






Integration Guide

This guide is for system architects and developers building integrated solutions (includes [HTTP Business API](#), [HTTP Single Sign-On API](#) and more).



Authentication solutions

-  [HTTP Single Sign-On API](#) — This API lets you integrate the Verba app into your user portals/intranets/extranets.
-  [Identity provider - Integrated Windows Authentication](#) — The web application can authenticate users using Microsoft Windows domain authentication information.



Business process integration

-  [Desktop Agent HTTP API](#) — This API allows applications to integrate with the Verba Desktop Recorder to control screen capturing, add time markers and more.
-  [Direct URL Access](#) — Direct URL Access provides allows external web apps to directly include features of the Verba Web Application.
-  [HTTP Business API](#) — This API lets you improve business processes by integrating the recording system with your applications.





Service provider tools

-  [Provisioning API](#) — This web services API allows service providers to automatically create users and tenants.
-  [Branding and customization](#) — The Verba Web Application is designed to allow changes to the look and behavior.

Low-level integration options

-  [Low-level XML Recorder API](#) — The Verba Recording System provides a low level XML API directly to the recording engines.
-  [Direct Database Access to CDRs](#) — Call detail records (CDRs) can be accessed directly in the SQL Server database.

Integrations with third party solutions

-  [Import API](#) — The Import API allows ingesting 3rd party or Verba data into the system.
-  [Oracle Siebel Integration](#) — Using this integration, you can configure one click access to Verba recordings directly from Oracle Siebel
-  [Salesforce integration](#) — Using this integration, you can configure one click access to Verba recordings directly from Salesforce.
-  [Microsoft Dynamics Integration](#) — Using this integration, you can configure one click access to Verba recordings directly from Microsoft Dynamics.

REST API

Legal Hold API

The Legal Hold API allows creating and removing litigation holds in the system programmatically. The legal hold functionality is also available via the standard user interface of the system. Legal holds created with the API are available through the API and vice versa. In order to use the API, the application user requires the same permissions as the users for the user interface. The API works slightly differently from the user interface:

- The deletion/removal of legal holds does not require approval through the API.
- By creating a new legal hold via the API, the application can automatically apply to both historical and future conversations. On the user interface, a separate labeling or case rule has to be defined.
- Only the API allows enabling or disabling the system-wide legal hold configuration setting.

HTTP Business API

Overview

The primary goal of the interface is to enable the integration of external applications with the recording system on business data level. The API provides access to features like attaching metadata to calls, keeping on-demand calls, getting call information, etc.

This API lets you improve business processes by integrating the recording system with your applications.

General guidelines

HTTP GET, POST

The functions of the API are available as simple HTTP GET and POST requests. For implementations, where HTTP POST is not available, you can use the HTTP GET method. The maximum length of the HTTP GET request is usually maximised either by the client or the server. The client should assume that the maximum length of a GET request is 4000 characters, although, some implementations may support longer URLs too.

URL encoding

All HTTP requests have to be URL encoded and all spaces and special characters has to be escaped and substituted with its URL encoded equivalent. For further information, see http://www.w3schools.com/TAGS/ref_urlencode.asp.

Response types

The API provides multiple types of responses, depending on the parameter defined in the request. This feature allows to use the API with applications with different capabilities:

- XML: for applications with XML parsing capabilities
- HTML: client-side, browser based applications, where only a HTTP URL can be called and HTML formatted response can be displayed
- TEXT: for applications with very limited capabilities

The available response types are depending on the API function, some of the response types are not applicable for certain API functions.












Security

The API provides the following mechanism to ensure that the communications between the external application and the recording system is secure:




- Authentication
- Option to limit the access to the API from preset network addresses
- Option to use SSL/HTTPS






API calls

Metadata Calls

-  [Add Marker](#) — Adds segment markers to any recorded call.
-  [Attach Metadata](#) — Adds metadata to any recorded call.
-  [Delete Call](#) — Deletes a conversation or marks an ongoing conversation for deletion.
-  [Get Call ID](#) — Retrieves the unique identifier of the given call.
-  [Get Call Information](#) — Retrieves all metadata available for a call.
-  [Get Call URL](#) — Retrieves the full HTTP URL pointing to the given call.
-  [Get Markers](#) — Get the list of segment markers for any recorded call.
-  [Get Voice Quality](#) — Retrieves Voice Quality Check results for one or more Call Identifiers (ccdr_id).
-  [Keep Call](#) — Keeps the on-demand call.
-  [Mute Recording](#) — Mutes or Unmutes Recording (pause / resume).
-  [Search Calls](#) — Retrieves all CDRs that match a search filter.

Media calls

-  [Get Extensions](#) — Retrieves extension data.
-  [Get Media](#) — Retrieves the media for the given call.
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- [Get Media Encoded](#) — Retrieves encoded media for the given call.

- [Get Media Live](#) — Retrieves the live media for a given ongoing call.

- [Get Media Segment](#) — Retrieves the audio segment for the given call.

- [Get Thumbnail](#) — Retrieves a frame from a selected video call.

- [Get Waveform](#) — Retrieves the waveform for the given call.

- [Put Media](#) — Uploads a media file with metadata.

Topics

- [API authentication](#)
- [Metadata designer](#)
- [API calls](#)
- [API error messages](#)

API authentication

In order to access the services of the API, external applications have to authenticate themselves. As a part of the authentication process, the system only accepts requests which contain a pre-generated API key. The system supports an unlimited number of API keys, which can be issued through the web interface.

API key administration

An API key identifies an application that is intended to use the Verba Business API. The API key administration is available on the web-based user interface of the system. In order to access the configuration, please navigate to **Administration / API Keys**.

Each application should have its own API key so that it can be configured separately.

API key parameters

You can configure the API keys on the web interface of the Verba Recording System if you have the API Keys permission.

Field	Description	Requirements
API Key	Random generated, unique GUID.	-
Name	Name of the API key.	Required field Minimum length: 3 Maximum length: 128
Network Restrictions	For each API key, the system can restrict access to the API for a certain set of network addresses. This optional parameter contains a list of IP addresses and/or hostnames.	-

User account-based authentication

For better security, the external application has to provide user credentials in order to access the API.

The **security tokens' lifetime** is 1 hour. The **timezone of the results** will match the user time zone if user authentication is required for the API key. Unauthenticated API calls will return times in GMT.

Request token

The external application sends an authentication request via HTTP GET or POST and provides the login and password in a Basic Authorization header:

```
GET /verba/api?action=RequestToken&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8 HTTP/1.1
Connection: keep-alive
Cache-Control: max-age=0
Authorization: Basic bXlhcGl1c2VyOnBhJCR3b3Jk
```

The Authorization header starts with the "Basic" string, followed by a space character, then the Base64 encoded form of the login and password separated by a colon, in the above example the "myapiuser:pa\$\$word" was sent in the Base64 encoded format.

Alternatively, the login and password can be sent in the userName and password HTTP parameters too. It is important that the MD5 format is no longer supported, the password has to be sent in clear text format, so this type of authentication is highly not recommended for GET requests.

Detailed description of the API request elements:

API request element	Description	Requirements
/verba/api	Verba Business API HTTP URL.	Mandatory
action=RequestToken	Name of the HTTP API request.	Mandatory
apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
Authorization: Basic bXlhcGl1c2VyOnBhJCR3b3Jk	The Basic Authorization header with the Base64-encoded login:password string. The provided user has to have System Administrator and System Supervisor roles.	Mandatory
userName=myapiuser	If Basic Authorization is not supported by the client, then the Login ID of the user.	Mandatory
password=pa%24%24word	If Basic Authorization is not supported by the client, then the Password of the user (the "pa\$\$word" string in URL-Encoded format)	Mandatory

Response

On success, the API responds with the followings:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="RequestToken" token="09835e02-6c10-11e0-bb22-ba324924019b"/>
</VerbaApi>
```

Metadata designer

Overview

You can define what extra business specific call information should be stored for each phone call. Custom Meta Data Designer is a tool available in the Verba Web Application.

A typical application of metadata is to add customer IDs, subscription or contact IDs to your recorded calls.

Configuring Metadata Templates

To access the designer interface, navigate to **System / Metadata Templates**.

In this tool, you can define an unlimited number of custom metadata fields accessible for the users and external applications. This facility provides a flexible template based framework to easily enrich metadata for each recorded interaction. A set of custom fields is called a metadata template.

All fields that you want to use from your [Attach Metadata](#) API calls should be defined in this tool.












Each template consists of one or more custom metadata field definitions.

For more information, see [Metadata template fields](#).









API calls

The following HTTP Business API calls are available:

Metadata Calls

-  [Add Marker](#) — Adds segment markers to any recorded call.
-  [Attach Metadata](#) — Adds metadata to any recorded call.
-  [Delete Call](#) — Deletes a conversation or marks an ongoing conversation for deletion.
-  [Get Call ID](#) — Retrieves the unique identifier of the given call.
-  [Get Call Information](#) — Retrieves all metadata available for a call.
-  [Get Call URL](#) — Retrieves the full HTTP URL pointing to the given call.
-  [Get Markers](#) — Get the list of segment markers for any recorded call.
-  [Get Voice Quality](#) — Retrieves Voice Quality Check results for one or more Call Identifiers (ccdr_id).
-  [Keep Call](#) — Keeps the on-demand call.
-  [Mute Recording](#) — Mutes or Unmutes Recording (pause / resume).
-  [Search Calls](#) — Retrieves all CDRs that match a search filter.

Media Calls

-  [Get Extensions](#) — Retrieves extension data.
-  [Get Media](#) — Retrieves the media for the given call.
-  [Get Media Encoded](#) — Retrieves encoded media for the given call.
-  [Get Media Live](#) — Retrieves the live media for a given ongoing call.
-  [Get Media Segment](#) — Retrieves the audio segment for the given call.
-  [Get Thumbnail](#) — Retrieves a frame from a selected video call.
-  [Get Waveform](#) — Retrieves the waveform for the given call.
-  [Put Media](#) — Uploads a media file with metadata.

Get Call ID

Overview

Retrieves the unique identifier of the given call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Call ID:

```
http://<host>/verba/api?action=GetCallID
```

Get Call ID HTTP GET sample:

```
http://192.168.1.104/verba/api?action=GetCallID&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=TEXT&extension=8856&status=last
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetCallID	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=HTML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XML, designed for applicationsHTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser.TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.
extension	extension=8856	Defines the phone number that is a participant of the call. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	

status	status=last	<p>Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply:</p> <ul style="list-style-type: none"> ▪ ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party ▪ next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last - the API will look for the last finished call, where the number is either the calling party or the called party ▪ ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	
platformCallID	platformCallID=71627389	The value of the Platform Call ID field.	
nativeID	nativeID=TRS26140192	The value of the Technical Call Identifier field.	
type	type>manualRecord	Flag to query controlled recording call.	

Response

XML based response sample on success

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="GetCallID"/>
<CallID>a8343631-9f35-4a3a-83f0-9e81592339fb</CallID>
</VerbaApi>
```

XML based response sample on error

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="2" type="GetCallID">
<ErrorMessage>Unable to retrieve the call identifier, because the call cannot be found.</ErrorMessage>
</Response>
</VerbaApi>
```

HTML based response sample

```
<html>
<body>
```

```
<p>a8343631-9f35-4a3a-83f0-9e81592339fb</p>
```

```
</body>
```

```
</html>
```

TEXT based response sample

```
a8343631-9f35-4a3a-83f0-9e81592339fb
```

Get Call Information

Overview

Retrieves all metadata available for a call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Call Information:

```
http://<host>/verba/api?action=GetCallInformation
```

Get Call Information HTTP GET sample:

```
http://192.168.1.104/verba/api?action=GetCallInformation&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=XML&extension=8856&status=last
```

Detailed description of the API request elements:

URL parameter	Parameter example	Description	Requirements
action	action=GetCallInformation	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=XML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XML, designed for applicationsHTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser.TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.
callID	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Either callID , platformCallID , nativeID , meetingID or extension parameter is mandatory
platformCallID	platformCallID=71627389	The value of the Platform Call ID field.	
nativeID	nativeID=TRS26140192	The value of the Technical Call Identifier field.	
meetingID	meetingID=WHBFM6DD	The Lync Meeting ID.	

extension	extension=8856	Defines the phone number that is a participant of the call. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	
status	status=last	<p>Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply:</p> <ul style="list-style-type: none"> ▪ ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party ▪ next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last - the API will look for the last finished call, where the number is either the calling party or the called party ▪ ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the extension parameter is specified
returnInvitation	returnInvitation=1	If 1, then the Lync Invitation details acquired by Verba from the technical account will be returned in the response.	
returnSharedItems	returnSharedItems=1	If 1, then the corresponding shared items will be returned in the response.	
returnMetadata	returnMetadata=1	If 1, then the corresponding custom metadata will be returned in the response.	
returnIM	returnIM=1	If 1, then the corresponding IM messages will be returned in the response.	
returnTranscriptDB	returnTranscriptDB=1	If 1, then the corresponding transcript will be returned in the response as stored in the database (clear text).	
returnTranscriptFile	returnTranscriptFile=1	If 1, then the corresponding transcript will be returned in the response as stored in the transcript file (special transcript format) in Base64 format.	
returnVoiceQuality	returnVoiceQuality=1	If 1, then the corresponding voice quality check results will be returned in the response.	

