- Address is an extension.

Operation


```
PUT http://ucsserver.mycompany.com:8080/path/profiles/00027a52JCGY000M
Content-Location /profiles/00027a52JCGY000M
Content-Type: application/json
{
  "FirstName": "Bruce",
  "LastName": "Banner",
  "DOB": "1962-05-10",
  "EmailAddress": [
    "bruce.banner@marvelous.com",
    "b.banner@hulk.dom"
  ],
  "Address": { "Type":1, "Address":"21 JumpStreet", "City":"Hollywood",
    "County":"Santa Barbara", "PostCode":"555", "Country":"United States" }
}
```

Result


The above representation is now the profile of the customer whose id is 00027a52JCGY000M.

```
HTTP 200 OK
[]
```

Update Record In Profile Extension

| | |
|---|--|
|  | PUT /profiles/{customer_id}/extensions/{ext_name}/by/unique |
| | Available since: 8.0.200.00 |

Description

Updates the content of a single record in a multi-valued extension. The attributes which are part of the 'unique' list specified at the [Extension Schema](#) creation are passed in the body and used to find the correct record to update.  This update cannot change the values of the attributes which are part of the 'unique' list of the [Extension Schema](#); 'unique' attributes are used as identifiers for the given record. **Workaround:** If you wish to update a value for an attribute stamped as unique, you must [delete the concerned record](#), then [recreate this record with its correct values](#).

Operation

Prerequisites: The extension record exists.

| | | | |
|---|---|------------------|--|
| ID | CV.WS.PROF.6 | | |
| Method | PUT | | |
| URL | /profiles/{customer_id}/extensions/{ext_name}/by/unique | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| {customer_id} | string | yes | The unique ID of the given customer. Limited to 16 characters. |
| {ext_name} | string | yes | The name of the Profile Extension to update. |
| Body <ref>Record for the Profile Extension .</ref> | | | |
| <attribute n> | <ul style="list-style-type: none"> string integer long double date | yes | Individual attributes defined in the Profile Extension Schema . <attribute n> corresponds to the attribute name defined in the schema. <ul style="list-style-type: none"> If the attribute is unique, its value is |

| ID | CV.WS.PROF.6 | | |
|----|---|--|--|
| | <ul style="list-style-type: none"> • datetime • currency • boolean | | <p>used to select the record to update. It is not updated.</p> <ul style="list-style-type: none"> • If the attribute is not unique, its value is updated. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example

Operation The following operation updates the Phone record associated with the unique "PhoneNumber":"3145926535".

```
PUT /profiles/0000Sb5U97XE000Y/extensions/Phone/by/unique
{
  "PhoneType":0,
  "prefix":"+33",
  "PhoneNumber":"3145926535",
  "description":"family phone",
  "start_availability":"2009-12-18T18:30:00.000Z",
  "end_availability":"2009-12-18T21:40:00.000Z"
}
```

Result

204 No Content with empty body

Delete Record From Profile Extension

| | |
|--|---|
| | PUT <code>/profiles/{customer_id}/extensions/{ext_name}/delete/by/unique</code> |
| | Available since: 8.0.200.00 |

Description

Deletes a single record in a multi-valued extension. You must specify the list of 'unique' attributes which identify the record to delete. See [Unique Attributes](#) for further information.

Operation

Prerequisites: The extension record exists.

| | | | |
|--|--|------------------|--|
| ID | CV.WS.PROF.7 | | |
| Method | PUT | | |
| URL | <code>/profiles/{customer_id}/extensions/{ext_name}/delete/by/unique</code> | | |
| Parameter | Type | Mandatory | Description |
| URI Parameters | | | |
| <code>{customer_id}</code> | string | yes | The unique ID of the given customer. Limited to 16 characters. |
| <code>{ext_name}</code> | string | yes | The name of the Profile Extension to modify. |
| Body Unique attributes of the Profile Extension record . | | | |
| <code><attribute n></code> | <ul style="list-style-type: none"> string integer long double date datetime currency boolean | yes | <code><attribute n></code> corresponds to the attribute name defined 'unique' in the Extension Schema . |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|------------|
| HTTP code | 204 |
| HTTP message | No Content |

Example


Operation The following operation updates the Phone record associated with the unique "PhoneNumber":"3145926535".

```
PUT /profiles/0000Sb5U97XE000Y/extensions/Phone/delete/by/unique
{"PhoneType":0, "prefix":"+33", "PhoneNumber":"3145926535",
"description":"family phone", "start_availability":"2009-12-18T18:30:00.000Z",
"end_availability":"2009-12-18T21:40:00.000Z"}
```

Result

204 No Content

Attribute Schema


| | |
|---|---|
|  | Purpose: Describes an attribute schema, which can be part of an Extension Schema or of a Profile Schema. |
| | Available since: 8.0.100.00 |

Description

Your application can retrieve or manage the definitions of the attributes that compose some resources of the Context Services. Each attribute schema defines an attribute, its name, its type, and associated properties such as the default value of the attribute (if it exists). For instance, the following attribute schema defines that the Address Type attribute accepts integer values and is equal to 0 by default:

```
{"name": "AddressType", "type": "integer", "default": 0}
```

Profile Attributes

Profile attributes correspond to a recorded schema which details the attribute name, type, and content.  In the 8.0.1 release, the configuration of a new attribute schema is performed in the Configuration Manager. Select in "Tenant" the item *specific configuration*, and under "Business Attributes" the item 'Contact Attributes'. Then, create a new Business Attribute Value. By default, the new Attribute is of type string. To assign another type to the schema, in Annex, create a section "settings", and a key "type" with the value "string" or "date". The default predefined attributes visible in the Configuration Server are the following:

- First Name (string)
- Last Name (string)
- Phone Number (string)
- E-mail Address (string)
- Title (string)

Default 'internal' Attributes (not visible in the Configuration Server) are the following:

- LastCalledAgent_EmployeeID (string)
- LastCalledAgent_TimeStamp (date)
- PreferredAgent_EmployeeID (string)

Additional attributes are available for each active media defined in the Business Attribute "Media Type" of the Configuration Manager:

- LCA_EmplID_<media> (string)

- LCA_TimeStamp_<media> (date)
- Pref_EmplID_<media> (string)

Attributes of type date/time are formatted in ISO 8601 UTC <ref>Wikipedia ISO 8601</ref>: [YYYY]-[MM]-[DD]T[HH]:[mm]:[ss].[SSS]Z


Example: "1981-03-17T02:00:00.000Z"

Service, State, and Task extension attributes

In 8.0.2, your application can define service, states, and tasks extension resources, based on extension schema which use an array of Attribute Schemas to define the content of the extension. See [Extension Schema](#) for further details.

Resource

Attribute Schema

| Field | Type | Mandatory | Description |
|-------|--|-----------|--|
| name | string | yes | <p>The name is unique for each attribute within the given extension.</p> <ul style="list-style-type: none"> • Starts with a letter, and can be followed with letters, numbers, or underscores. • Is restricted to a maximum of 30 characters (Maximum RDBMS<ref name="RDBMS">http://en.wikipedia.org/wiki/Relational_database_management_shared limit.) <p> In profile attribute schemas, the name is not case-sensitive.</p> |
| type | token <ul style="list-style-type: none"> • boolean • string • integer • long | yes | <ol style="list-style-type: none"> 1. The constraints on these types (the minimum and maximum values supported for the integer type) vary with the RDBMS<ref name="RDBMS" />. |

| Field | Type | Mandatory | Description |
|-----------|--|-----------|---|
| | <ul style="list-style-type: none"> double date dateTime currency | | <p>2. Customer profiles are built on top of UCS' Contact Attributes, and support only String and DateTime attribute types. However, all attribute types are supported for profile extensions.</p> |
| default | numeric or string | no | <p>Provides a default value for the attribute. For numeric attributes, you do not need quotation marks. Quotation marks are for string, date, and datetime attributes. By default, the date/time format is ISO 8601 UTC Wikipedia ISO 8601: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.</p> |
| length | integer | no | <p>Reserved to attributes of type String. Defines the maximum number of characters for the string.</p> <ul style="list-style-type: none"> Default length is 256 Maximum length is 4000. |
| mandatory | boolean | no | <ul style="list-style-type: none"> <i>false</i> by default; <i>true</i> if the attribute is mandatory when inserting a new Profile Extension record. |

<references />

Extension Schema



Purpose: Describes the schema for any service, state, or task extension.

Description

Describes one of the **Extension** resources.

- Profile extensions are supported. Before your application can start adding extensions to a given profile, your application must define this extension's schema, which includes its nested attributes.
- Service extensions are supported and multi-valued extensions are allowed.

Resource

Profile Extension Schema

| Field | Type | Mandatory | Description |
|-------|---|-----------|---|
| name | string | yes | <p>The unique, case-insensitive name of the extension. The name must start with a letter, and can be followed with letters, numbers, or underscores (_).</p> <p>The name is restricted to a maximum of 26 characters (Maximum RDBMS shared limit on creation of index).</p> |
| type | token <ul style="list-style-type: none"> • "single-valued" • "multi-valued" • "classifier" | yes | <p>Extensions come in the following forms:</p> <ul style="list-style-type: none"> • Single-valued: a single extension record is associated with a given customer. • Multi-valued: multiple extension records can be associated with a |

| Field | Type | Mandatory | Description |
|------------|--------------------|-----------|---|
| | | | <p>given customer.</p> <ul style="list-style-type: none"> Classifier: the single-valued extension has no attribute. |
| attributes | Attribute Schema[] | no | The array of zero or more attributes. Empty when type="classifier". |
| unique | string[] | no | <p>Lists attributes which are unique in the scope of a given customer. The customer profile cannot include several extension records with identical values for these attributes.</p> <p>For example, let's consider a contact extension with the attributes "phone_num", "ext", "time_of_day". To ensure that a given customer does not have two contact extensions with the same phone number, set the following in the extension schema: unique = ["phone_num", "ext"] Each item of this array is either a single attribute, or an array of two or more attributes.</p> |

Service/State/Task Extension Schema

Schema for Service/State/Task Extensions

| Name | Type | Mandatory | Description |
|------|---|-----------|---|
| name | string | yes | The unique, case-insensitive name of the extension. The name must start with a letter, and can be followed with letters, numbers, or underscores (_). The name is restricted to a maximum of 26 characters. |
| type | token <ul style="list-style-type: none"> "single-valued" "multi-valued" | yes | Extensions come in the following forms: <ul style="list-style-type: none"> Single-valued: a single extension record is associated |

| Name | Type | Mandatory | Description |
|------------|--------------------|-----------|--|
| | | | <p>with a given customer.</p> <ul style="list-style-type: none"> Multi-valued: multiple extension records can be associated with any given customer. |
| attributes | Attribute Schema[] | yes | The attributes that define the extension. |
| unique | string[] | no | <p>Lists attributes (separated with commas) which are unique in the scope of a given service, state, or task. The resource cannot include several extension records with identical values for these attributes.</p> <p>For example, let's consider a bill extension with the attribute "bill_id". To ensure that a given service does not have two bills with the same "bill_id", set the following in the extension schema: unique = ["bill_id"] Each item of this array is either a single attribute, or an array of two or more attributes.</p> |

Examples

Schema of a Single-Valued Extension

```
{
  "attributes": [
    {"name": "FeedbackType", "type": "string", "length": "10", "mandatory": "true"},
    {"name": "rating", "type": "integer", "mandatory": "true"},
    {"name": "notes", "type": "string", "length": "256", "mandatory": "false"}
  ],
  "name": "Feedback",
  "type": "single-valued"
}
```

Schema of a Multi-valued Extension

```
{
```



```
"attributes": [  
  {"name": "car type", "type": "string", "length": "50", "mandatory": "true"},  
  {"name": "price", "type": "integer", "mandatory": "true"},  
  {"name": "seats", "type": "integer"},  
  {"name": "comments", "type": "string", "length": "1024"}  
],  
"name": "Proposal",  
"type": "multi-valued"  
}
```

See [Query State Extension Schema](#) for further examples.

Schema of a Profile Extension

The following schema describes the Address extension.

```
"name": "Address",  
"type": "single-valued",  
"attributes": [  
  {"name": "AddressType", "type": "integer", "default": 0},  
  {"name": "Address", "type": "string", "length": 256},  
  {"name": "City", "type": "string", "length": 32},  
  {"name": "County", "type": "string", "length": 32},  
  {"name": "PostCode", "type": "string", "length": 10},  
  {"name": "Country", "type": "string", "length": 32}  
]
```

Identification Key

Purpose

Describes the Identification Key Resource.

Description

The Identification Key is a combination of attributes used to identify a customer. These attributes (one or more) belong to the Customer Profile or to its extensions. Your application is responsible for creating the identification keys that are alter use to identify customers. See [Create Identification Key](#) for further details.

- ⚠ Identification keys cannot be issued from both the profile and its extensions.