Response

XML based response sample on success:

```
<?xml version="1.0" encoding="UTF-8"?>
<verbacdr state="1"> <!-- Finished Call State -->
  <ccdr_id>54bc7c43-561f-11e0-b752-005056c00008</ccdr_id>
  <native_id>25579707</native_id>
  <location>PETER-PC</location>
  <source_ip>192.168.1.210</source_ip>
  <source_caller_id>1000</source_caller_id>
  <source_name>John Smith</source_name>
  <destination_ip>192.168.1.67</destination_ip>
  <destination_caller_id>9999</destination_caller_id>
  <destination_name>Earl Jones</destination_name>
```

```
<start_time>2011-03-24 14:02:19.673</start_time>
<end_time>2011-03-24 14:02:24.325</end_time>
<audio_codec_id>4</audio_codec_id> <!-- G.711U 64 kbps -->
<direction_id>0</direction_id> <!-- Internal -->
<cause_id>0</cause_id> <!-- Normal -->
<signaling_id>2</signaling_id> <!-- SIP -->
<recorder_service_id>1</recorder_service_id>
<ondemand>>false</ondemand>
<conference>>false</conference>
<platform_call_id>WHBFM6DD</platform_call_id>
<manual>0</manual>
<do_not_delete>0</do_not_delete>
<secondary>>false</secondary>
<recorded_party>>false</recorded_party>
<meeting_id>WHBFM6DD</meeting_id>
<invitation_organizer_cn>boss@company.com</invitation_organizer_cn>
<invitation_organizer_email>boss@company.com</invitation_organizer_email>
<shared_item>
  <id>C853EE44-3C96-4DED-9086-E1D6D313BA55</id>
  <publisher>boss@company.com</publisher>
  <title>Lync Meeting WHBFM6DD</title>
  <publicity_level>public_to_everybody</publicity_level>
  <accessible_by_url>>true</accessible_by_url>
  <allow_download>>false</allow_download>
</shared_item>
</verbacdr>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="2" type="GetCallInformation">
<ErrorMessage>Unable to retrieve call information, because the call cannot be found.</ErrorMessage>
</Response>
</VerbaApi>
```

Get Call URL

Overview

Retrieves the full HTTP URL pointing to the given call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Call URL:

```
http://<host>/verba/api?action=GetCallURL
```

Get call URL HTTP GET sample:

```
http://192.168.1.104/verba/api?action=GetCallURL&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=TEXT&extension=8856&status=last
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetCallURL	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=HTML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XML, designed for applicationsHTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser.TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.
callID	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Either the callID or either the number parameter is mandatory

extension	extension=8856	Defines the phone number that is a participant of the call. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	Either the callID or either the number parameter is mandatory
status	status=last	<p>Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply:</p> <ul style="list-style-type: none"> ▪ ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party ▪ next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last - the API will look for the last finished call, where the number is either the calling party or the called party ▪ ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the number parameter is specified

Response

XML based response sample on success

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="GetCallURL"/>
<Url>http://192.168.1.104/verba/gwtCallDetail.do?ccdrId=6E6F3934-73E3-49E3-8C16-344DA248DE44</Url>
</VerbaApi>
```

XML based response sample on error

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="2" type="GetCallURL">
<ErrorMessage>Unable to retrieve the URL, because the call cannot be found.</ErrorMessage>
</Response>
</VerbaApi>
```

HTML based response sample

```
<html>
```

```
<body>
```

```
<a href="http://192.168.1.104/verba/gwtCallDetail.do?ccdrId=6E6F3934-73E3-49E3-8C16-344DA248DE44">http://demo.verba.com  
/verba/gwtCallDetail.do?ccdrId=6E6F3934-73E3-49E3-8C16-344DA248DE44</a>
```

```
</body>
```

```
</html>
```

TEXT based response sample

```
http://192.168.1.104/verba/gwtCallDetail.do?ccdrId=6E6F3934-73E3-49E3-8C16-344DA248DE44
```

Keep Call

Overview

Keeps the on-demand call.

The function is available as a HTTP GET or HTTP POST request.

Request

Keep Call:

```
http://<host>/verba/api?action=KeepCall
```

Keep Call HTTP GET sample:

```
http://192.168.1.104/verba/api?action=KeepCall&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=XML&extension=8856&status=ongoing
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=KeepCall	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=XML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XML, designed for applicationsHTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser.TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.
callID	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Either the callID or either the number parameter is mandatory

extension	extension=8856	Defines the phone number that is a participant of the call. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	Either the callID or either the number parameter is mandatory
status	status=ongoing	Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply: <ul style="list-style-type: none"> ■ ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party ■ next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ■ last - the API will look for the last finished call, where the number is either the calling party or the called party ■ ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ■ last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the number parameter is specified
type	type>manualRecord	Instead of marking an on-demand call for recording, the following other types of data can be modified: <ul style="list-style-type: none"> • manualRecord - start recording of a Controlled extension • do_not_delete - set the Protected flag 	
unmark	unmark=1	If unmark=1 is set, the system does quite the opposite of the normal operation: <ul style="list-style-type: none"> • if type>manualRecord - stop recording of a Controlled extension • if type=do_not_delete - remove the Protected flag 	

Response

XML based response sample on success

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="KeepCall"/>
</VerbaApi>
```

XML based response sample on error

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="2" type="KeepCall">
<ErrorMessage>Unable to keep the call, because the call cannot be found.</ErrorMessage>
</Response>
</VerbaApi>
```

HTML based response sample

```
<html>
<body>
<p>The call has been marked for recording.</p>
</body>
</html>
```

TEXT based response sample

The call has been marked for recording.

Attach Metadata

Overview

Adds metadata to any recorded call.

Additional metadata can include various variables received from a contact center like outbound call campaign identifier, service queue identifier, etc. This API function can be also used to insert various data from a CRM or ERP solutions including customer identifier, account name, ticket identifier, etc. Having these extra metadata fields, users can retrieve recording in a very easy and quick way by simply using these additional data fields.

The Verba API allows to define unlimited number of custom fields using the Custom Meta Data Designer, which is available in the Verba Web Application. After defining the custom fields, 3rd party applications can use the API and insert information referring to the field definitions.

The function is available as a HTTP GET or HTTP POST request.

Request

Attach Metadata:

```
http://<host>/verba/api?action=AttachMetaData
```

Attach Metadata HTTP GET sample:

```
http://192.168.1.104/verba/api?action=AttachMetaData&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=HTML&callID=a8343631-9f35-4a3a-83f0-9e81592339fb&customVariable1=ACME&customVariable2=John%20Smith
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=AttachMetaData	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.

responseType	responseType=HTML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none"> XML: the response is formatted and structured in XML, designed for applications HTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser. TEXT: simple clear text based response 	If the parameter is missing, it defaults to XML.
callID	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call, which the metadata is attached to.	Either the callID or either the number parameter is mandatory
extension	extension=8856	Defines the phone number that is a participant of the call which the metadata is attached to. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	Either the callID or either the number parameter is mandatory
status	status=ongoing,next	Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply: <ul style="list-style-type: none"> ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party last - the API will look for the last finished call, where the number is either the calling party or the called party ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the number parameter is specified
customVariable1	customVariable1=ACME	Key-value pair defining the identifier of the custom field variable and the data itself. The custom variable field identifier has to match exactly the ID defined in the Custom Meta Data Designer.	-
customVariable2	customVariable2=John%20Smith	Key-value pair defining the identifier of the custom field variable and the data itself.	-
Additional reserved parameters for appending Conference Participants only from Verba 8.2			
meetingID	meetingID=T0MZJ99J	Defines the conference ID, which will define every conference leg in Verba. This parameter can be used for simple metadata attaching.	-
participants	participants=3564, customer@company.com	List of the participating phone numbers or SIP URIs	-
startTimes	startTimes=2015-02-22 23:00:00.000,2015-02-22 23:10:00.000	List of the participants' join time. The sequence of join times has to match with the participants parameter sequence to insert the proper join time of the participant. Format is either "YYYY-MM-DD hh:mm:ss.SSS ", "YYYY-MM-DD hh:mm:ss " or "YYYY-MM-DD hh:mm"	-
endTimes	endTimes=2015-02-22 23:15:00.000,2015-02-22 23:16:00.000	List of the participants' leave time. The sequence of end times has to match with the participants parameter sequence to insert the proper leave time of the participant. Format is either "YYYY-MM-DD hh:mm:ss.SSS ", "YYYY-MM-DD hh:mm:ss " or "YYYY-MM-DD hh:mm"	-

Response

XML based response sample on success:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="AttachMetaData"/>
</VerbaApi>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="2" type="AttachMetaData">
<ErrorMessage>Unable to attach the metadata to the call, because the call cannot be found.</ErrorMessage>
</Response>
</VerbaApi>
```

HTML based response sample:

```
<html>
<body>
<p>The system successfully attached the metadata to the defined call.</p>
</body>
</html>
```

TEXT based response sample:

The system successfully attached the metadata to the defined call.

Add Marker

Overview

Adds segment markers to any recorded call.

A segment of the recorded media can be marked automatically by your application. This way users can easily identify important segments of a recording in the web-based player of the system. This API allows to define multiple marker segments for a call.

A typical application is to mark segments where e.g. a voice contract was made over telephone.

You can use the function to start and end segments during the call, or define segment periods during or after the call.

The function is available as a HTTP GET or HTTP POST request.

Request

Add Marker:

```
http://<host>/verba/api?action=AddMarker
```

Add Marker HTTP GET sample:

```
http://192.168.1.104/verba/api?action=AddMarker&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=HTML&callID=a8343631-9f35-4a3a-83f0-9e81592339fb&mmode=start&mname=Agreement
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=AddMarker	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.

responseType	responseType=HTML	<p>Defines the format of the response of the API request. The following valid values apply:</p> <ul style="list-style-type: none"> XML: the response is formatted and structured in XML, designed for applications HTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser. TEXT: simple clear text based response 	If the parameter is missing, it defaults to XML.
ccdr_id	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	The ccdr_id and the extension parameters are mandatory
extension	extension=8856	Defines the phone number that is a participant of the call which the marker is added. The API will look for a call with the status (see the status field below), where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	The ccdr_id and the extension parameters are mandatory
status	status=ongoing,next	<p>Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply:</p> <ul style="list-style-type: none"> ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party last - the API will look for the last finished call, where the number is either the calling party or the called party ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the number parameter is specified
mmode	mmode=start	<p>Marker mode can be one of the followings:</p> <ul style="list-style-type: none"> start - this mode sets a new marker at the current time position in the call end - this mode ends a marker at the current time position in the call segment - this mode adds a marker with a defined start and end position <p>Markers is defined by their name for segment start and end calls, therefore marker names should be different if multiple markers are added.</p> <p>Markers should not overlap.</p>	<p>Mandatory</p> <p>Start and End more requires that status is ongoing.</p>
mname	mname=Agreement	Key-value pair defining the identifier of the custom field variable and the data itself.	Mandatory
mstart	mstart=15	This parameter defines the end of a marker segment in seconds. If mmode is not segment, this parameter is not used.	Mandatory if the mmode is segment
mend	mend=30	This parameter defines the end of a marker segment in seconds. If mmode is not segment, this parameter is not used.	Mandatory if the mmode is segment

Response

XML based response sample on success:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="AddMarker"/>
</VerbaApi>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="2" type="AddMarker">
<ErrorMessage>Unable to add marker to the call, because the call cannot be found.</ErrorMessage>
</Response>
</VerbaApi>
```

HTML based response sample:

```
<html>
<body>
<p>The system successfully added the marker to the defined call.</p>
</body>
</html>
```

TEXT based response sample:

The system successfully added the marker to the defined call.

Get Markers

Overview

Get the list of segment markers for any recorded call.

Segment of recordings can be marked in the system through the web interface and the [Add Marker](#) API call. This way users can easily identify important segments of a recording in the web-based player of the system. A typical application is to mark segments where e.g. a voice contract was made over telephone.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Markers:

```
http://<host>/verba/api?action=GetMarkers
```

Get Markers HTTP GET sample:

```
http://192.168.1.104/verba/api?action=GetMarkers&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=XML&callID=a8343631-9f35-4a3a-83f0-9e81592339fb
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetMarkers	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=HTML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XML, designed for applicationsHTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser.TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.

cid	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Mandatory
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Response

XML based response sample on success:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
  <Response code="0" type="GetMarkers">
    <verbamarker>
      <name>Sale</name>
      <start>16700</start>
      <end>65400</end>
    </verbamarker>
    <verbamarker>
      <name>Price</name>
      <start>101000</start>
      <end>145000</end>
    </verbamarker>
  </Response>
</VerbaApi>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
  <Response code="2" type="GetMarkers">
    <ErrorMessage>Call cannot be found.</ErrorMessage>
  </Response>
</VerbaApi>
```

HTML based response sample:

```
<html>
<body>
<table>
<tr>
<td>Name</td>
<td>Start (ms)</td>
<td>End (ms)</td>
</tr>
<tr>
```

```
<td>Sale</td>
<td>16700</td>
<td>65400</td>
</tr>
<tr>
<td>Price</td>
<td>101000</td>
<td>145000</td>
</tr>
</table>
</body>
</html>
```

TEXT based response sample:

```
Markers
Name: Sale, Start: 16700 ms, End: 65400 ms
Name: Price, Start: 10100 ms, End: 145000 ms
```

Get Media

Overview

Retrieves the media for the given call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Media:

```
http://<host>/verba/api?action=GetMedia
```

Get Media HTTP GET sample:

```
http://192.168.1.104/verba/api?action=GetMedia&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&extension=8856&status=last
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetMedia	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
ccdr_id	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Either the ccdr_id or either the extension parameter is mandatory
extension	extension=8856	Defines the phone number that is a participant of the call. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	Either the ccdr_id or either the extension parameter is mandatory

status	status=last	<p>Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply:</p> <ul style="list-style-type: none"> ▪ ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party ▪ next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last - the API will look for the last finished call, where the number is either the calling party or the called party ▪ ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the number parameter is specified
--------	-------------	--	---

Response

The response contains the raw stream of the media file over HTTP in its original file format.

Get Media Encoded

Overview

Retrieves encoded media for the given call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Media Encoded:

```
http://<host>/verba/api?action=GetMediaEncoded
```

Get Media Encoded HTTP GET sample:

```
http://localhost:8010/verba/api?action=GetMediaEncoded&apiKey=D5D395D8-CD6E-4B92-8068-004E41874367&token=sbCSiDRKeEcytDYK98zgXtlw5G1qlbGf&cid=4abcc460-1f3b-11e1-9cfe-0016d4a3517c&format=mp3
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetMediaEncoded	Name of the HTTP API request.	Mandatory
apiKey	apiKey=D5D395D8-CD6E-4B92-8068-004E41874367	API key used to identify the application.	Mandatory
token	token=AMGRkYRN23daANVnlac0dDUan51nQpOq	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
cid	cid=4abcc460-1f3b-11e1-9cfe-0016d4a3517c	The Verba Conversation ID.	Mandatory
format	format=mp3	Format of the media to stream: <ul style="list-style-type: none">• mp3 for audio calls• mp4 for video calls	Mandatory

Response

The response contains the call in a requested audio format.

Get Media Segment

Overview

Retrieves the audio segment for the given call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Media Segment:

```
http://<host>/verba/api?action=GetMediaSegment
```

Get Media Segment HTTP GET sample:

```
http://localhost:8010/verba/api?action=GetMediaSegment&apiKey=D5D395D8-CD6E-4B92-8068-004E41874367&token=sbCSiDRKeEcytDYK98zgXtlw5G1qlbGf&cid=4abcc460-1f3b-11e1-9cfe-0016d4a3517c&start=0&end=10
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetWaveform	Name of the HTTP API request.	Mandatory
apiKey	apiKey=D5D395D8-CD6E-4B92-8068-004E41874367	API key used to identify the application.	Mandatory
token	token=AMGRkYRN23daANVnlac0dDUan51nQpOq	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
cid	cid=4abcc460-1f3b-11e1-9cfe-0016d4a3517c	Defines the internal ID of the call.	Either the callID or either the number parameter is mandatory
start	start=0	Defines the start time of the segment in seconds.	Optional (Default value is 0)
end	end=10	Defines the end time of the segment in seconds.	Optional (Default value is 10)

Response

The response contains the call in a originally recorded audio format.

Get Media Live

Overview

Retrieves the live media for a given ongoing call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Media Live:

```
http://<host>/verba/api?action=GetMediaLive
```

Get Media Live HTTP GET sample:

```
http://192.168.1.104/verba/api?action=GetMediaLive&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&callID=a8343631-9f35-4a3a-83f0-9e81592339fb
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetMedia	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
callID	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Either the callID or either the number parameter is mandatory
format	format=mp3	Currently only mp3 format is supported in the API for live calls	

Response

The response contains the raw stream of the media file over HTTP in its original file format.

Get Waveform

Overview

Retrieves the waveform for the given call.

The function is available as a HTTP GET or HTTP POST request.

Request

Get Waveform:

```
http://<host>/verba/api?action=GetWaveform
```

Get Waveform HTTP GET sample:

```
http://192.168.1.104/verba/api?action=GetWaveform&apiKey=D5D395D8-CD6E-4B92-8068-004E41874367&token=AMGRkYRN23daANVnlac0dDUan51nQpOq&cid=4abcc460-1f3b-11e1-9cfe-0016d4a3517c&width=800&height=80&isColorDefined=true&bgColor=0xF0F0F0&maxColor=0xF4F2F2&minColor=0x232323&transparency
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetWaveform	Name of the HTTP API request.	Mandatory
apiKey	apiKey=D5D395D8-CD6E-4B92-8068-004E41874367	API key used to identify the application.	Mandatory
token	token=AMGRkYRN23daANVnlac0dDUan51nQpOq	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
cid	cid=4abcc460-1f3b-11e1-9cfe-0016d4a3517c	Defines the internal ID of the call.	Either the callID or either the number parameter is mandatory
width	width=800	Defines the waveform's width.	Mandatory
height	height=80	Defines the waveform's height.	Mandatory

isColorDefined	isColorDefined=true	Allows to use unique colors in the waveform. The value can be true or false . if the value is false the waveform will be created in Verba Technologies's style, otherwise the colors can be set with the following parameters: <ul style="list-style-type: none"> • bgColor • maxColor • minColor • transparency 	Mandatory
bgColor	bgColor=0xF0F0F0	Defines the background color of the waveform. The value of the parameter represents a color in the RGB colorspace. The lowest 8 bits set the red channel, the middle 8 bits set the green channel, and the highest 8 bit set the blue channel.	Mandatory if the value of the ColorDefined parameter is true.
maxColor	maxColor=0xF4F2F2	Defines the color of the wave. The value of the parameter represents a color in the RGB colorspace. The lowest 8 bits set the red channel, the middle 8 bits set the green channel, and the highest 8 bit set the blue channel.	Mandatory if the value of the ColorDefined parameter is true.
minColor	minColor=0x232323	Defines the color of the wave. The value of the parameter represents a color in the RGB colorspace. The lowest 8 bits set the red channel, the middle 8 bits set the green channel, and the highest 8 bit set the blue channel.	Mandatory if the value of the ColorDefined parameter is true.
transparency	transparency=0x000000	Defines the transparency of the waveform.	Mandatory if the value of the ColorDefined parameter is true.

Response

The response contains the waveform in PNG format.

Get Thumbnail

Overview

Retrieves a frame from a selected video call.

This function is available as a HTTP GET or HTTP POST request.

Request

Get Thumbnail:

```
http://<host>/verba/api?action=GetThumbnail
```

Get Thumbnail HTTP GET sample:

```
http://localhost:8010/verba/api?action=GetThumbnail&apiKey=E8270568-EB2C-40DB-BAAA-78BD8D531FE5&cid=EC452E42-F654-43DB-98D8-CF48477DDD26&width=500&nFrame=10
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=GetWaveform	Name of the HTTP API request.	Mandatory
apiKey	apiKey=D5D395D8-CD6E-4B92-8068-004E41874367	API key used to identify the application.	Mandatory
token	token=AMGRkYRN23daANVnlac0dDUan51nQpOq	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
cid	cid=4abcc460-1f3b-11e1-9cfe-0016d4a3517c	Defines the internal ID of the call.	Either the callID or the number parameter is mandatory
width	width=500	Defines the width of the rendered picture.	Mandatory
frame	frame=10	Defines the number of the frame from the media, what will be rendered by the API.	Mandatory

Response

The response contains the selected frame from the media file.

Search Calls

Overview

Retrieves all CDRs that match a search filter.

The function is available as a HTTP GET or HTTP POST request.

Request

Search Calls:

```
http://<host>/verba/api?action=SearchCalls
```

Search Calls HTTP GET sample:

```
http://hostname/verba/api?action=SearchCalls&apiKey=3B54952C-74D9-4B84-B4F3-D5E818B7CD95&token=09835e02-6c10-11e0-bb22-ba324924019b&start=2011-01-01 00:00&end=2011-11-16 23:59
```

Detailed description of the API request elements:

URL parameter	Parameter example	Description	Requirements
action	action=SearchCalls	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=XML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">■ XML: the response is formatted and structured in XML, designed for applications■ HTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser.■ TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.
status	status=ongoing	Defines the focus of the call search: <ul style="list-style-type: none">• ongoing - search ongoing calls• recorded - search already recorded calls (default value)	Optional

secondary	secondary=1	If 1, then the secondary recordings will be returned too.	Optional
start	start=2011-01-01 00:00	Start time of the search period. Format is either "YYYY-MM-DD hh:mm:ss.SSS", "YYYY-MM-DD hh:mm:ss" or "YYYY-MM-DD hh:mm"	Mandatory
end	end=2011-11-16 23:59	End time of the search period. Format is either "YYYY-MM-DD hh:mm:ss.SSS", "YYYY-MM-DD hh:mm:ss" or "YYYY-MM-DD hh:mm"	Mandatory
endTimeFrom endTimeTo	endTimeFrom=2011-01-01 00:00 endTimeTo=2011-01-01 10:00	In certain cases, it is required to filter for the end time of the conversation instead of the start time. Use these parameters to define the interval of the end time of the returned conversations. Note that the <code>start</code> and <code>end</code> parameters (filtering for the start time of the conversations) are still mandatory because of performance reasons, but those parameters can be set to a wider interval (+ 2 hours for example) to make sure they do not filter out relevant conversations.	Optional
anynum	anynum=2017	Searched phone number part (searched both in called and caller id) This parameter can be used multiple times to filter for multiple phone numbers. For example: ...&anynum=1222&anynum=3988&...	Optional Must be URL encoded
anyname	anyname=Joe	Searched name part (searched both in called and caller name) This parameter can be used multiple times to filter for multiple names. For example: ...&anyname=Joe&anyname=Peter&...	Optional Must be URL encoded
orderby	orderby=source_caller_id	Ordering field. Values: same field names as in the result XML CDR (see below)	Optional
order	order=asc	Ascending or descending order. Values: "asc" or "desc"	Optional
pagefirst	pagefirst=30	Row number of the first CDR to be included in the results	Optional
pagelen	pagelen=10	Defines how many rows (CDRs) should be presented in one result	Optional
returnInvitation	returnInvitation=1	If 1, then the Lync Invitation details acquired by Verba from the technical account will be returned in the response.	Optional
returnSharedItems	returnSharedItems=1	If 1, then the corresponding shared items will be returned in the response.	Optional
f_field_name	f_meeting_id=WHBFM6DD	The results will be filtered by <code>field_name = value</code> <code>field_name</code> has to be a valid field name of the section table in the database.	Optional
f_field_name_like	f_meeting_id_like=WHBF%25	the same as <code>f_field_name</code> , but LIKE operation will be used in the SQL filter	Optional
returnMetadata	returnMetadata=1	If 1, then the corresponding custom metadata will be returned in the response.	Optional

meta	<p>meta=[Metadata_Template]: [Field Name]=[value]</p> <p>Example: meta=Default:Text1=val</p> <p>Encoded (correct) form: meta=Default%3AAPhone XML List%3DItem1</p>	<p>This parameter can be specified multiple times (?meta=...&meta=...&meta=...) The results will be filtered by the given Metadata Template (before the colon) and Field (between the colon and the equals sign) and its value (after the equals sign).</p> <p>The default operator is "equals", but it can be changed by meta_relation=... parameter. Examples: - meta_relation=LIKE - meta_relation=%21%3D (this is !=) If LIKE is specified, then the standard SQL LIKE patterns (%_) can be used in the value part. The meta_relation parameter should be used as many times as the meta parameter is used.</p> <p>The Field can be referenced by the Display Name or the value of the Field Identifier field.</p>	Optional
returnIM	returnIM=1	If 1, then the corresponding IM messages will be returned in the response.	Optional
returnTranscriptDB	returnTranscriptDB=1	If 1, then the corresponding transcript will be returned in the response as stored in the database (clear text).	Optional
returnTranscriptFile	returnTranscriptFile=1	If 1, then the corresponding transcript will be returned in the response as stored in the transcript file (special transcript format) in Base64 format.	Optional
returnVoiceQuality	returnVoiceQuality=1	If 1, then the corresponding voice quality check results will be returned in the response.	Optional
returnCustomUser	returnCustomUser=1	If 1, then the associated user's custom fields will be returned in the response.	Optional

Response

XML based response sample on success:

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<verbacdrlist rowcount="1">
  <verbacdr state="1" index="0">
    <startdate>2011-10-06 15:24:28.580</startdate>
    <enddate>2011-10-06 15:28:03.737</enddate>
    <starttime>2011-10-06 15:24:28.580</starttime>
    <endtime>2011-10-06 15:28:03.737</endtime>
    <start_time>2011-10-06 15:24:28.580</start_time>
    <end_time>2011-10-06 15:28:03.737</end_time>
    <duration>00:03:35</duration>
    <location>IP-0AE45E06</location>
    <archive_status>>false</archive_status>
    <source_name>2017077068</source_name>
```

<source_caller_id>2017077068</source_caller_id>
<source_ip/>
<destination_name>Verba Active Recorder</destination_name>
<destination_caller_id>12012213874</destination_caller_id>
<destination_ip/>
<usercause>Normal</usercause>
<defcause>Normal</defcause>
<userdirection>Incoming</userdirection>
<defdirection>Incoming</defdirection>
<url>2011\10\06\47818808-f02f-11e0-8bf5-876cf2078e7c_(20111006162428579).wav</url>
<audio_codec_id>4</audio_codec_id>
<audio_codec>G.711 u-law 64k</audio_codec>
<ccdr_id>47818808-f02f-11e0-8bf5-876cf2078e7c</ccdr_id>
<ondemand>>false</ondemand>
<owner_eid>0000</owner_eid>
<marked>1</marked>
<commented>1</commented>
<private>0</private>
<secondary>>false</secondary>
<recorded_party>>false</recorded_party>
<meeting_id>WHBFM6DD</meeting_id>
<exists_related_call>>true</exists_related_call>
<retention_auto_delete>>false</retention_auto_delete>
<cdr_media_type>1</cdr_media_type>
<encryption_priv>>false</encryption_priv>
<primary_secondary>Primary</primary_secondary>
<cdr_media_type_name>CDR</cdr_media_type_name>
<in_recycle_bin>>false</in_recycle_bin>
<invitation_organizer_cn>boss@company.com</invitation_organizer_cn>
<invitation_organizer_email>boss@company.com</invitation_organizer_email>
<shared_item>
 <id>C853EE44-3C96-4DED-9086-E1D6D313BA55</id>
 <publisher>boss@company.com</publisher>
 <title>Lync Meeting WHBFM6DD</title>
 <publicity_level>public_to_everybody</publicity_level>
 <accessible_by_url>>true</accessible_by_url>
 <allow_download>>false</allow_download>

```
</shared_item>  
</verbacdr>  
</verbacdrlist>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>  
<VerbaApi>  
<Response code="2" type="GetCallInformation">  
<ErrorMessage>Unable to retrieve call information, because the call cannot be found.</ErrorMessage>  
</Response>  
</VerbaApi>
```

Put Media

Overview

Uploads a media file with metadata.

The function is available as an HTTP POST request. CDR metadata should be added to the request URL as GET parameters, the media file(s) should be in the POST body with multipart/form-data encoding (normal file upload).

Request

Put Media HTTP POST URL:

`http://<host>/verba/api?action=PutMedia`

Parameters

The following parameters can be defined in the URL:

URL parameter	Example	Description	Requirements
action	PutMedia	Name of the HTTP API request.	Mandatory
apiKey	74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
nativeid	3A4B8016-FA30-44EC-9C1F-63D7279F8A68	Platform ID of the added media file (e.g. SIP ID for SIP IP calls)	
location	HOSTNAME	Name of the device where the media is recorded	
starttime	2011-03-24 14:02:19.673	Start time of the recording	Mandatory
endtime	2011-03-24 14:10:25	End time of the recording	Mandatory
srccallerid	1234	Phone number of the caller party	
srcip	192.168.1.1	IP address of the caller party	
srcname	Joe	Name of the caller party	
dstcallerid	1235	Phone number of the called party	
dstip	192.168.1.2	IP address of the called party	
dstname	Susan	Name of the called party	
audiocodec	0	Codec ID of the recorded media	
direction	1	Direction of the recorded media (e.g. incoming call)	
cause	0	Termination code of the media recording (e.g. 0 is normal)	
donotdelete	0	Marks if the call is protected	

conference	0	Marks if the call is a conference with more than 2 parties	
signalingid	1	Signalling used by the recorded media session	
recorderserviceid	10	ID of the recording technology used to record the media	
sourceaudiortpcount	1566		
destinationaudiortpcount	1734		

Response

XML based response sample on success:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="PutMedia"/>
<ccdrId>9b4f1f86-5d22-4907-9a33-47610a5f0038</ccdrId>
</VerbaApi>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="-20" type="PutMedia">
<ErrorMessage>starttime parameter is mandatory</ErrorMessage>
</Response>
</VerbaApi>
```

Mute Recording

Overview

Mutes or Unmutes Recording (pause / resume).

The function is available as an HTTP GET or HTTP POST request. The Requests must target the Media Repository.

Request

Mute Recording:

```
http://<host>/verba/api?action=MuteRecording
```

Mute Recording HTTP GET sample:

```
http://192.168.1.104/verba/api?action=MuteRecording&token=09835e02-6c10-11e0-bb22-ba324924019b&extension=8856&status=ongoing&mute=3
```

Parameters

Detailed description of the API request elements:

URL parameter	Example	Description	Requirements
action	action=MuteRecording	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=XML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XML, designed for applicationsHTML: the response is in human readable format and formatted using standard HTML; it can be directly displayed in any browser.TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.

callID	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Either the callID or either the number parameter is mandatory
extension	extension=8856	Defines the phone number that is a participant of the call. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with an error.	Either the callID or either the number parameter is mandatory
status	status=ongoing	Defines the status of the requested call. Comma separated values can be specified. The following valid values and value combinations apply: <ul style="list-style-type: none"> ▪ ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party ▪ next - the API will look for the next call in the upcoming 1-minute time range after the API request, where the number is either the calling party or the called party ▪ last - the API will look for the last finished call, where the number is either the calling party or the called party ▪ ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the number parameter is specified
mute	mute=3	Defines what channels should be muted: <ul style="list-style-type: none"> • 0 - unmute • 1 - mute the caller party • 2 - mute the called party • 3 - mute both caller and called • if empty or not present, then the mute status will be returned in the response <ul style="list-style-type: none"> • <Response code="0" type="MuteRecording" callerMuted="false" calledMuted="false"/> 	

Response

XML-based response sample on success

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="MuteRecording" callerMuted="true" calledMuted="true"/>
</VerbaApi>
```

XML-based response sample on error

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
```



```
<Response code="2" type="MuteRecording">  
<ErrorMessage>The call cannot be found.</ErrorMessage>  
</Response>  
</VerbaApi>
```

Get Voice Quality

Overview

Retrieves Voice Quality Check results for one or more Call Identifiers (ccdr_id).