Some identification key samples:

- An identification key consisting of attributes "name" and "birthdate" in the Profile.
- A key based on attribute "pin" of a single-valued extension used to hold customer pass codes.
- A key based on attribute "number" of a multi-valued extension used to record the phone numbers we have seen a customer call from.

When the UCS receives a new customer profile and the associated extension data, it builds the indexing structures based on the specified identification keys, in order to ensure efficient customer identification.

Resource

Identification Key

| Field | Type | Mandatory | Description |
|-------|--------|-----------|--|
| name | string | yes | The unique, case-insensitive name of the key. The name must start with a letter, and can be followed with letters, numbers, or underscores. The name is restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on |

| Field | Type | Mandatory | Description |
|------------|----------|-----------|---|
| | | | creation of index.) |
| source | string | no | <p>Can take on one of the following values:</p> <ul style="list-style-type: none"> <i>profile</i> (default value): indicates that the attributes specified in parameter "attribute" belong to the core customer profile. The unique name of the given Extension, used to create the Identification Key. If none, it means that the attributes specified in the parameter <i>attributes</i> are not sourced from either the profile or an extension. In this case, you must manage manually the identification table in UCS. |
| attributes | string[] | yes | The array names of one or more attributes of the extension or of the profile. |
| unique | bool | no | <ul style="list-style-type: none"> <i>false</i> by default. <i>true</i> to indicate that the given attributes of the profile or extension are unique across all customers. |

Example

The following identification key is a phone number.

```
{ "name": "idPhone",
  "attributes": ["phone_number"]}
```

The following sample defines "FirstName" and "LastName" as a "primary key" instead of "indexed

key".

```
{"name":"idFirstNameLastName", "unique":true, "attributes":["FirstName","LastName"]}
```

The combination of both parameters is unique. If your application tries to insert twice the same values, the operation will return an error. 💡 The use of a "primary key" instead of an "indexed key" makes the identification queries faster. It also prevents from creating two profiles with the same email address for example.


Related operations

- [Get Identification Keys](#)
- [Create Identification Key](#)
- [Update Identification Key](#)

List of Schema Operations

- Schema Operations
 - [GET /metadata/profiles/](#)
 - [POST /metadata/profiles/extensions](#)
 - [GET /metadata/profiles/extensions](#)
 - [GET /metadata/identification-keys](#)
 - [POST /metadata/identification-keys](#)
 - Since 8.0.2:
 - [POST /metadata/services/extensions](#)
 - [GET /metadata/services/extensions](#)
 - [POST /metadata/states/extensions](#)
 - [GET /metadata/states/extensions](#)
 - [POST /metadata/tasks/extensions](#)
 - [GET /metadata/tasks/extensions](#)

Create Identification Key

| | |
|---|---|
|  | POST /metadata/identification-keys |
| | Available since: 8.0.100.00 |

Description

Creates the key used to identify customers. Your application must define the **Identification Key** prior to any customer identification attempt. You can build identification keys as a combination of attributes:

- One or more attributes of the customer profile.
- One or more attributes of an extension.

Important

Your application cannot create Identification keys with a blend of profile attributes and extension attributes.

The following identification key representation identifies customers based on the `PhoneNumber` attribute.

```
{ "name": "idPhone",  
  "attributes": ["PhoneNumber"]}
```

Let's imagine that the phone number is part of the **contactExt** extension; the corresponding object is:

```
{ "name": "idPhone",  
  "source": "contactExt",  
  "attributes": ["PhoneNumber "]}
```

This example assumes that one or more customers can share the same phone number, which could apply to members of a family for instance, and makes the identification key not unique across the calling customers. To make it unique, use the "unique" field of the identification key (see the **Identification Key** for further details).

Operation

Prerequisites: The server is in **Maintenance mode**.

 Use the **Set Server Mode** operation to switch modes.

Create Identification Key

| | | | |
|--|-------------------------------|------------------|--|
| ID | CV.WS.PROF.META.7 | | |
| Method | POST | | |
| URL | /metadata/identification-keys | | |
| Parameter | Type | Mandatory | Description |
| Body: Includes the identification key to create. This body contains the Identification Key resource. | | | |
| name | string | yes | The unique, case-insensitive name of the key. The name must start with a letter, and can be followed with letters, numbers, or underscores. The name is restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on creation of index.) |
| source | string | no | Can take on one of the following values: <ul style="list-style-type: none"> "profile" (default value): indicates that the attributes specified in parameter "attribute" belong to the core customer profile. The unique name of the given Profile Extension, used to create the Identification Key. |
| attributes | string[] | yes | The array names of one or more attributes of the extension or of the profile. |
| unique | bool | no | <ul style="list-style-type: none"> "false" by default. "true" to indicate that the given attributes of the profile or extension are unique across all customers. |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|---|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: metadata/identification-keys/ \${key-name} where: <ul style="list-style-type: none"> • \${key-name} is the name specified in the submitted identification key resource. |
| Body | {"name": "\${key-name}"} where: <ul style="list-style-type: none"> • \${key-name} is the name of the created key. |

Example

The following sample creates a key which identifies the customer based on the provided phone ID. After this key is created, the further profile creations are indexed based on the Customer Phone ID.


Operation

```
POST /metadata/identification-keys
{
  "name": "idPhone",
  "extension": "contacts",
  "attributes": ["phone_number"]
}
```

Result

```
HTTP 201 Created
{"name": "idPhone"}
```


Create Profile Extension Schema

| | |
|---|---|
|  | POST /metadata/profiles/extensions |
| | Available since: 8.0.100.00 |

Description

Creates a profile extension schema resource, which is mandatory to query and use profile extension schemas. Your application can create profile extension schemas when the UCS is in Production mode, but Genesys recommends to create extensions when the server is in maintenance mode.

- [Read more about UCS Modes for Context Services.](#)
- [Read more about Extensions.](#)

 8.0.1 does not support multi-valued extensions.

Operation

Prerequisites:

- The server is in [Maintenance mode](#).

Create Profile Extensions Schema

| | | | |
|--|-------------------------------|------------------|--|
| ID | CV.WS.PROF.META.4 | | |
| Method | POST | | |
| URL | /metadata/profiles/extensions | | |
| Parameter | Type | Mandatory | Description |
| Body: The schema to create.<ref>This is the Profile Extension Schema to create.</ref> | | | |
| name | string | yes | The unique, case-insensitive name of the extension. The name must start with a letter, and can be followed with letters, numbers, or underscores. The name is restricted to a maximum of 26 characters (Maximum RDBMS shared limit on creation of index). |

| ID | CV.WS.PROF.META.4 | | |
|------------|---|-----|---|
| type | token <ul style="list-style-type: none"> • "single-valued" • "multi-valued" | yes | Extensions come in the following forms: <ul style="list-style-type: none"> • Single-valued: a single extension record is associated with a given customer. • Multi-valued: multiple extension records can be associated with a given customer. |
| attributes | Attribute Schema[] | no | The array of <i>zero or more</i> attributes. Empty when type="classifier". |
| unique | string[] | no | Lists attributes which are unique in the scope of a given customer. The customer profile cannot include several extension records with identical values for these attributes. For example, let's consider a contact extension with the attributes "phone_num", "ext", "time_of_day". To ensure that a given customer does not have two contact extensions with the same phone number, set the following in the extension schema: <pre>unique = ["phone_num", "ext"]</pre> |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|--|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: <code>\${base_uri}/profiles/extensions/\${extension-name}</code> where <ul style="list-style-type: none"> • <code>\${extension-name}</code> is the name of the extension provided in the request's entity body. • <code>\${base_uri}</code> is the base URI of Context Services. |
| Body | <code>{ "name": "\${extension-name}" }</code> where: <ul style="list-style-type: none"> • <code>\${extension-name}</code> is the name of the created extension. |

Example


Operation

```
POST http://ucsserver.mycompany.com:8080/cms/profiles/extensions
{
  "name": "Address",
  "type": "single-valued",
  "attributes": [
    {"name": "AddressType", "type": "integer", "default": 0},
    {"name": "Address", "type": "string", "length": 256},
    {"name": "City", "type": "string", "length": 32},
    {"name": "County", "type": "string", "length": 32},
    {"name": "PostCode", "type": "string", "length": 10},
    {"name": "Country", "type": "string", "length": 32}
  ]
}
```

Result

```
201 Created
Content-Location http://ucsserver.mycompany.com:8080/cms/profiles/extensions/Address
{"name": "Address"}
```

Get Identification Keys

| | |
|---|--|
|  | GET /metadata/identification-keys |
| | Available since: 8.0.100.00 |


Description

Returns the identification keys. This operation is available in both "production" and "maintenance" modes.

[Read more about UCS Modes for Context Services.](#)

Operation

Get Identification Keys

| | | | |
|----------------------|--|------------------|---|
| ID | CV.WS.PROF.META.6 | | |
| Method | GET | | |
| URL | <ul style="list-style-type: none"> All: /metadata/identification-keys Key: /metadata/identification-keys/\${key-name} | | |
| Name | Type | Mandatory | Description |
| URI Parameter | | | |
| \${key-name} | string | no | <p>The unique, case-insensitive name of the key. The name must start with a letter, and can be followed with letters, numbers, or underscores. The name is restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on creation of index.)</p> <p> If you do not specify this parameter, all keys are returned.</p> |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|---|
| HTTP code | 200 |
| HTTP message | OK |
| Body | <ul style="list-style-type: none"> /metadata/identification-keys: Identification Key[] <ref>Length can be 0.</ref> /metadata/identification-keys/\${key-name}: Identification Key |

<references />

Example


The following request retrieves all the identification keys: **Operation**

```
GET /metadata/identification-keys
```


Result

Let's consider a customer profile which consists of the customer's name, the date of birth, and the external ID (the customer's ID in an external system such as a CRM). Further assume that a single extension, Contacts, include various attributes such as the phone_number. If you set up the Context Management Server to allow the customer identification via name+birthdate, external ID, or phone number, then the returned result is the following:

```
[{"name": "idNameBD", "attributes": [{"name", " birthdate"}]},
{"name": "idExt", "attributes": [{"external_id"}, {"unique": true}],
{"name": "idPhone", "attributes": [{"phone_number"}]}
{"name": "idExtension", "attributes": [{"ext.code"}, {"ext.date"}]}
```

 If the identification key was created off an extension, attributes that are part of the extension are prefixed with the extension name. In the previous example, "idExtension" was built on the extension "ext".

Query Business Attribute Schema

| | |
|---|--|
|  | GET /metadata/business-attributes |
| | Available since: 8.0.200.04 |

Description

Returns the schema for the list of available business attributes.

You do not need to switch to a specific server mode to attempt this operation.

Operation

| | | | |
|---------------------------|---|--|---|
| ID | CV.WS.CONFIG.BA | | |
| Method | GET | | |
| URL | <ol style="list-style-type: none"> All: /metadata/business-attributes /metadata/business-attributes/{business-attribute-name} /metadata/business-attributes?cv-attribute=\${attribute-full-name} | | |
| Parameter | Type | Mandatory | Description |
| {business-attribute-name} | string | no | The name of the business attribute, in order to retrieve its schema only. |
| {attribute-full-name} | string | yes if ?cv-attribute= is part of the URL | <p>The full name of a Context Services' business attribute in order to retrieve its schema. Examples:</p> <ul style="list-style-type: none"> Service.type, Task.disposition, State.media_type |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| HTTP code | | 200 | |
|---|---------------------|-----------|--|
| HTTP message | | OK | |
| Parameter | Type | Mandatory | Description |
| Body Business Attribute or BusinessAttribute[] | | | |
| name | string | yes | The business attribute's name. |
| dbid | string | yes | The business attribute's database ID. |
| display_name | string | yes | The business attribute's display name. |
| description | string | yes | The description. |
| map_name Available since: 8.1.000.xx | boolean | no | <ul style="list-style-type: none"> • true means that the Business Attribute Value Names is returned instead of DB IDs in the responses for GET operations. • false means that DB IDs are returned in the responses for GET operations. See also [business-attributes] Section. |
| cv_attributes | string[] | no | The associated Context Services attributes. |
| values | BusinessAttribute[] | no | Nested possible attributes values. |

Example

Operation


```
GET /metadata/business-attributes/MediaType
```

Result

```
200 OK {
{
```

```
"display_name" : "Media Type",
"values" : [ {
  "display_name" : "email",
  "description" : "Media EMail",
  "name" : "email",
  "dbid" : 1003
}, {
  "display_name" : "chat",
  "description" : "Media Chat",
  "name" : "chat",
  "dbid" : 1006
}, {
  "display_name" : "voice",
  "description" : "Media Voice",
  "name" : "voice",
  "dbid" : 1001
}, {
  "display_name" : "fax",
  "description" : "Media Fax",
  "name" : "fax",
  "dbid" : 1014
}],
"description" : "Media type identifier",
"name" : "MediaType",
"dbid" : 1001,
"map_name" : false,
"cv_attributes" : [ "Service.media_type", "State.media_type", "Task.media_type" ]
}
}
```


Query Profile Extension Schema

| | |
|---|--|
|  | GET /metadata/profiles/extensions |
| | Available since: 8.0.100.00 |


Description

Queries the schemas of the given profile extension. This operation is available in both Production or Maintenance modes (read the [Documentation:CS:Developer:Server Mode](#) page for further information about server modes.)