The function is available as a HTTP GET or HTTP POST request.

Request

Get Voice Quality HTTP GET sample:

```
http://hostname/verba/api?action=GetVoiceQuality&token=hvMTp6lGwTfwZVNSu1XxQ99p2c9PtpgT&callIDs=182de753-1427-11e9-8de4-0028f8fd6834,e26f595b-141c-11e9-8de4-0028f8fd6834
```

Detailed description of the API request elements:

URL parameter	Parameter example	Description	Requirements
action	action=GetVoiceQuality	Name of the HTTP API request.	Mandatory
token	token=hvMTp6lGwTfwZVNSu1XxQ99p2c9PtpgT	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=XML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XMLJSON: the response is formatted and structured in JSON	If the parameter is missing, it defaults to XML.
callIDs	callIDs=182de753-1427-11e9-8de4-0028f8fd6834,e26f595b-141c-11e9-8de4-0028f8fd6834	Comma separated list of Call Identifiers (ccdr_id).	Mandatory

Response

XML based response sample on success:

```
<?xml version = '1.0' encoding = 'UTF-8'?>
<voice_quality_check_scores>
<conversation>
<callID>182de753-1427-11e9-8de4-0028f8fd6834</callID>
<found>true</found>
<voice_quality>
```

```
<item>
<name>Silence</name>
<value>60</value>
</item>
<item>
<name>Unnatural Silence</name>
<value>20</value>
</item>
<item>
<name>Sharp Amplitude Changes</name>
<value>30</value>
</item>
<item>
<name>Waveform Envelope Variance</name>
<value>50</value>
</item>
<item>
<name>Volume</name>
<value>60</value>
</item>
<item>
<name>Noise</name>
<value>10</value>
</item>
<item>
<name>Beeps and Clicks</name>
<value>1</value>
</item>
<item>
<name>RTP Loss</name>
<value>2</value>
</item>
<item>
<name>Decoding Errors</name>
<value>1</value>
</item>
<item>
<name>SRTP Decryption Errors</name>
<value>2</value>
</item>
<item>
<name>Media Mixing Errors</name>
<value>3</value>
</item>
</voice_quality>
</conversation>
<conversation>
<callID>e26f595b-141c-11e9-8de4-0028f8fd6834</callID>
<found>false</found>
</conversation>
</voice_quality_check_scores>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
```

```
<Response  
code="-1"  
type="GetVoiceQuality"  
  
>  
<ErrorMessage>StatusCodeException: Parameter callIDs is mandatory.  
</ErrorMessage>  
</Response>  
</VerbaApi>
```

Delete Call

Overview

Deletes a conversation or marks an ongoing conversation for deletion.

The function is available as an HTTP GET or HTTP POST request.

Request

Delete Call:

```
http://<host>/verba/api?action=DeleteCall
```

Delete Call HTTP GET sample:

```
http://192.168.1.104/verba/api?action=DeleteCall&apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8&token=09835e02-6c10-11e0-bb22-ba324924019b&responseType=XML&extension=8856&status=last
```

Detailed description of the API request elements:

URL parameter	Parameter example	Description	Requirements
action	action=DeleteCall	Name of the HTTP API request.	Mandatory
apiKey	apiKey=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	API key used to identify the application.	Mandatory
token	token=09835e02-6c10-11e0-bb22-ba324924019b	Unique identifier for authenticated sessions. After successful authentication, the API sends back a token, which has to be used for each request.	Mandatory if authentication is configured for the given API key.
responseType	responseType=XML	Defines the format of the response of the API request. The following valid values apply: <ul style="list-style-type: none">XML: the response is formatted and structured in XML, designed for applicationsHTML: the response is in human-readable format and formatted using standard HTML; it can be directly displayed in any browser.TEXT: simple clear text based response	If the parameter is missing, it defaults to XML.
callID	callID=a8343631-9f35-4a3a-83f0-9e81592339fb	Defines the internal ID of the call.	Either callID , platformCallID , nativeID , meetingID or extension parameter is mandatory
platformCallID	platformCallID=71627389	The value of the Platform Call ID field.	
nativeID	nativeID=TRS26140192	The value of the Technical Call Identifier field.	
meetingID	meetingID=WHBFM6DD	The Lync Meeting ID.	

extension	extension=8856	Defines the phone number that is a participant of the call. The API will look for a call with the status defined, where the number is either the calling party or the called party. If the API, for some reason, finds more than 1 record, it will respond with error.	
status	status=last	<p>Defines the status of the requested call. Comma-separated values can be specified. The following valid values and value combinations apply:</p> <ul style="list-style-type: none"> ▪ ongoing - the API will look for an ongoing call, where the number is either the calling party or the called party ▪ next - the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last - the API will look for the last finished call, where the number is either the calling party or the called party ▪ ongoing, next - the API will look for an ongoing call, where the number is either the calling party or the called party; if no record was found, the API will look for the next call in the upcoming 1 minute time range after the API request, where the number is either the calling party or the called party ▪ last, ongoing - the API will look for the last finished call, where the number is either the calling party or the called party; if no record was found, the API will look for an ongoing call, where the number is either the calling party or the called party 	Mandatory if the extension parameter is specified

Response

XML based response sample on success:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0" type="DeleteCall" />
</VerbaApi>
```

XML based response sample on error:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="-50" type="DeleteCall">
<ErrorMessage>Call for extension 3123212312 with status ongoing not found after 2 tries, with sleep time 1000.</ErrorMessage>
</Response>
</VerbaApi>
```

API error messages

Error code	Name	Description
-1	UNEXPECTED_ERROR	Unexpected error has occurred, when the API call was executed.
-10	EVALUATION_EXPIRED	The Verba license is expired.
-20	INVALID_PARAMETERS	The API action was called with wrong or missing parameters.
-30	INVALID_ACTION	The called API action doesn't exist.
-40	INVALID_CREDENTIALS	An application tried to use API Key, from a forbidden IP address.
-41	INVALID_API_KEY	The API call doesn't contain valid API key, or the API key doesn't exist.
-42	LOGIN_REQUIRED	The API key requires authentication. Use the RequestToken action to get authenticated token.
-43	TOKEN_EXPIRED	The requested token is expired, or never got authenticated.
-50	CALL_NOT_FOUND	The requested call is not found in the database.
-60	INVALID_BUSINESS_ID	The business ID parameter is not valid.
-70	MEDIA_NOT_FOUND	The requested media file is not found on the storage server.
-71	VIDEO_NOT_FOUND	The requested video file is not found on the storage server.
-80	PROPERTY_NOT_FOUND	The one of the requested properties is not found.

Provisioning API

Overview

This web services API allows service providers to automatically create users and tenants. The interface is implemented using Web Services.

- [Overview](#)
- [API Configuration](#)
- [API versioning](#)
- [Security](#)

API Configuration

Please follow the guidelines below to configure the Verba Provisioning API.

Step 1 - Login to the web interface with **System administrator** rights.

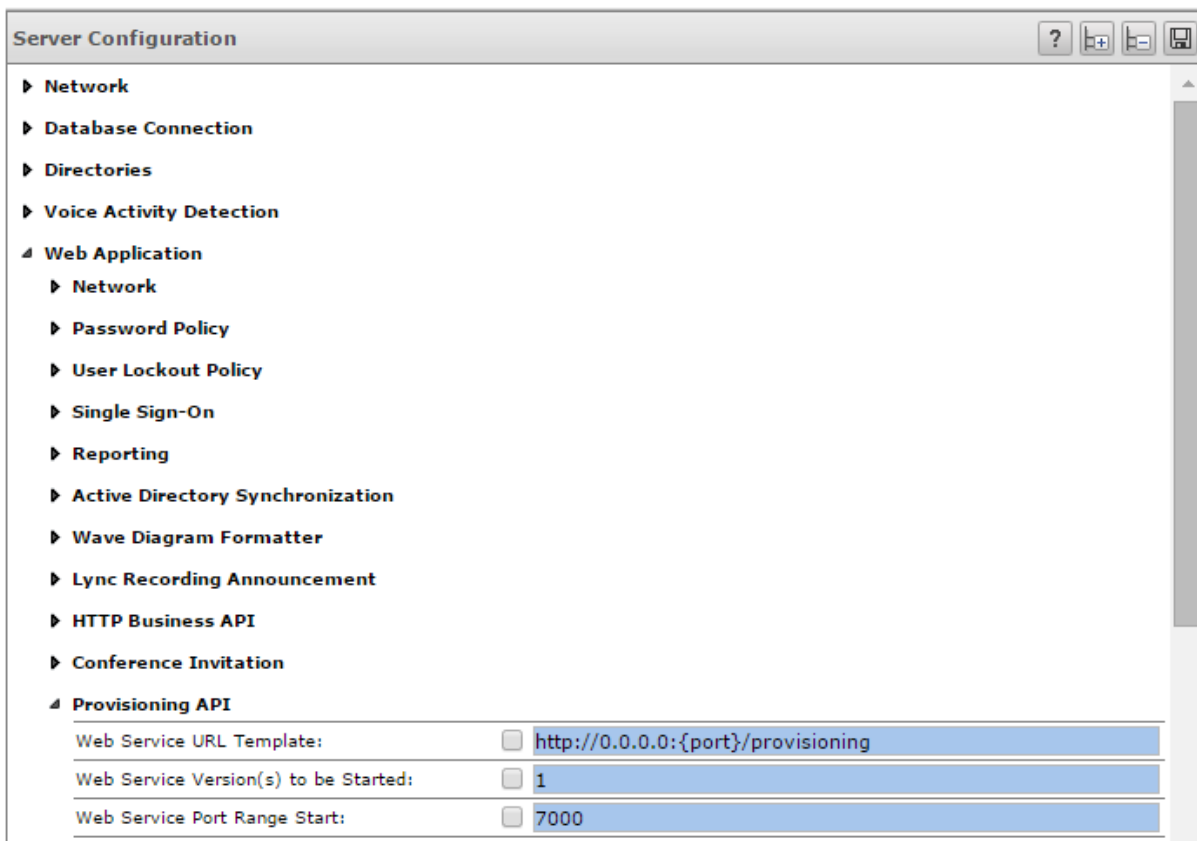
Step 2 - Navigate to the **Administration / Verba Servers** menu item and select your server from the list.

Step 3 - Click on the **Change Configuration Settings** link (2nd tab from left)

Step 4 - Navigate to the **Web Application / Provisioning API** node.

Step 5 - Fill out the configuration according to the requirements in the following table.

Configuration item	Description
Web Service URL Template	The default value is: http://0.0.0.0:{port}/provisioning You can specify on which interface and URI should Verba listen on. The default 0.0.0.0 means that we listen on all interfaces for incoming requests.
Web Service Version(s) to be Started	The default value is: 1 Available versions are 0, 1, 2 and 3. You can specify more than one version with a comma like so: 1,2,3. Configuring multiple versions will result in multiple TCP ports.
Web Service Port Range Start	The default value is: 7000 For each version, the port value is fixed. For example: <ul style="list-style-type: none">• API version 0 = 7000 (Web Service Port Range Start value + 0)• API version 1 = 7001 (Web Service Port Range Start value + 1)• API version 2 = 7002 (Web Service Port Range Start value + 2)• API version 3 = 7003 (Web Service Port Range Start value + 3)



Step 6 - Hit the save icon



and restart the **Verba Web Application Service** on the Media Repository Server so the new settings can take effect.

API versioning

The Provisioning API provides a version control mechanism. Different versions of the API can coexist on the same recording platform through different TCP ports. When a new version of the API becomes available it gets deployed on the next available TCP port without interfering with earlier versions.

For detailed information regarding each Provisioning API version please follow the links below:

- [API version 0](#)
- [API version 1](#)
- [API version 2](#)
- [API version 3](#)

Security

The API provides the following mechanism to ensure that access to the API is secure:

- **User-based authentication** - you can create different API users for different projects
- **Token based sessions** - use [requestToken](#) to receive a temporary session token
- **Separate provisioning port** - You can use TCP port filters to restrict access to the API

Provisioning API version 3

AVAILABLE IN 9.6.7 AND LATER

Overview

This web services API allows service providers to automatically create users and tenants. The interface is implemented using Web Services.

- [Overview](#)
- [Requirement](#)
- [API Calls](#)
 - Authentication
 - Users
 - Groups
 - Extensions
 - Environments
 - Miscellaneous
 - Storage
- [Data types](#)
 - Main entities
 - Reponse types
 - Miscellaneous
- [Tips for developers](#)



Requirement

Make sure that the [version 3 API is enabled](#).




API Calls

The Provisioning API provides the following Web Services calls:






Authentication

-  [ReleaseToken \(v3\)](#) — Releases a token
-  [RequestToken \(v3\)](#) — Requests an authentication token




Groups



-  [CreateGroup \(v3\)](#) — Creates a new Group.
-  [DeleteGroup \(v3\)](#) — Deletes a Group.
-  [GetGroupByNameAndEnvironment \(v3\)](#) — Reads a Group.

Users






-  [CreateUser \(v3\)](#) — Creates a user.
-  [DeleteUser \(v3\)](#) — Deletes a User.
-  [GetUserByLoginNameAndEnvironment \(v3\)](#) — Returns a user.
-  [ListUsers \(v3\)](#) — Lists users.
-  [UpdateUser \(v3\)](#) — Updates a user.

Extensions










-  [ApplyExtensionConfiguration \(v3\)](#) — Applies the extension configuration.
-  [CreateExtension \(v3\)](#) — Creates an extension.
- 

-  [ListGroupsWith \(v3\)](#) — Lists groups.
-  [UpdateGroup \(v3\)](#) — Updates a group.

Environments

-  [CreateEnvironment \(v3\)](#) — Create a new Environment.
-  [GetEnvironmentById \(v3\)](#) — Reads a tenant based on its ID.
-  [GetEnvironmentByShortName \(v3\)](#) — Reads a tenant based on its short name.
-  [ListEnvironments \(v3\)](#) — Returns an environment list.
-  [UpdateEnvironment \(v3\)](#) — Updates an environment.