Operation


Prerequisites: The Profile Extension Schemas resource exist.  To create the profile extension schema, use the [Create Profile Extension Schema](#) operation.

Query Profile Extensions Schema

| | | | |
|----------------------|--|------------------|--|
| ID | CV.WS.PROF.META.3 | | |
| Method | GET | | |
| URL | <ul style="list-style-type: none"> All: /metadata/profiles/extensions /metadata/profiles/extensions/\${extension-name} | | |
| Name | Type | Mandatory | Description |
| URI Parameter | | | |
| \${extension-name} | string | no | The extension name, if a specific extension should be returned.  This name is not case-sensitive. |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|---|
| HTTP code | 200 |
| HTTP message | OK |
| Body | /metadata/profiles/extensions |
| | Returns an array of the following fields: <ul style="list-style-type: none"> name: the unique extension name. type: "single-valued" or "multi-valued".  In v8.0.1 only single-valued extensions are supported. required: true or false attributes: Attribute Schema[]. |
| | /metadata/profiles/extensions/\${extension-name} Extension Schema or Extension Schema[] |

Example

Get all extension schemas

Operation

```
GET /metadata/profiles/extensions
```

Result

```
200 OK
[
  {
    "name": "Phone",
    "type": "multi-valued",
    "attributes": [
      {"name": "PhoneType", "type": "integer", "default": 0, "mandatory": "true"},
      {"name": "prefix", "type": "string", "length": "3", "default": "555",},
      {"name": "PhoneNumber", "type": "integer", "length": 15, "mandatory": "true"},
      {"name": "description", "type": "string", "length": 32, "mandatory": "true"},
      {"name": "start_availability", "type": "datetime"},
      {"name": "end_availability", "type": "datetime", "mandatory": "false"}
    ]
  },
  {
    "name": "Address",
    "type": "single-valued",
    "attributes": [
      {"name": "AddressType", "type": "integer", "default": 0},
      {"name": "Address", "type": "string", "length": 256},
      {"name": "City", "type": "string", "length": 32},
      {"name": "County", "type": "string", "length": 32},
      {"name": "PostCode", "type": "string", "length": 10},
      {"name": "Country", "type": "string", "length": 32}
    ]
  }
]
```

```
} ]
```

Get a single extension schema


Operation

GET /metadata/profiles/extensions/Phone

Result

```
200 OK
{
  "name": "Phone",
  "type": "multi-valued",
  "attributes": [
    {"name": "PhoneType", "type": "integer", "default": 0, "mandatory": "true"},
    {"name": "prefix", "type": "string", "length": 3, "default": "555",},
    {"name": "PhoneNumber", "type": "integer", "length": 15, "mandatory": "true"},
    {"name": "description", "type": "string", "length": 32, "mandatory": "true"},
    {"name": "start_availability", "type": "datetime"},
    {"name": "end_availability", "type": "datetime", "mandatory": "false"}
  ]
}
```

Query Profile Schema

| | |
|---|--------------------------------|
|  | GET /metadata/profiles/ |
| | Available since: 8.0.100.00 |

Description

Queries the schema which describes the customer profiles. If the profile schema is not defined, this operation returns the HTTP Status Code 404 (Not Found). In that case, your application should switch to maintenance mode, see [Set Server Mode](#), and create the profile Schema by defining business contact attributes in the Configuration Manager. See [Configuration Options](#) for further details.

Operation

Prerequisites:

- The UCS<ref name="ucs">[Universal Contact Server](#)</ref> is in [production mode](#).
- The profile schema is already defined.

Query Profile Schema

| | |
|---------------|---------------------|
| ID | CV.WS.PROF.META.1 |
| Method | GET |
| URL | /metadata/profiles/ |

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

Response

| | |
|---------------------|------------------------------------|
| HTTP code | 200 |
| HTTP message | OK |
| Body | Attribute Schema[] |

Example

Operation

GET /metadata/profiles/


Result

200 OK

```
[{"encrypt":false,"name":"PIN","length":256,"type":"string"},
{"encrypt":false,"name":"Title","length":256,"type":"string"},
{"encrypt":false,"name":"CustomerSegment","length":256,"type":"string"},
{"encrypt":false,"name":"LastName","length":256,"type":"string"},
{"encrypt":false,"name":"AccountNumber","length":256,"type":"string"},
{"encrypt":false,"name":"FirstName","length":256,"type":"string"},
{"encrypt":false,"name":"PhoneNumber","length":256,"type":"string"},
{"encrypt":false,"name":"ContactId","length":256,"type":"string"},
{"encrypt":false,"name":"EmailAddress","length":256,"type":"string"},
{"encrypt":false,"name":"Title","length":256,"type":"string"},
{"encrypt":false,"name":"PIN","length":256,"type":"string"},
{"encrypt":false,"name":"ContactId","length":256,"type":"string"},
{"encrypt":false,"name":"homeaddress","length":256,"type":"string"},
{"encrypt":false,"name":"EmailAddress","length":256,"type":"string"},
{"encrypt":false,"name":"PhoneNumber","length":256,"type":"string"},
{"encrypt":false,"name":"AccountNumber","length":256,"type":"string"},
{"encrypt":false,"name":"LastName","length":256,"type":"string"},
{"encrypt":false,"name":"FirstName","length":256,"type":"string"},
{"encrypt":false,"name":"CustomerSegment","length":256,"type":"string"},
{"encrypt":false,"name":"LastCalledAgent_EmployeeID","length":256,"type":"string"},
{"encrypt":false,"name":"LastCalledAgent_TimeStamp","length":0,"type":"datetime"},
{"encrypt":false,"name":"PreferredAgent_EmployeeID","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_workitem","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_workitem","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_workitem","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_auxwork","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_auxwork","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_auxwork","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_imchat","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_imchat","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_imchat","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_outboundpreview","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_outboundpreview","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_outboundpreview","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_vmail","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_vmail","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_vmail","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_smail","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_smail","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_smail","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_cobrowsing","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_cobrowsing","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_cobrowsing","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_webform","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_webform","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_webform","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_busevent","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_busevent","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_busevent","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_voice","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_voice","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_voice","length":256,"type":"string"}]
```

```
{"encrypt":false,"name":"LCA_EmplID_appsharing","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_appsharing","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_appsharing","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_email","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_email","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_email","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_chat","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_chat","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_chat","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_any","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_any","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_any","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_fax","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_fax","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_fax","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_video","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_video","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_video","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_whiteboard","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_whiteboard","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_whiteboard","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_alert","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_alert","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_alert","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_voip","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_voip","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_voip","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_sms","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_sms","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_sms","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_EmplID_callback","length":256,"type":"string"},
{"encrypt":false,"name":"LCA_TimeStamp_callback","length":0,"type":"datetime"},
{"encrypt":false,"name":"Pref_EmplID_callback","length":256,"type":"string"}
```