Miscellaneous

-  [GetStatistics \(v3\)](#) — Reads user and tenant statistics.
-  [GetVersion \(v3\)](#) — Returns the API version.
-  [ListAnnouncements \(v3\)](#) — Returns a list of announcement audio files for an announcement type.
-  [ListExtensionRules \(v3\)](#) — Returns a list of recording rules.
-  [ListForwardTypes \(v3\)](#) — Returns a list of forwarding types.
-  [ListImportSources \(v3\)](#) — Returns a list of import sources.
-  [ListSites \(v3\)](#) — Returns a list of sites.
-  [ListSourcePlatforms \(v3\)](#) — Returns a list of recorded platforms.
-  [ListWorkflows \(v3\)](#) — Returns a list of announcement audio files for an announcement type.

















Data types

The Provisioning Web Service uses three fundamental data types, that represent user provisioning related entities:


Main entities











-  [ApplyExtensionConfigurationResponseServer \(v3\)](#) — Represents the extension configuration.

Storage













-  [DeleteExtension \(v3\)](#) — Delete an extension.
-  [GetExtension \(v3\)](#) — Reads an extension.
-  [ListExtensions \(v3\)](#) — Returns an extension list.
-  [UpdateExtension \(v3\)](#) — Updates an extension.
-  [CreateStorageFolder \(v3\)](#) — Creates a new Storage Folder.
-  [CreateStoragePolicy \(v3\)](#) — Creates a new Storage Policy.
-  [GetStorageFolderById \(v3\)](#) — Returns a Storage Folder information by id.
-  [GetStorageFolderByName \(v3\)](#) — Returns a Storage Folder information by name.
-  [GetStoragePolicyById \(v3\)](#) — Returns a Storage Policy information by id.
-  [GetStoragePolicyByName \(v3\)](#) — Returns a Storage Policy information by name.
-  [ListStorageFolders \(v3\)](#) — Lists Storage Folders.
-  [ListStorageFoldersByEid \(v3\)](#) — Lists Storage Folders by eid.
-  [ListStoragePolicies \(v3\)](#) — Lists Storage Policies.
-  [ListStoragePoliciesByEid \(v3\)](#) — Lists Storage Policies by eid.
-  [UpdateStorageFolder \(v3\)](#) — Updates a Storage Folder.
-  [UpdateStoragePolicy \(v3\)](#) — Updates a Storage Policy.























Miscellaneous


















-  [AnnouncementTypeEnum \(v3\)](#) — Possible announcement types.

-  [CallStatistic \(v3\)](#) — Represents a call statistic.
-  [Environment \(v3\)](#) — Represents a tenant.
-  [Extension \(v3\)](#) — Represents a phone extension.
-  [Group \(v3\)](#) — Represents a group.
-  [GroupMembership \(v3\)](#) — Represents a user.
-  [Location \(v3\)](#) — Represents the location.
-  [Status \(v3\)](#) — Return status of API calls.
-  [StorageFolder \(v3\)](#) — Represents a storage folder.
-  [StoragePolicy \(v3\)](#) — Represents a storage policy.
-  [User \(v3\)](#) — Represents a user.

Response types

-  [ApplyExtensionConfigurationResponse \(v3\)](#) — Returned extension configuration information.
-  [CreateOrUpdateGroupResponse \(v3\)](#) — Returned group create/update information.
-  [CreateOrUpdateStorageFolderResponse \(v3\)](#) — Returned storage folder create/update information.
-  [CreateOrUpdateStoragePolicyResponse \(v3\)](#) — Returned storage policy create/update information.
-  [CreateOrUpdateUserResponse \(v3\)](#) — Returned user create/update information.
-  [GetAnnouncementsResponse \(v3\)](#) — Returned list of announcement files for one announcement type.
-  [GetEnvironmentResponse \(v3\)](#) — Returned tenant information.
-  [GetEnvironmentsResponse \(v3\)](#) — Returned tenant information for all tenants.
-  [GetExtensionResponse \(v3\)](#) — Returned extension information.
-  [GetExtensionRulesResponse \(v3\)](#) — Returned a list of recording rules.
-  [GetExtensionsResponse \(v3\)](#) — Returned extension information for all extensions.
- 

-  [CallSourceType \(v3\)](#) — Possible call source types.
-  [CallStatisticsFilter \(v3\)](#) — Used to filter call statistic.
-  [CallStatisticsType \(v3\)](#) — Possible call statistic types.
-  [Direction \(v3\)](#) — Represents a recorded direction entity.
-  [EnvironmentFilter \(v3\)](#) — Used to filter tenants.
-  [ExtensionFilter \(v3\)](#) — Used to filter extensions.
-  [ExtensionRule \(v3\)](#) — Represents a recording rule entity.
-  [ForwardType \(v3\)](#) — Represents call forwarding types.
-  [GroupFilter \(v3\)](#) — Used to filter groups.
-  [GroupMembershipFilter \(v3\)](#) — Used to filter group memberships.
-  [ImportSource \(v3\)](#) — Represents an import source entity.
-  [Modality \(v3\)](#) — Represents a modality entity.
-  [PasswordFormat \(v3\)](#) — Possible password format type values.
-  [RecordingModeType \(v3\)](#) — Possible recording mode types.
-  [Site \(v3\)](#) — Represents a site entity.
-  [SourcePlatform \(v3\)](#) — Represents a source platform entity for the Recorded platforms.
-  [StatusCode \(v3\)](#) — Return code for API calls.
-  [StorageFolderFilter \(v3\)](#) — Used to filter storage folders.
-  [StoragePolicyAction \(v3\)](#) — Possible storage policy action types.
-  [StoragePolicyFilter \(v3\)](#) — Used to filter storage policies.
-  [UserFilter \(v3\)](#) — Used to filter users.
-  [Workflow \(v3\)](#) — Represents an approval workflow entity.

- [GetForwardTypeResponse \(v3\)](#) — Returned list of forwarding types
-  [GetGroupMembershipResponse \(v3\)](#) — Returned group membership information.
-  [GetGroupMembershipsResponse \(v3\)](#) — Returned group membership information for all group memberships.
-  [GetGroupResponse \(v3\)](#) — Returned group information.
-  [GetGroupsResponse \(v3\)](#) — Returned group information.
-  [GetImportSourcesResponse \(v3\)](#) — Returned list of import sources
-  [GetSitesResponse \(v3\)](#) — Returned list of sites.
-  [GetSourcePlatformResponse \(v3\)](#) — Returned list of recorded platforms
-  [GetStorageFolderResponse \(v3\)](#) — Returned storage folder information.
-  [GetStorageFoldersResponse \(v3\)](#) — Returned storage folder information for all storage folders.
-  [GetStoragePoliciesResponse \(v3\)](#) — Returned storage policies information for all storage policies.
-  [GetStoragePolicyResponse \(v3\)](#) — Returned storage policy information.
-  [GetUserResponse \(v3\)](#) — Returned user information.
-  [GetUsersResponse \(v3\)](#) — Returned user information for all users.
-  [GetVersionResponse \(v3\)](#) — Returned Provision API version information.
-  [GetWorkflowsResponse \(v3\)](#) — Returned a list of approval workflows.
-  [StatisticsResponse \(v3\)](#) — Response of call statistic requests.
-  [TokenResponse \(v3\)](#) — Response of token requests.

Tips for developers

To make things faster during development we recommend using [SoapUI](#) which offers functional testing for SOAP and REST APIs.

Once you downloaded and installed it, simply create a new SOAP Project from the File menu and enter the <http://MediaRepositoryIpAddress:7003/provisioning?wsdl> for HTTP connection or <https://MediaRepositoryIpAddress:443/ws-provisioning-3?wsdl> for HTTPS connection.

In the case of SOAP XML-based communication don't forget to remove the unused optional tags from the request XML.

Provisioning API (v3) Calls

- [ApplyExtensionConfiguration \(v3\)](#) — Applies the extension configuration.
- [CreateEnvironment \(v3\)](#) — Create a new Environment.
- [CreateExtension \(v3\)](#) — Creates an extension.
- [CreateGroup \(v3\)](#) — Creates a new Group.
- [CreateStorageFolder \(v3\)](#) — Creates a new Storage Folder.
- [CreateStoragePolicy \(v3\)](#) — Creates a new Storage Policy.
- [CreateUser \(v3\)](#) — Creates a user.
- [DeleteExtension \(v3\)](#) — Delete an extension.
- [DeleteGroup \(v3\)](#) — Deletes a Group.
- [DeleteUser \(v3\)](#) — Deletes a User.
- [GetEnvironmentById \(v3\)](#) — Reads a tenant based on its ID.
- [GetEnvironmentByShortName \(v3\)](#) — Reads a tenant based on its short name.
- [GetExtension \(v3\)](#) — Reads an extension.
- [GetGroupByNameAndEnvironment \(v3\)](#) — Reads a Group.
- [GetStatistics \(v3\)](#) — Reads user and tenant statistics.
- [GetStorageFolderById \(v3\)](#) — Returns a Storage Folder information by id.
- [GetStorageFolderByName \(v3\)](#) — Returns a Storage Folder information by name.
- [GetStoragePolicyById \(v3\)](#) — Returns a Storage Policy information by id.
- [GetStoragePolicyByName \(v3\)](#) — Returns a Storage Policy information by name.
- [GetUserByLoginNameAndEnvironment \(v3\)](#) — Returns a user.
- [GetVersion \(v3\)](#) — Returns the API version.
- [ListAnnouncements \(v3\)](#) — Returns a list of announcement audio files for an announcement type.
- [ListEnvironments \(v3\)](#) — Returns an environment list.
- [ListExtensionRules \(v3\)](#) — Returns a list of recording rules.
- [ListExtensions \(v3\)](#) — Returns an extension list.
- [ListForwardTypes \(v3\)](#) — Returns a list of forwarding types.
- [ListGroup \(v3\)](#) — Lists groups.
- [ListImportSources \(v3\)](#) — Returns a list of import sources.
- [ListSites \(v3\)](#) — Returns a list of sites.
- [ListSourcePlatforms \(v3\)](#) — Returns a list of recorded platforms.
- [ListStorageFolders \(v3\)](#) — Lists Storage Folders.
- [ListStorageFoldersById \(v3\)](#) — Lists Storage Folders by id.
- [ListStoragePolicies \(v3\)](#) — Lists Storage Policies.
- [ListStoragePoliciesById \(v3\)](#) — Lists Storage Policies by id.
- [ListUsers \(v3\)](#) — Lists users.
- [ListWorkflows \(v3\)](#) — Returns a list of announcement audio files for an announcement type.
- [ReleaseToken \(v3\)](#) — Releases a token
- [RequestToken \(v3\)](#) — Requests an authentication token
- [UpdateEnvironment \(v3\)](#) — Updates an environment.
- [UpdateExtension \(v3\)](#) — Updates an extension.
- [UpdateGroup \(v3\)](#) — Updates a group.
- [UpdateStorageFolder \(v3\)](#) — Updates a Storage Folder.
- [UpdateStoragePolicy \(v3\)](#) — Updates a Storage Policy.
- [UpdateUser \(v3\)](#) — Updates a user.

ApplyExtensionConfiguration (v3)

Overview

Applies the extension configuration.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
theseServersOnly	List< Location >	The list of server you would like to send the extension configuration to. If left out then the extension configuration will be sent to all available servers in the Verba System.	
returnSuccessfulStatuses	boolean	If true we show all success and failure response states. If false we show only failure responses.	
forceEvenIfNotRegistered	boolean	If true we send to all servers regardless of their current extension configuration. If false we only send the extension configuration to those servers that have different extension configuration than in the central database.	

Response

Parameters of the API response:

Parameter	Type	Description
statuses	List< ApplyExtensionConfigurationResponseServer >	Contains the success or error message from each requested server.
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ApplyExtensionConfiguration to all servers.

Example ApplyExtensionConfiguration to all servers.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:applyExtensionConfiguration>
      <token>piyyOvWeg64IXskLzVMutqxikakzLV5D</token>

      <!--Zero or more repetitions:-->
      <!--
      <theseServersOnly>
```



```

        <eid>0000</eid>
        <location>server-name</location>
    </theseServersOnly>
-->

    <returnSuccessfulStatuses>1</returnSuccessfulStatuses>
    <forceEvenIfNotRegistered>1</forceEvenIfNotRegistered>
</v3:applyExtensionConfiguration>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:applyExtensionConfigurationResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com"
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-MR</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>FE1SFB</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>FE2SFB</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-PROXY1</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-PROXY2</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS2</location>
          </server>

```

```

        <status>
          <statusCode>OK</statusCode>
        </status>
      </statuses>
    </statuses>
    <server>
      <eid>0000</eid>
      <location>DEV-RS1</location>
    </server>
    <status>
      <statusCode>OK</statusCode>
    </status>
  </statuses>
</return>
</ns2:applyExtensionConfigurationResponse>
</S:Body>
</S:Envelope>

```

▼ Example ApplyExtensionConfiguration to specific servers.

Example ApplyExtensionConfiguration to specific servers.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:applyExtensionConfiguration>
      <token>piyyOvWeg64IXskLzVMutqxikakzLV5D</token>

      <!--Zero or more repetitions:-->
      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS1</location>
      </theseServersOnly>

      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS2</location>
      </theseServersOnly>

      <returnSuccessfulStatuses>1</returnSuccessfulStatuses>
      <forceEvenIfNotRegistered>1</forceEvenIfNotRegistered>
    </v3:applyExtensionConfiguration>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:applyExtensionConfigurationResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS1</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS2</location>
          </server>
          <status>

```

```

        <statusCode>OK</statusCode>
      </status>
    </statuses>
  </return>
</ns2:applyExtensionConfigurationResponse>
</S:Body>
</S:Envelope>

```

▼ Example ApplyExtensionConfiguration to unavailable servers.

Example ApplyExtensionConfiguration to unavailable servers.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:applyExtensionConfiguration>
      <token>piyyOvWeg64IXskLzVMutqxikakzLV5D</token>

      <!--Zero or more repetitions:-->
      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS1</location>
      </theseServersOnly>

      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS2</location>
      </theseServersOnly>

      <returnSuccessfulStatuses>1</returnSuccessfulStatuses>
      <forceEvenIfNotRegistered>1</forceEvenIfNotRegistered>
    </v3:applyExtensionConfiguration>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:applyExtensionConfigurationResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com
      <return>
        <status>
          <message>2 server(s) failed</message>
          <statusCode>ERROR_GENERAL</statusCode>
        </status>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS1</location>
          </server>
          <status>
            <message>Could not apply extension configuration on 0000:DEV-RS1: java.lang.Exc
Please check if the service is in running state.</message>
            <statusCode>ERROR_GENERAL</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS2</location>
          </server>
          <status>
            <message>Could not apply extension configuration on 0000:DEV-RS2: java.lang.Exc
Please check if the service is in running state.</message>
            <statusCode>ERROR_GENERAL</statusCode>
          </status>
        </statuses>
      </return>
    </ns2:applyExtensionConfigurationResponse>
  </S:Body>
</S:Envelope>

```

</S:Body>
</S:Envelope>

CreateEnvironment (v3)

Overview

Create a new Environment.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
environment	Environment	Environment parameters	Mandatory
archiveAtAgeHours	Integer	Creates a default storage policy that archives after X hours	
deleteAtAgeHours	Integer	Creates a default storage policy that deletes after X hours	
archivePath	String	Configures the archive path for the environment If empty, the system uses a default based on these rules: <ul style="list-style-type: none">• if the [Verba\Storage\Archiving\DestinationPath] registry parameter is not empty, the value will be [Verba\Storage\Archiving\DestinationPath]\EnvShortName• if above is empty it becomes: [parent folder of AudioPath]\VerbaArchive\EnvShortName	

Response

Parameters of the API response in **getGroupsResponse** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example CreateEnvironment transaction.

Example CreateEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header />
  <soapenv:Body>
    <v3:createEnvironment>
      <token>9QckC2nVeO3JM8qL6DVHFo3p0Mt7ytuD</token>
      <environment>
```

```
    <displayName>API test Environment</displayName>
    <eid>0001</eid>
    <helpdeskURL>http://help-menu-link.net</helpdeskURL>
    <inactive>0</inactive>
    <ondemandMaxCallAgeHoursInBuffer>72</ondemandMaxCallAgeHoursInBuffer>
    <ondemandMaxRowsInBufferPerUser>24</ondemandMaxRowsInBufferPerUser>
    <shortName>Tenant test shortname</shortName>
  </environment>
  <archiveAtAgeHours>12</archiveAtAgeHours>
  <!-- <archivePath></archivePath> Use default path -->
  <!-- <deleteAtAgeHours></deleteAtAgeHours> Don't delete recordings -->
</v3:createEnvironment>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createEnvironmentResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:createEnvironmentResponse>
  </S:Body>
</S:Envelope>
```

CreateExtension (v3)

Overview

Creates an extension.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
extension	Extension	Defines the new extension's properties.	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS

Examples

▼ Example CreateExtension transaction where voice modality is added with incoming and outgoing recorded direction.

Example CreateExtension transaction where voice modality is added with incoming and outgoing recorded direction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createExtension>
      <token>tbESeqhBDsevSwi4HZdYAz8mKbBg8f6j</token>
      <extension>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->
        <extensionId>verbatestuser3@verbalabs.com</extensionId>
        <modalities>
          <modalitiesForWS>
            <directionsForWS>
              <id>1</id>
            </directionsForWS>
            <directionsForWS>
              <id>2</id>
            </directionsForWS>
            <id>voice</id>
          </modalitiesForWS>
        </modalities>
      </extension>
    </v3:createExtension>
  </soapenv:Body>
</soapenv:Envelope>
```

```

        </modalitiesForWS>
    </modalities>
</extension>
</v3:createExtension>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createExtensionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:createExtensionResponse>
  </S:Body>
</S:Envelope>

```

▼ Example CreateExtension transaction where the extension's recording mode is on-demand, voice-video-im-screen recorded and is associated with the user who's id is 4.

Example CreateExtension transaction where the extension's recording mode is on-demand, voice-video-im-screen recorded and is associated with the user who's id is 4.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createExtension>
      <token>tbESeqhBDsevSwi4HZdYAz8mKbBg8f6j</token>
      <extension>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->
        <extensionId>verbatestuser2@verbalabs.com</extensionId>
        <recordingModeType>ON_DEMAND</recordingModeType>
        <modalities>
          <modalitiesForWS>
            <directionsForWS>
              <id>-1</id>
            </directionsForWS>
            <id>voice</id>
          </modalitiesForWS>
          <modalitiesForWS>
            <directionsForWS>
              <id>-1</id>
            </directionsForWS>
            <id>im</id>
          </modalitiesForWS>
          <modalitiesForWS>
            <directionsForWS>
              <id>-1</id>
            </directionsForWS>
            <id>video</id>
          </modalitiesForWS>
        </modalities>
        <screenCaptureEnabled>1</screenCaptureEnabled>
        <user>
          <id>4</id>
        </user>
      </extension>
    </v3:createExtension>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>

```



```

    <ns2:createExtensionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:createExtensionResponse>
  </S:Body>
</S:Envelope>

```

▼ Example CreateExtension transaction where the extension's recording mode is full, only voice recorded and is associated with the user who's id is 3.

Example CreateExtension transaction where the extension's recording mode is full, only voice recorded and is associated with the user who's id is 3.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createExtension>
      <token>tbESeqhBDsevSwi4HZdYAz8mKbBg8f6j</token>
      <extension>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->
        <extensionId>verbatestuser@verbalabs.com</extensionId>
        <recordingModeType>FULL</recordingModeType>
        <modalities>
          <modalitiesForWS>
            <directionsForWS>
              <id>-1</id>
            </directionsForWS>
            <id>voice</id>
          </modalitiesForWS>
        </modalities>
        <screenCaptureEnabled>0</screenCaptureEnabled>
        <user>
          <id>3</id>
        </user>
      </extension>
    </v3:createExtension>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createExtensionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:createExtensionResponse>
  </S:Body>
</S:Envelope>

```

▼ Example CreateExtension with already exists response.

Example CreateExtension with already exists response.

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createExtensionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <message>This extension already exists in the database: 0000:verbatestuser@verbalabs.
        <statusCode>ERROR_ALREADY_EXISTS</statusCode>
      </return>
    </ns2:createExtensionResponse>
  </S:Body>
</S:Envelope>

```

CreateGroup (v3)

Overview

Creates a new Group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
group	Group	New group's properties	Mandatory

Response

Parameters of the API response in `getGroupsResponse` type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
group	Group	

Examples

▼ Example createGroup transaction.

Example createGroup transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createGroup>
      <token>T1R5Ur6AKmaoGemf6LG8EUZLFa671X1U</token>
      <group>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName>?</environmentShortName>
        -->
        <name>API test group</name>
        <nonModifiable>0</nonModifiable>
      </group>
    </v3:createGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createGroupResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>6</id>
          <name>API test group</name>
          <nonModifiable>false</nonModifiable>
        </group>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:createGroupResponse>
  </S:Body>
</S:Envelope>
```

▼ Example createGroup transaction. Assigning one admin user, one supervisor user, 2 standard users.

Example createGroup transaction. Assigning one admin user, one supervisor user, 2 standard users.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createGroup>
      <token>cU1VuDEkuu5w9jutzl2y4zFjBoh7gpOf</token>
      <group>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->
        <name>Nest group</name>
        <nonModifiable>0</nonModifiable>

        <!--Zero or more repetitions:-->

        <users> <!-- standard user -->
          <admin>0</admin>
          <member>1</member>
          <primary>0</primary>
          <supervisor>0</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
          <user>
            <id>6</id>
          </user>
        </users>

        <users> <!-- standard user -->
          <admin>0</admin>
          <member>1</member>
          <primary>0</primary>
          <supervisor>0</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
          <user>
            <id>7</id>
          </user>
        </users>

        <users> <!-- supervisor user -->
          <admin>0</admin>
          <member>1</member>
          <primary>0</primary>
          <supervisor>1</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
          <user>
```

```

        <id>8</id>
      </user>
    </users>

    <users> <!-- admin user -->
      <admin>1</admin>
      <member>1</member>
      <primary>0</primary>
      <supervisor>0</supervisor>
      <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
      <user>
        <id>9</id>
      </user>
    </users>

  </group>
</v3:createGroup>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createGroupResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>12</id>
          <name>Nest_group2</name>
          <nonModifiable>false</nonModifiable>
          <users>
            <admin>false</admin>
            <member>true</member>
            <primary>false</primary>
            <supervisor>false</supervisor>
            <uniqueIdUnmodifiable>45</uniqueIdUnmodifiable>
            <user>
              <agentId/>
              <apiAccessOnly>false</apiAccessOnly>
              <crmUserId/>
              <customDateFormat/>
              <customTimeFormat/>
              <displayName>IPTUser1</displayName>
              <eid>0000</eid>
              <email/>
              <environmentShortName>Ref.</environmentShortName>
              <externalId/>
              <id>6</id>
              <language>en</language>
              <locked>false</locked>
              <loginName>IPTUser1</loginName>
              <needChangePassword>false</needChangePassword>
              <nonModifiable>false</nonModifiable>
              <passwordExpires>false</passwordExpires>
              <passwordHash>e10adc3949ba59abbe56e057f20f883e</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-09-15T12:16:00Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-11-23T15:14:59.317Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
        </group>
      </return>
    </ns2:createGroupResponse>
  </S:Body>
</S:Envelope>

```

```

<uniqueIdUnmodifiable>46</uniqueIdUnmodifiable>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>IPTUser2</displayName>
  <eid>0000</eid>
  <email>Abdula@VerbaMsftTest.ccsctp.net</email>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>7</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>IPTUser2</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>e10adc3949ba59abbe56e057f20f883e</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-09-15T12:17:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-23T15:14:59.320Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>false</primary>
  <supervisor>>true</supervisor>
  <uniqueIdUnmodifiable>47</uniqueIdUnmodifiable>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>TPO</displayName>
    <eid>0000</eid>
    <email>KatieJ@VerbaMsftTest.ccsctp.net</email>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>8</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>TPO</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>e10adc3949ba59abbe56e057f20f883e</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-15T12:17:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-23T15:14:59.323Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>true</admin>
  <member>>true</member>
  <primary>>false</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>48</uniqueIdUnmodifiable>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>

```

```
<crmUserId/>
<customDateFormat/>
<customTimeFormat/>
<displayName>mate</displayName>
<eid>0000</eid>
<email/>
<environmentShortName>Ref.</environmentShortName>
<externalId/>
<id>9</id>
<language>en</language>
<locked>>false</locked>
<loginName>mate</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<passwordHash>d87869a979db0078521d5872944e966e</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-10-12T15:47:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-23T15:14:59.323Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</group>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:createGroupResponse>
</S:Body>
</S:Envelope>
```

CreateStorageFolder (v3)

Overview

Creates a new Storage Folder.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storageFolder	StorageFolder	New Storage Folder's properties	

Response

Parameters of the API response in **getGroupsResponse** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storageFolder	StorageFolder	

Examples

▼ Example createGroup transaction.

Example createGroup transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createStorageFolder>
      <token>U3eZLSDtMhWSSv9dOo1FFAqrze0soiwt</token>
      <storageFolder>
        <!-- To understand each property you should:
          * login to the Verba Web Interface
          * create a dummy Storage Target
          * use the ListStorageFolders API call to get the dummy Storage Target's properties.
        -->
        <accountId></accountId>
        <apiLogin></apiLogin>
        <apiPassword></apiPassword>
        <apiUrl></apiUrl>
        <applicationId></applicationId>
```

```

    <certPublic></certPublic>
    <eid>0000</eid>
    <emailFrom></emailFrom>
    <emailTls>0</emailTls>
    <exportTarget>1</exportTarget>
    <exportTargetEveryone>0</exportTargetEveryone>
    <name>Verba test</name>
    <path>amazon_s3</path>
    <port></port>
    <serverName>eu-west-1</serverName>
    <snaplockVolume></snaplockVolume>
    <sourceId></sourceId>
    <storageType>amazon_s3</storageType>
    <userLogin>.....</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</v3:createStorageFolder>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createStorageFolderResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolder>
          <accountId/>
          <apiLogin/>
          <apiPassword/>
          <apiUrl/>
          <applicationId/>
          <certPublic/>
          <eid>0000</eid>
          <emailFrom></emailFrom>
          <emailTls>>false</emailTls>
          <exportTarget>>true</exportTarget>
          <exportTargetEveryone>>false</exportTargetEveryone>
          <id>24</id>
          <name>Verba test</name>
          <path>amazon_s3</path>
          <port>0</port>
          <serverName>eu-west-1</serverName>
          <snaplockVolume/>
          <sourceId/>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolder>
      </return>
    </ns2:createStorageFolderResponse>
  </S:Body>
</S:Envelope>

```


CreateStoragePolicy (v3)

Overview

Creates a new Storage Policy.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storagePolicy	StoragePolicy	Storage folder filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example CreateStoragePolicy transaction.

Example CreateStoragePolicy transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createStoragePolicy>
      <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
      <storagePolicy>
        <action>export</action>
        <callFilter>WHERE section.owner_eid = '0000'</callFilter>
        <customSql>>false</customSql>
        <decrypt>1</decrypt>
        <eid>0000</eid>
        <enabled>1</enabled>
        <engineId></engineId>
        <firstTranscode>0</firstTranscode>
        <format></format>
        <keepCdr>1</keepCdr>
      </storagePolicy>
    </v3:createStoragePolicy>
  </soapenv:Body>
</soapenv:Envelope>
```

```

    <languageId></languageId>
    <moveToRecycleBin>0</moveToRecycleBin>
    <name>Test Data Retention</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>0</onlyForArchived>
    <priority>33</priority>

    <storageFolder>
      <id>2</id>
    </storageFolder>

  </storagePolicy>
</v3:createStoragePolicy>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createStoragePolicyResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>true</decrypt>
          <eid>0000</eid>
          <enabled>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format></format>
          <id>1036</id>
          <keepCdr>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>33</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
            <storageType>amazon_s3</storageType>
            <userLogin>AKIAIDR3I26OLTLTJVKA</userLogin>
            <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaIVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
          </storageFolder>
        </storagePolicy>
      </return>
    </ns2:createStoragePolicyResponse>
  </S:Body>
</S:Envelope>

```

▼ Example CreateStoragePolicy transaction. Transcode to mp3.