Create Service Extension Schema


| | |
|---|---|
|  | POST /metadata/services/extensions |
| | Available since: 8.0.200.00 |

Description

Creates an extension schema for service resources. Your application must create a schema which defines the state extension before this extension can be used. For instance, if your application needs to fill in feedback data in some state, the first step is to create the corresponding schema which details the lists of attributes that compose this extension. See [Extension](#) for further details.

- [Read more about UCS Modes for Context Services.](#)
- [Read more about Extensions.](#)

Operation

 Genesys advises to use this operation in maintenance mode, rather than in production mode.

Create Service Extension Schema

| | | | |
|---|-------------------------------|------------------|---|
| ID | CV.WS.SRV.META.1 | | |
| Method | POST | | |
| URL | /metadata/services/extensions | | |
| Name | Type | Mandatory | Description |
| Body: The Schema of the Service Extension <ref>This body contains a complete Extension Schema resource, which defines the service extension to create.</ref> | | | |
| name | string | yes | The unique name of the extension. The name, which is not case-sensitive, must start with a letter to be followed with letters, numbers, or underscores (_). The name is restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on creation of index.) |

| ID | CV.WS.SRV.META.1 | | |
|------------|---|-----|--|
| type | token <ul style="list-style-type: none"> "single-valued" "multi-valued" | yes | Extensions come in the following forms: <ul style="list-style-type: none"> Single-valued: a single extension record is associated with a given customer. Multi-valued: multiple extension records can be associated with a given customer. |
| attributes | Attribute Schema[] | yes | The array of attribute schemas. |
| unique | string[] | no | Lists attributes (separated by commas) which are unique in the scope of a given service. The resource cannot include several extension records with identical values for these attributes. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|---|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: /metadata/services/ extensions/ \${extension-name} where: <ul style="list-style-type: none"> \${extension-name} is the name of the created extension. |
| Body | { "name": " \${extension-name} " } where: |

| HTTP code | 201 |
|-----------|---|
| | <ul style="list-style-type: none">• <code>\${extension-name}</code> is the name of the created extension. |

Example


Operation

```
POST /metadata/services/extensions
{
  "attributes":
  [
    {"name": "FeedbackType", "type": "string", "length": "10", "mandatory": "true"},
    {"name": "rating", "type": "integer", "mandatory": "true"},
    {"name": "notes", "type": "string", "length": 256, "mandatory": "false"}
  ],
  "name": "Feedback",
  "type": "single-valued"
}
```

Result

```
201 Created
{ "name": "Feedback" }
```


Query Service Extension Schema

| | |
|---|--|
|  | GET /metadata/services/extensions |
| | Available since: 8.0.200.00 |

Description

Queries an extension schema used for service resources. Your application must create a schema which defines the state extension before this extension can be used. For instance, if your application needs to fill in feedback data in some state, the first step is to create the corresponding schema which details the lists of attributes that compose this extension. See [Extension](#) for further details.

Operation

| | | | |
|----------------------|---|------------------|---|
| ID | CV.WS.SRV.META.2 | | |
| Method | GET | | |
| URL | <ul style="list-style-type: none"> all: /metadata/services/extensions /metadata/services/extensions/{extension-name} | | |
| Name | Type | Mandatory | Description |
| URI Parameter | | | |
| {extension-name} | string | no | <p>The unique name of the extension. If you do not specify the name, all the service schema are returned.</p> <p> The name is not case-sensitive.</p> |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further

details on the possible codes that this operation can return.

| Response | |
|---------------------|--|
| HTTP code | 200 |
| HTTP message | OK |
| Body | Extension Schema or Extension Schema[] |

Example

Retrieve all the service extension schemas

Operation

```
GET /metadata/services/
```

Result

```
200 OK
[
  {
    "attributes": [
      {
        "default": "no discount",
        "encrypt": false,
        "length": 100,
        "mandatory": false,
        "name": "coupon",
        "type": "string",
        "unique": false
      },
      {
        "default": 5,
        "encrypt": false,
        "length": 0,
        "mandatory": true,
        "name": "amount",
        "type": "integer",
        "unique": false
      }
    ],
    "name": "couponExtension",
    "type": "single-valued"
  },
  {
    "name": "relatedOffers",
    "attributes": [
      {
        "unique": false,
        "encrypt": false,
        "mandatory": true,
        "name": "offer_name",
        "length": 50,
        "type": "string"
      }
    ],
    "unique": false,
    "encrypt": false,
  }
]
```

```
"mandatory" : false,
"name" : "type",
"length" : 50,
"type" : "string"
}, {
  "unique" : false,
  "encrypt" : false,
  "mandatory" : false,
  "name" : "comments",
  "length" : 1024,
  "type" : "string"
} ],
"type" : "multi-valued"
}
]
```

Retrieve a single schema

Operation


Retrieve the *couponExtension* schema.

```
GET /metadata/services/couponExtension
```

Result

```
200 OK
{
  "attributes": [
    {
      "default": "no discount",
      "encrypt": false,
      "length": 100,
      "mandatory": false,
      "name": "coupon",
      "type": "string",
      "unique": false
    },
    {
      "default": 5,
      "encrypt": false,
      "length": 0,
      "mandatory": true,
      "name": "amount",
      "type": "integer",
      "unique": false
    }
  ],
  "name": "couponExtension",
  "type": "single-valued"
}
```

Create State Extension Schema

| | |
|---|---|
|  | POST /metadata/states/extensions |
| | Available since: 8.0.200.00 |

Description

Creates an extension schema for state resources. Your application must create a schema which defines the state extension before this extension can be used. For instance, if your application needs to fill in feedback data in some state, the first step is to create the corresponding schema which details the lists of attributes that compose this extension. See [Extension](#) for further details.