Example CreateStoragePolicy transaction. Transcode to mp3.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p

```

```

<soapenv:Header/>
<soapenv:Body>
  <v3:createStoragePolicy>
    <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
    <storagePolicy>
      <action>export</action>
      <callFilter>WHERE section.owner_eid = '0000'</callFilter>
      <customSql>>false</customSql>
      <decrypt>1</decrypt>
      <eid>0000</eid>
      <enabled>1</enabled>
      <engineId></engineId>
      <firstTranscode>0</firstTranscode>
      <format>mp3</format>
      <keepCdr>1</keepCdr>
      <languageId></languageId>
      <moveToRecycleBin>0</moveToRecycleBin>
      <name>Test Data Retention</name>
      <olderThanMinutes>0</olderThanMinutes>
      <olderThanYears>0</olderThanYears>
      <onlyForArchived>0</onlyForArchived>
      <priority>33</priority>

      <storageFolder>
        <id>2</id>
      </storageFolder>

    </storagePolicy>
  </v3:createStoragePolicy>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createStoragePolicyResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>
          <enabled>>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format>mp3</format>
          <id>1036</id>
          <keepCdr>>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>33</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
          </storageFolder>
        </storagePolicy>
      </return>
    </ns2:createStoragePolicyResponse>
  </S:Body>
</S:Envelope>

```

```
        <storageType>amazon_s3</storageType>
        <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
        <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaIVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
    </storageFolder>
  </storagePolicy>
</return>
</ns2:createStoragePolicyResponse>
</S:Body>
</S:Envelope>
```

CreateUser (v3)

Overview

Creates a user.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
user	User	Specifies the user (credentials, type, parameters, roles), the user's extensions (if any), the user's groups (if any)	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	CreateOrUpdateUserResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS

Examples

▼ Example CreateUser transaction.

Example CreateUser transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:createUser>
      <token>14ycnUJIuDBAbvO8h1L5GtAcsHZIF5pz</token>
      <user>
        <agentId></agentId>
        <externalId></externalId>
        <crmUserId></crmUserId>

        <customDateFormat></customDateFormat>
        <customTimeFormat></customTimeFormat>

        <loginName>verbatest</loginName>
```

```

<needChangePassword>0</needChangePassword>
<displayName>Verba Test User</displayName>
<email>verbatest@verbalabs.com</email>
<userType>user_type_verba</userType> <!-- Standard user type -->

<eid>0000</eid>
<!-- Needed if eid is not present
<environmentShortName></environmentShortName>
-->

<!--Zero or more repetitions:-->
<groupMemberships>
  <member>1</member>
  <primary>1</primary>
  <supervisor>1</supervisor>
  <admin>1</admin>
  <group>
    <eid>0000</eid>
    <!-- <environmentShortName?></environmentShortName?-->
    <id>2</id> <!-- Valid existing group ID -->
  </group>
  <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
  <validFromUnmodifiable>0</validFromUnmodifiable>
  <validUntilUnmodifiable>0</validUntilUnmodifiable>
</groupMemberships>

<customs>custom value 1</customs>
  <customs>custom value 2</customs>
  <customs>custom value 3</customs>
  <customs>custom value 4</customs>
  <customs>custom value 5</customs>
  <customs>custom value 6</customs>
  <customs>custom value 7</customs>
  <customs>custom value 8</customs>
  <customs>custom value 9</customs>
  <customs>custom value 10</customs>

<language>en</language>
<timeZone>Europe/Budapest</timeZone>
<locked>0</locked>
<nonModifiable>0</nonModifiable>
<observerGroupId>3</observerGroupId> <!-- Valid existing group ID -->
<observerUserId>1</observerUserId> <!-- Valid existing user ID -->
<passwordExpires>0</passwordExpires>
<passwordHash>MD5HASH("your-password")</passwordHash>
<!-- <recorderLinePIN></recorderLinePIN> -->

<apiAccessOnly>0</apiAccessOnly>

<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>

<!--Zero or more repetitions:-->
<roles>r_standard_user</roles>
<roles>r_system_supervisor</roles>
<roles>r_system_administrator</roles>

  </user>
</v3:createUser>
</soapenv:Body>
</soapenv:Envelope>

Response:

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createUserResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>

```

```

    <statusCode>OK</statusCode>
  </status>
</user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <customDateFormat/>
  <customTimeFormat/>
<customs>custom value 1</customs>
  <customs>custom value 2</customs>
  <customs>custom value 3</customs>
  <customs>custom value 4</customs>
  <customs>custom value 5</customs>
  <customs>custom value 6</customs>
  <customs>custom value 7</customs>
  <customs>custom value 8</customs>
  <customs>custom value 9</customs>
  <customs>custom value 10</customs>
  <displayName>Verba Test User</displayName>
  <eid>0000</eid>
  <email>verbatest@verbalabs.com</email>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <groupMemberships>
    <admin>>true</admin>
    <group>
      <eid>0000</eid>
      <environmentShortName>Ref.</environmentShortName>
      <id>2</id>
      <name>Developers</name>
      <nonModifiable>>false</nonModifiable>
    </group>
    <member>true</member>
    <primary>true</primary>
    <supervisor>true</supervisor>
    <uniqueIdUnmodifiable>39</uniqueIdUnmodifiable>
  </groupMemberships>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>Verba Test User</displayName>
    <eid>0000</eid>
    <email>verbatest@verbalabs.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>36</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>verbatest</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <observerGroupId>0</observerGroupId>
    <observerUserId>0</observerUserId>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-03T11:56:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-20T16:23:33.887Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</groupMemberships>
<id>36</id>
<language>en</language>
<locked>>false</locked>
<loginName>verbatest</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<observerGroupId>0</observerGroupId>

```

```
<observerUserId>0</observerUserId>
<passwordExpires>>false</passwordExpires>
<roles>r_standard_user</roles>
<roles>r_system_administrator</roles>
<roles>r_system_supervisor</roles>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
  </user>
</return>
</ns2:createUserResponse>
</S:Body>
</S:Envelope>
```


DeleteExtension (v3)

Overview

Delete an extension.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
extension	Extension	Specifies the extension	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example DeleteExtension transaction.

Example DeleteExtension transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:deleteExtension>
      <token>FipASZ3Y336Kvmv7W1BV7aXY7hDFeMxq</token>
      <extension>

        <!-- The ID of the existing Extension can be queried with the GetExtension call -->
        <!-- To delete an extension the ID or the extension and the environment must bespecified -->
        <id>20100</id>

      <!-- OR -->

    </v3:deleteExtension>
  </soapenv:Body>
</soapenv:Envelope>

<eid>0000</eid>
  <!-- Needed if eid is not present
```

```
        <environmentShortName></environmentShortName>
        -->
        <extension>verbatestuser2@verbalabs.com</extension>
    </extension>
</v3:deleteExtension>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteExtensionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:deleteExtensionResponse>
  </S:Body>
</S:Envelope>
```

DeleteGroup (v3)

Overview

Deletes a Group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
groupId	Integer	Deleteable group's id	Mandatory

Response

Parameters of the API response in **DeleteGroup** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example DeleteGroup transaction.

Example DeleteGroup transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:deleteGroup>
      <token>oJYrqC0mSEEmHEoO9tcMBOV3NKJLvmYS</token>
      <groupId>10</groupId>
    </v3:deleteGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteGroupResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:deleteGroupResponse>
  </S:Body>
</S:Envelope>
```

```
    </ns2:deleteGroupResponse>
  </S:Body>
</S:Envelope>
```

▼ Example DeleteGroup transaction. The Default group is not deleteable.

Example DeleteGroup transaction. The Default group is not deleteable.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:deleteGroup>
      <token>oJYrqC0mSEEmHEo09tcMBOV3NKJLvmyS</token>
      <groupId>1</groupId>
    </v3:deleteGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteGroupResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <message>This is the default group and so it can not be deleted.</message>
        <statusCode>ERROR_ILLEGAL_ARGUMENT</statusCode>
      </return>
    </ns2:deleteGroupResponse>
  </S:Body>
</S:Envelope>
```

DeleteUser (v3)

Overview

Deletes a User.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
userId	Integer	The id of the user we would like to delete.	Mandatory

Response

Parameters of the API response in **DeleteUser** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example DeleteUser transaction.

Example DeleteGroup transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:deleteUser>
      <token>70oPY1HDzqW5mt6ZNH9pUjvjsaG7ZfF7</token>
      <userId>3</userId>
    </v3:deleteUser>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteUserResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:deleteUserResponse>
```

</S:Body>
</S:Envelope>

GetEnvironmentByEid (v3)

Overview

Reads a tenant based on its ID.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Environment ID of the tenant we are looking for	Mandatory

Response

Parameters of the API response in **getGroupsResponse** type called **return**:

Parameter	Type	Description
status	GetEnvironmentResponse	Possible statusCodes: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND

Examples

▼ Example GetEnvironmentByEid transaction.

Example GetEnvironmentByEid transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getEnvironmentByEid>
      <token>CwF1v5KhYh9IP780249cgZjyRJJuJe3xM</token>
      <eid>0000</eid>
    </v3:getEnvironmentByEid>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getEnvironmentByEidResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <environment>
```

```
<displayName>Reference environment</displayName>
<eid>0000</eid>
<inactive>>false</inactive>
<shortName>Ref.</shortName>
<helpdeskURL>http://help-menu-url.com</helpdeskURL> <!-- If this field is empty th
<!-- <ondemandMaxRowsInBufferPerUser></ondemandMaxRowsInBufferPerUser> -->
<!-- <ondemandMaxCallAgeHoursInBuffer></ondemandMaxCallAgeHoursInBuffer> -->
</environment>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:getEnvironmentByEidResponse>
</S:Body>
</S:Envelope>
```


GetEnvironmentByShortName (v3)

Overview

Reads a tenant based on its short name.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
shortName	String	Environment short name of the tenant we are looking for	Mandatory

Response

Parameters of the API response in **GetEnvironmentByShortName** type called **return**:

Parameter	Type	Description
status	GetEnvironmentResponse	Possible statusCodes: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND

Examples

▼ Example GetEnvironmentByShortName transaction.

Example GetEnvironmentByShortName transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getEnvironmentByShortName>
      <token>xjK9AVj1Lc4ciA4tBxEelKBrC5astJYj</token>
      <shortName>Ref.</shortName>
    </v3:getEnvironmentByShortName>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getEnvironmentByShortNameResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/"
      <return>
        <environment>
```

```
        <displayName>Reference environment</displayName>
        <eid>0000</eid>
        <helpdeskURL>http://valami.hu</helpdeskURL>
        <inactive>>false</inactive>
        <shortName>Ref.</shortName>
    </environment>
    <status>
        <statusCode>OK</statusCode>
    </status>
</return>
</ns2:getEnvironmentByShortNameResponse>
</S:Body>
</S:Envelope>
```

GetExtension (v3)

Overview

Reads an extension.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
environmentFilter	EnvironmentFilter	Specifies the environment	Mandatory
extension	String	Specifies the extension	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
extension	GetExtensionResponse	Extensions

Examples

▼ Example GetExtension transaction.

Example GetExtension transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getExtension>
      <token>vpAWrB4SIQk7NNuHGvRLv2FM7rjLQjB6</token>
      <environmentFilter>
        <eid>0000</eid>
        <eidExact>0</eidExact>
        <inactive>0</inactive>
        <!-- Needed if eid is not present
        <shortName></shortName>
        <shortNameExact></shortNameExact>
```

```
-->
  </environmentFilter>
  <extension>verbatestuser2@verbalabs.com</extension> <!-- Mandatory! -->
</v3:getExtension>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getExtensionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <extension>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>verbatestuser2@verbalabs.com</extension>
          <id>56</id>
          <im>false</im>
          <recordingMode>ON_DEMAND</recordingMode>
          <screenCaptureEnabled>false</screenCaptureEnabled>
          <user>
            <agentId/>
            <apiAccessOnly>false</apiAccessOnly>
            <crmUserId/>
            <customDateFormat/>
            <customTimeFormat/>
            <displayName>strange-emailx</displayName>
            <eid>0000</eid>
            <email>louise.o'donnell@verbalabs.com</email>
            <environmentShortName>Ref.</environmentShortName>
            <externalId/>
            <id>4</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>strange-email</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-09-03T11:56:00Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
          </user>
          <video>false</video>
          <voice>true</voice>
        </extension>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:getExtensionResponse>
  </S:Body>
</S:Envelope>
```

GetGroupByNameAndEnvironment (v3)

Overview

Reads a Group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
name	String	The name of the	Mandatory
environment	String	The environment	Mandatory
environmentParamsShortName	boolean	If true the environment parameter is a short name otherwise it's an eid	Mandatory

Response

Parameters of the API response in **GetGroupByNameAndEnvironment** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
group	Group	

Examples

▼ Example GetGroupByNameAndEnvironment transaction.

Example GetGroupByNameAndEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getGroupByNameAndEnvironment>
      <token>xjK9AVj1Lc4ciA4tBxEe1KBrC5astJYj</token>
      <name>Default</name>
      <environment>0000</environment>
      <environmentParamIsShortName>0</environmentParamIsShortName>
    </v3:getGroupByNameAndEnvironment>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getGroupByNameAndEnvironmentResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.co">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <name>Default</name>
          <nonModifiable>>false</nonModifiable>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>true</primary>
            <supervisor>>false</supervisor>
            <uniqueIdUnmodifiable>1</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>false</apiAccessOnly>
              <displayName>Verba Administrator</displayName>
              <eid>0000</eid>
              <email/>
              <environmentShortName>Ref.</environmentShortName>
              <id>1</id>
              <language>en</language>
              <locked>>false</locked>
              <loginName>Administrator</loginName>
              <needChangePassword>>false</needChangePassword>
              <nonModifiable>>false</nonModifiable>
              <passwordExpires>>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2014-08-28T07:42:37.193Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-08-28T07:42:37.287Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>true</primary>
            <supervisor>>false</supervisor>
            <uniqueIdUnmodifiable>2</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>true</apiAccessOnly>
              <displayName>Verba Desktop Api User</displayName>
              <eid>0000</eid>
              <environmentShortName>Ref.</environmentShortName>
              <id>2</id>
              <language>en</language>
              <locked>>false</locked>
              <loginName>verbadesktopapi</loginName>
              <needChangePassword>>false</needChangePassword>
              <nonModifiable>>false</nonModifiable>
              <passwordExpires>>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <userType>user_type_verba</userType>
              <validFrom>2015-08-28T07:43:45.493Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-08-28T07:43:45.493Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>false</primary>
            <supervisor>>false</supervisor>
          </users>
        </group>
      </return>
    </ns2:getGroupByNameAndEnvironmentResponse>
  </S:Body>
</S:Envelope>
```

```
<uniqueIdUnmodifiable>3</uniqueIdUnmodifiable>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>olibali</displayName>
  <eid>0000</eid>
  <email/>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>3</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>olibali</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-08-28T09:17:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-08-28T09:17:00Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>11</uniqueIdUnmodifiable>
  <user>
    <agentId/>
    <apiAccessOnly>>true</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>verba_api_user</displayName>
    <eid>0000</eid>
    <email/>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>11</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>verba_api_user</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T12:01:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T12:01:00Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>19</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Ken Willoughby</displayName>
```

```

    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>19</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>ken</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>20</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Kovats Gergely</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>20</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>kovats</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>21</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Bálint Kuhár</displayName>
    <eid>0000</eid>
    <email>kuhar@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>21</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>kuhar</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>

```



```
<validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>22</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Lori Peterson</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>22</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>lori</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>23</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Moczar Gabor</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>23</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>moczar</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>24</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Kakas Norbert</displayName>
    <eid>0000</eid>
    <email>kakas@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>24</id>
```

```
<language>en</language>
<locked>>false</locked>
<loginName>norbi</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<passwordHash>.....</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-11-19T14:35:26.310Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>25</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Krasznai Péter</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>25</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>peti</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</group>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:getGroupByNameAndEnvironmentResponse>
</S:Body>
</S:Envelope>
```

GetStatistics (v3)

Overview

Reads user and tenant statistics.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	CallStatisticsFilter	Statistics filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	StatisticsResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example GetStatistics transaction.