Operation

 Genesys advises to use this operation in maintenance mode, rather than in production mode.

Create State Extension Schema

| | | | |
|---|---|------------------|---|
| ID | CV.WS.SRV.META.5 | | |
| Method | POST | | |
| URL | /metadata/states/extensions | | |
| Name | Type | Mandatory | Description |
| Body: The Schema of the State Extension <ref>This body contains a complete Extension Schema resource, which defines the state extension to create.</ref> | | | |
| name | string | yes | The unique name of the extension. The name, which is not case-sensitive, must start with a letter to be followed with letters, numbers, or underscores (_). The name is restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on creation of index.) |
| type | token <ul style="list-style-type: none"> "single-valued" "multi-valued" | yes | Extensions come in the following forms: <ul style="list-style-type: none"> Single-valued: a |

| ID | CV.WS.SRV.META.5 | | |
|------------|---------------------------|-----|---|
| | | | <p>single extension record is associated with a given customer.</p> <ul style="list-style-type: none"> Multi-valued: multiple extension records can be associated with a given customer. |
| attributes | Attribute Schema[] | yes | The array of attribute schemas. |
| unique | string[] | no | Lists attributes (separated by commas) which are unique in the scope of the given state. The resource cannot include several extension records with identical values for these attributes. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

Response

| | |
|---------------------|--|
| HTTP code | 201 |
| HTTP message | Created |
| Header | <p>Location: /metadata/states/extensions/\${extension-name}</p> <p>where:</p> <ul style="list-style-type: none"> \${extension-name} is the name of the created extension. |
| Body | <pre>{ "name": "\${extension-name}" }</pre> <p>where:</p> <ul style="list-style-type: none"> \${extension-name} is the name of the created extension. |

Example


Operation

```
POST /metadata/states/extensions
{
  "attributes":
  [
    {"name": "FeedbackType", "type": "string", "length": "10", "mandatory": "true"},
    {"name": "rating", "type": "integer", "mandatory": "true"},
    {"name": "notes", "type": "string", "length": 256, "mandatory": "false"}
  ],
  "name": "Feedback",
  "type": "single-valued"
}
```


Result

```
201 Created
{ "name": "Feedback" }
```

Query State Extension Schema

| | |
|---|--|
|  | GET /metadata/states/extensions |
| | Available since: 8.0.200.00 |


Description

Retrieves one or more schema for state extensions.  This operation is possible in either maintenance and production mode.

Operation

Prerequisites: Universal Contact Server is in maintenance mode.

Query State Extension Schema

| | | | |
|-----------------------|--|------------------|--|
| ID | CV.WS.SRV.META.6 | | |
| Method | GET | | |
| URL | <ol style="list-style-type: none"> All: /metadata/states/extensions /metadata/states/extensions/\${extension-name} | | |
| Name | Type | Mandatory | Description |
| URL Parameters | | | |
| \${extension-name} | string | no | <p>The unique name of the extension, to retrieve a single extension schema. If you do not specify this name, all the state extension schemas are returned.</p> <p> Note: The name is not case-sensitive.</p> |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|--------------|--|
| HTTP code | 200 |
| HTTP message | OK |
| Body | Extension Schema or Extension Schema[] |

Examples

Several results

Operation

```
GET /metadata/states/extensions
```

Result

```
200 OK
[
  {
    "attributes": [
      {"name": "FeedbackType", "type": "string", "length": "10", "mandatory": "true"},
      {"name": "rating", "type": "integer", "mandatory": "true"},
      {"name": "notes", "type": "string", "length": "256", "mandatory": "false"}
    ],
    "name": "Feedback",
    "type": "single-valued",
  },
  {
    "attributes": [
      {"name": "priority", "type": "integer", "mandatory": "true"},
      {"name": "customerNotes", "type": "string", "length": "256", "mandatory": "false"}
    ],
    "name": "PriorityFlag",
    "type": "single-valued",
  }
]
```

Single result


Operation

```
GET /metadata/states/extensions/feedback
```

Result

```
200 OK
{
  "attributes": [
    {"name": "FeedbackType", "type": "string", "length": "10", "mandatory": "true"},
    {"name": "rating", "type": "integer", "mandatory": "true"},
    {"name": "notes", "type": "string", "length": 256, "mandatory": "false"}
  ],
  "name": "Feedback",
  "type": "single-valued",
}
```

Create Task Extension Schema

| | |
|---|--|
|  | POST /metadata/tasks/extensions |
| | Available since: 8.0.200.00 |

Description

Creates an extension schema for task resources. Your application must create a schema which defines the task extension before this extension can be used. For instance, if your application needs to fill in feedback data in some task, the first step is to create the corresponding schema which details the lists of attributes that compose the new extension. Then, once the schema is created, your application can use the extension records in task resources which fulfill the extension schema. See [Extension](#) for further details. Your application can create the extension schema when the UCS is in Production mode, but Genesys recommends to create extensions when the server is in maintenance mode.

- [Read more about UCS Modes for Context Services.](#)
- [Read more about Extensions.](#)

Operation

Prerequisites: [Universal Contact Server is in maintenance mode.](#)

| | | | |
|--|----------------------------|------------------|---|
| ID | CV.WS.SRV.META.7 | | |
| Method | POST | | |
| URL | /metadata/tasks/extensions | | |
| Name | Type | Mandatory | Description |
| Body: The Schema of the Task Extension <ref>This body contains a complete Extension Schema resource, which defines the content of the task extension.</ref> | | | |
| name | string | yes | The unique name of the extension. The name, which is not case-sensitive, must start with a letter to be followed with letters, numbers, or underscores (_). The name is restricted to a maximum of 26 characters. (Maximum RDBMS shared limit on |

| ID | CV.WS.SRV.META.7 | | |
|------------|---|-----|--|
| | | | creation of index.) |
| type | token <ul style="list-style-type: none"> "single-valued" "multi-valued" | yes | Extensions come in the following forms: <ul style="list-style-type: none"> Single-valued: a single extension record is associated with a given customer. Multi-valued: multiple extension records can be associated with a given customer. |
| attributes | Attribute Schema[] | yes | The array of attributes that compose the extension. |
| unique | string[] | no | Lists attributes (separated by commas) which are unique in the scope of a given task. The resource cannot include several extension records with identical values for these attributes. |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|---|
| HTTP code | 201 |
| HTTP message | Created |
| Header | Location: /metadata/tasks/extensions/ {extension-name} where: <ul style="list-style-type: none"> {extension-name} is the name of the created extension. |
| Body | { "name": " {extension-name} " } |

| | |
|------------------|--|
| HTTP code | 201 |
| | where: <ul style="list-style-type: none">• <code>\${extension-name}</code> is the name of the created extension. |

Example

Operation


POST /metadata/tasks/extensions

```
[
  {
    "attributes": [
      {"name": "url", "type": "string", "length": "1024", "mandatory": "true"},
      {"name": "question1", "type": "integer", "mandatory": "true"},
      {"name": "question2", "type": "boolean"},
      {"name": "question3", "type": "string", "length": "256"}
    ],
    "name": "Survey",
    "type": "single-valued"
  }
]
```

Result

```
201 Created
{ "name": "Feedback" }
```


Query Task Extension Schema

| | |
|---|---------------------------------------|
|  | GET /metadata/tasks/extensions |
| | Available since: 8.0.200.00 |

Description

Retrieves one or more schema of task extensions. This operation is possible in either maintenance and production mode.

Operation

| | | | |
|---------------------------|---|------------------|---|
| ID | CV.WS.SRV.META.8 | | |
| Method | GET | | |
| URL | <ol style="list-style-type: none"> All: /metadata/tasks/extensions /metadata/tasks/extensions/\${extension-name} | | |
| Name | Type | Mandatory | Description |
| URL Parameters | | | |
| \${extension-name} | string | no | <p>The unique name of the extension, to retrieve a single extension schema. If you do not specify this name, all the task extension schemas are returned.</p> <p> Note: The name is not case-sensitive.</p> |

<references />

Response

The Context Management Service API answers with HTTP codes for every request. The following table shows the correct response for a successful request. See [HTTP Response Codes and Errors](#) for further details on the possible codes that this operation can return.

| Response | |
|---------------------|--|
| HTTP code | 200 |
| HTTP message | OK |
| Body | Extension Schema or Extension Schema[] |

Examples

Several results

Operation

GET /metadata/tasks/extensions

Result

```
200 OK
[{
  "attributes": [
    {"name": "FeedbackType", "type": "string", "length": "10", "mandatory": "true"},
    {"name": "rating", "type": "integer", "mandatory": "true"},
    {"name": "notes", "type": "string", "length": 256, "mandatory": "false"}
  ],
  "name": "Feedback",
  "type": "single-valued",
},
{
  "attributes": [
    {"name": "priority", "type": "integer", "mandatory": "true"},
    {"name": "customerNotes", "type": "string", "length": 256, "mandatory": "false"}
  ],
  "name": "PriorityFlag",
  "type": "single-valued",
}
]
```

Single result

Operation

GET /metadata/tasks/extensions/feedback

Result

```
200 OK
{
  "attributes": [
    {"name": "FeedbackType", "type": "string", "length": "10", "mandatory": "true"},
    {"name": "rating", "type": "integer", "mandatory": "true"},
    {"name": "notes", "type": "string", "length": 256, "mandatory": "false"}
  ],
  "name": "Feedback",
```

```
"type": "single-valued",  
}
```

Profile Attribute Schema



Purpose: Describes a Profile Attribute schema.

Description

Describes a Profile Attribute. Each attribute field of the profile corresponds to a recorded schema which details the attribute name, type, and content. 💡 In 8.0.1 release, the configuration of a new attribute schema is performed in the Configuration Manager. Select in "Tenant" the item *specific configuration*, and under "Business Attributes" 'Contact Attributes'. Then, create a new Business Attribute Value. By default the new Attribute is of type string. To assign another type to the schema, in Annex, create a section "settings", and a key "type" with value "string" or "date".

Predefined Attributes Schema

Default Attributes visible in the Configuration Server are the following:

- First Name (string)
- Last Name (string)
- Phone Number (string)
- E-mail Address (string)
- Title (string)

Default 'internal' Attributes (not visible in the Configuration Server) are the following:

- LastCalledAgent_EmployeID (string)
- LastCalledAgent_TimeStamp (date)
- PreferredAgent_EmployeID (string)

Additional attributes are available for each active media defined in the Business Attribute "Media Type" of the Configuration Manager:

- LCA_EmplID_<media> (string)
- LCA_TimeStamp_<media> (date)
- Pref_EmplID_<media> (string)

Attributes of type date/time are formatted in UTC ISO 8601: "yyyy-MM-dd'T'HH:mm:ss.SSS'Z'"
Example: "1981-03-17T02:00:00.000Z"

Resource

| Field | Type | Mandatory | Description |
|-------|--------|-----------|---|
| name | string | yes | <p>The name is unique for each attribute within the given profile.</p> <ul style="list-style-type: none"> Starts with a letter, and can be followed with letters, numbers, or underscores. Is restricted to a maximum of 30 characters (Maximum RDBMS<ref name="RDBMS">http://en.wikipedia.org/wiki/Relational_database_management_shared limit) <p> In profile attribute schemas, the name is not case-sensitive.</p> |
| type | token | yes | <p>The attribute type, which can be one of the following types:</p> <ul style="list-style-type: none"> Boolean String Integer Long Double Date DateTime Currency <p>Notes:</p> <ol style="list-style-type: none"> The constraints on these types (the minimum and maximum values supported for the integer type) vary with the RDBMS<ref name="RDBMS" |

| Field | Type | Mandatory | Description |
|-----------|-------------------|-----------|---|
| | | | <p><code></ref></code></p> <p>2. Customer profiles are built on top of UCS' Contact Attributes, and support only String and DateTime attribute types. However, all attribute types are supported for profile extensions.</p> |
| default | numeric or string | no | <p>Provides a default value for the attribute. For numeric attributes, you do not need quotation marks. Quotation marks are for string, date, and datetime attributes. By default, the date/time format is ISO 8601 UTC Wikipedia ISO 8601: [YYYY] - [MM] - [DD]T[HH]:[mm]:[ss].[SSS]Z.</p> |
| length | integer | no | <p>Reserved to attributes of type String. Defines the maximum number of characters for the string.</p> <ul style="list-style-type: none"> • Default length is 256; • Maximum length is 4000. |
| encrypt | Boolean | no | <ul style="list-style-type: none"> • <code>false</code> by default. • <code>true</code> if the server must encrypt the attribute value before saving it to the UCS database. |
| mandatory | Boolean | no | <ul style="list-style-type: none"> • <code>false</code> by default; • <code>true</code> if the attribute is mandatory when inserting a new Profile Extension |

| Field | Type | Mandatory | Description |
|-------|------|-----------|-------------|
| | | | record. |

<references />

Related Operation

- [Query Profile Schema](#)