Example GetStatistics transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStatistics>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
        -->
        </environmentFilter>
        <source>BOTH</source>
        <timeFrom>2015.01.01 08:00:00.000</timeFrom>
        <timeTo>2015.12.01 18:00:00.000</timeTo>
        <type>BY_USER</type>
      </filter>
    </v3:getStatistics>
  </soapenv:Body>
</soapenv:Envelope>
```

```
    </filter>
  </v3:getStatistics>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStatisticsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <callStatistics>
          <eid>0000</eid>
          <lengthOfCallsSeconds>235</lengthOfCallsSeconds>
          <loginName>IPTUser</loginName>
          <numberOfCalls>30</numberOfCalls>
          <shortName>Ref.</shortName>
          <userId>7</userId>
        </callStatistics>
        <callStatistics>
          <eid>0000</eid>
          <lengthOfCallsSeconds>22</lengthOfCallsSeconds>
          <loginName>balazs</loginName>
          <numberOfCalls>1</numberOfCalls>
          <shortName>Ref.</shortName>
          <userId>3</userId>
        </callStatistics>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:getStatisticsResponse>
  </S:Body>
</S:Envelope>
```

GetStorageFolderById (v3)

Overview

Returns a Storage Folder information by id.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
id	Integer	The requested Storage Policy's id	Mandatory

Response

Parameters of the API response in **GetStorageFolderById** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND
storageFolder	StorageFolder	

Examples

▼ Example GetStorageFolderById transaction.

Example GetStorageFolderById transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStorageFolderById>
      <token>z5bqHedL87j39ntkv4ZLt4yVCGeA26B9</token>
      <id>2</id>
    </v3:getStorageFolderById>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByIdResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
```

```

    <return>
      <status>
        <statusCode>OK</statusCode>
      </status>
      <storageFolder>
        <certPublic/>
        <eid>0000</eid>
        <emailTls>>false</emailTls>
        <exportTarget>>false</exportTarget>
        <exportTargetEveryone>>true</exportTargetEveryone>
        <id>2</id>
        <name>Amazon S3 TEST</name>
        <path>verbatest</path>
        <serverName>eu-west-1</serverName>
        <storageType>amazon_s3</storageType>
        <userLogin>.....</userLogin>
        <userPassword>.....</userPassword>
      </storageFolder>
    </return>
  </ns2:getStorageFolderByIdResponse>
</S:Body>
</S:Envelope>

```

▼ Example GetStorageFolderById transaction with bad id in the request.

Example GetStorageFolderById transaction with bad id in the request.

Request :

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStorageFolderById>
      <token>jA994t1I4jS6kbb4ENvKYThglekdi2wz</token>
      <id>4</id>
    </v3:getStorageFolderById>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByIdResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>No such Storage Target: id=4</message>
          <statusCode>ERROR_NOT_FOUND</statusCode>
        </status>
      </return>
    </ns2:getStorageFolderByIdResponse>
  </S:Body>
</S:Envelope>

```

GetStorageFolderByName (v3)

Overview

Returns a Storage Folder information by name.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	The requested Storage Folder's eid	Mandatory
name	String	The requested Storage Folder's name	Mandatory

Response

Parameters of the API response in **GetStorageFolderByName** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND
StorageFolder	StorageFolder	

Examples

▼ Example GetStorageFolderByName transaction.

Example GetStorageFolderByName transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStorageFolderByName>
      <token>h0QNnaRB5dX5RXJULcmiFT9MpKX2VPZTz</token>
      <eid>0000</eid>
      <name>Amazon S3 TEST</name>
    </v3:getStorageFolderByName>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByNameResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolder>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>false</emailTls>
          <exportTarget>>false</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>2</id>
          <name>Amazon S3 TEST</name>
          <path>verbatest</path>
          <serverName>eu-west-1</serverName>
          <storageType>amazon_s3</storageType>
          <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
          <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaIVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab</us
        </storageFolder>
      </return>
    </ns2:getStorageFolderByNameResponse>
  </S:Body>
</S:Envelope>

```

▼ Example GetStorageFolderByName transaction with bad name in the request.

Example GetStorageFolderByName transaction with bad name in the request.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStorageFolderByName>
      <token>jA994t1I4jS6kbb4ENvKYThglekdi2wz</token>
      <eid>0000</eid>
      <name>NotExists</name>
    </v3:getStorageFolderByName>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByNameResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>No such Storage Target: {ENVIRONMENT: eid=0000 (exact)} name=EWS</messag
          <statusCode>ERROR_NOT_FOUND</statusCode>
        </status>
      </return>
    </ns2:getStorageFolderByNameResponse>
  </S:Body>
</S:Envelope>

```


GetStoragePolicyById (v3)

Overview

Returns a Storage Policy information by id.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
id	Integer	The requested Storage Policy's id	Mandatory

Response

Parameters of the API response in **GetStoragePolicyById** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example GetStoragePolicyById transaction.

Example GetStoragePolicyById transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStoragePolicyById>
      <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
      <id>3</id>
    </v3:getStoragePolicyById>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStoragePolicyByIdResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
```

```

<status>
  <statusCode>OK</statusCode>
</status>
<storagePolicy>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>
  <decrypt>>true</decrypt>
  <eid>0000</eid>
  <enabled>>false</enabled>
  <firstTranscode>>false</firstTranscode>
  <format>mp3</format>
  <id>3</id>
  <keepCdr>>false</keepCdr>
  <moveToRecycleBin>>false</moveToRecycleBin>
  <name>Amazon testy</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>0</olderThanYears>
  <onlyForArchived>>false</onlyForArchived>
  <priority>10</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailTls>>false</emailTls>
    <exportTarget>>false</exportTarget>
    <exportTargetEveryone>>true</exportTargetEveryone>
    <id>2</id>
    <name>Amazon S3 TEST</name>
    <path>verbatest</path>
    <serverName>eu-west-1</serverName>
    <storageType>amazon_s3</storageType>
    <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
    <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaiVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
  </storageFolder>
</storagePolicy>
</return>
</ns2:getStoragePolicyByIdResponse>
</S:Body>
</S:Envelope>

```

▼ Example GetStoragePolicyById transaction.

Example GetStoragePolicyById transaction.

Request :

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStoragePolicyById>
      <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
      <id>6</id>
    </v3:getStoragePolicyById>
  </soapenv:Body>
</soapenv:Envelope>

```

Response :

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStoragePolicyByIdResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>

```

```
<enabled>>false</enabled>
<firstTranscode>>false</firstTranscode>
<id>6</id>
<keepCdr>>false</keepCdr>
<moveToRecycleBin>>false</moveToRecycleBin>
<name>EWS Test Export</name>
<olderThanMinutes>0</olderThanMinutes>
<olderThanYears>0</olderThanYears>
<onlyForArchived>>false</onlyForArchived>
<priority>40</priority>
<storageFolder>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>8</id>
  <name>EWS Test</name>
  <path>Ingestion@VerbaTest.ccsctp.net</path>
  <port>443</port>
  <serverName>https://3rdpartyingestio.cloudapp.net/service/ThirdPartyIngestion.s
  <storageType>ews</storageType>
  <userLogin>Ingestion@VerbaTest.ccsctp.net</userLogin>
  <userPassword>.....</userPassword>
</storageFolder>
</storagePolicy>
</return>
</ns2:getStoragePolicyByIdResponse>
</S:Body>
</S:Envelope>
```

GetStoragePolicyByName (v3)

Overview

Returns a Storage Policy information by name.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	The requested Storage Policy's eid	Mandatory
name	String	The requested Storage Policy's name	Mandatory

Response

Parameters of the API response in **GetStoragePolicyByName** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example GetStoragePolicyByName transaction.

Example GetStoragePolicyByName transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getStoragePolicyByName>
      <token>kmViATcGv0fqsPgBmsiUn47Bm8U811WX</token>
      <eid>0000</eid>
      <name>ASDF002</name>
    </v3:getStoragePolicyByName>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
```

```
<ns2:getStoragePolicyByNameResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
  <return>
    <status>
      <statusCode>OK</statusCode>
    </status>
    <storagePolicy>
      <action>export</action>
      <callFilter>WHERE section.owner_eid = '0000'</callFilter>
      <customSql>>false</customSql>
      <decrypt>>true</decrypt>
      <eid>0000</eid>
      <enabled>>true</enabled>
      <firstTranscode>>false</firstTranscode>
      <id>1030</id>
      <keepCdr>>false</keepCdr>
      <moveToRecycleBin>>false</moveToRecycleBin>
      <name>ASDF002</name>
      <olderThanMinutes>0</olderThanMinutes>
      <olderThanYears>0</olderThanYears>
      <onlyForArchived>>false</onlyForArchived>
      <priority>250</priority>
      <storageFolder>
        <certPublic/>
        <eid>0000</eid>
        <emailTls>>true</emailTls>
        <exportTarget>>true</exportTarget>
        <exportTargetEveryone>>true</exportTargetEveryone>
        <id>8</id>
        <name>EWS Test</name>
        <path>Ingestion@VerbaTest.ccsctp.net</path>
        <port>443</port>
        <serverName>https://3rdpartyingestion.cloudapp.net/service/ThirdPartyIngestion.
        <storageType>ews</storageType>
        <userLogin>Ingestion@VerbaTest.ccsctp.net</userLogin>
        <userPassword>.....</userPassword>
      </storageFolder>
    </storagePolicy>
  </return>
</ns2:getStoragePolicyByNameResponse>
</S:Body>
</S:Envelope>
```

GetUserByLoginNameAndEnvironment (v3)

Overview

Returns a user.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
loginName	String		Mandatory
environment	String		Mandatory
environmentParamIsShortName	boolean		Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS
user	User	

Examples

▼ Example GetUserByLoginNameAndEnvironment transaction.

Example GetUserByLoginNameAndEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getUserByLoginNameAndEnvironment>
      <token>WnGS6R24I0e7An7YIHWWvC1LRA0avFzA</token>
      <loginName>verbatest</loginName>
      <environment>0000</environment>
      <environmentParamIsShortName>0</environmentParamIsShortName>
    </v3:getUserByLoginNameAndEnvironment>
```

```
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getUserByLoginNameAndEnvironmentResponse xmlns:ns2="http://v3.provisioning.ws.web.verb
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <user>
          <agentId/>
          <apiAccessOnly>>false</apiAccessOnly>
          <customDateFormat/>
          <customTimeFormat/>
          <displayName>Verba Test User</displayName>
          <eid>0000</eid>
          <email>verbatest@verbalabs.com</email>
          <environmentShortName>Ref.</environmentShortName>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>+12444</extension>
            <id>58</id>
            <im>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>true</voice>
          </extensions>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>12444</extension>
            <id>59</id>
            <im>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>true</voice>
          </extensions>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>verbatest@verbalabs.com</extension>
            <id>60</id>
            <im>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>true</voice>
          </extensions>
          <externalId/>
          <groupMemberships>
            <admin>true</admin>
            <group>
              <eid>0000</eid>
              <environmentShortName>Ref.</environmentShortName>
              <id>2</id>
              <name>Developers</name>
              <nonModifiable>>false</nonModifiable>
            </group>
            <member>true</member>
            <primary>true</primary>
            <supervisor>true</supervisor>
            <uniqueIdUnmodifiable>39</uniqueIdUnmodifiable>
          </groupMemberships>
        </user>
        <agentId/>
```

```
<apiAccessOnly>false</apiAccessOnly>
<customDateFormat/>
<customTimeFormat/>
<displayName>Verba Test User</displayName>
<eid>0000</eid>
<email>verbatest@verbalabs.com</email>
<environmentShortName>Ref.</environmentShortName>
<externalId/>
<id>36</id>
<language>en</language>
<locked>false</locked>
<loginName>verbatest</loginName>
<needChangePassword>false</needChangePassword>
<nonModifiable>false</nonModifiable>
<observerGroupId>0</observerGroupId>
<observerUserId>0</observerUserId>
<passwordExpires>false</passwordExpires>
<passwordHash>673as22ecba23ca</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-20T16:23:33.887Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</groupMemberships>
<id>36</id>
<language>en</language>
<locked>false</locked>
<loginName>verbatest</loginName>
<needChangePassword>false</needChangePassword>
<nonModifiable>false</nonModifiable>
<observerGroupId>0</observerGroupId>
<observerUserId>0</observerUserId>
<passwordExpires>false</passwordExpires>
<roles>r_standard_user</roles>
<roles>r_system_administrator</roles>
<roles>r_system_supervisor</roles>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
</return>
</ns2:getUserByLoginNameAndEnvironmentResponse>
</S:Body>
</S:Envelope>
```


GetVersion (v3)

Overview

Returns the API version.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
getVersion		Tells the system to return the currently used API's version	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	VersionResponse	Provision API version information.

Examples

▼ Example GetVersion transaction.

Example GetVersion transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:getVersion/>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getVersionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <parts>3</parts>
        <versionStr>v3</versionStr>
      </return>
    </ns2:getVersionResponse>
  </S:Body>
</S:Envelope>
```

ListAnnouncements (v3)

Overview

Returns a list of announcement audio files for an announcement type.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
type	AnnouncementTypeEnum	Defines what type of announcement files should be listed	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
announcements	List<String>	Announcement audio files of the filtered announcement type
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListAnnouncements transaction.

Example ListAnnouncements transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listAnnouncements>
      <token>YWygO3Nw0LlqWWThMKxBa18G3zQ8HKq3</token>
      <type>CONFERENCE</type>
    </v3:listAnnouncements>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listAnnouncementsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <announcements>This_Meeting_Is_Being_Recorded.wma</announcements>
        <announcements>This_Meeting_Is_Being_Recorded_other_file.wma</announcements>
        <announcements>This_Meeting_Is_Being_Recorded_other_file_2.wma</announcements>
      </return>
    </ns2:listAnnouncementsResponse>
  </S:Body>
</S:Envelope>
```

```
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:listAnnouncementsResponse>
</S:Body>
</S:Envelope>
```

ListEnvironments (v3)

Overview

Returns an environment list.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	EnvironmentFilter	Defines what environment to search for	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
environments	List< Environment >	Returned extensions (returned only if justCount in the filter parameter is false)
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListEnvironments transaction.

Example ListEnvironments transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listEnvironments>
      <token>h0QNnaRB5dX5RXJU1cmiFT9MpKX2VPZT</token>
      <filter>

      <!-- use eid or shortName, but not both
      <eid></eid>
      <eidExact>0</eidExact>
      -->

      <!--
      <shortName></shortName>
      <shortNameExact>0</shortNameExact>
      -->
```

```
        <!-- As I used neither of them it will list all -->
        <inactive>0</inactive>
    </filter>
</v3:listEnvironments>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listEnvironmentsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <environments>
          <displayName>Reference environment</displayName>
          <eid>0000</eid>
          <helpdeskURL>http://valami.hu</helpdeskURL>
          <inactive>false</inactive>
          <shortName>Ref.</shortName>
        </environments>
        <environments>
          <displayName>API test Environment</displayName>
          <eid>0001</eid>
          <helpdeskURL>http://help-menu-link.net</helpdeskURL>
          <inactive>false</inactive>
          <ondemandMaxCallAgeHoursInBuffer>72</ondemandMaxCallAgeHoursInBuffer>
          <ondemandMaxRowsInBufferPerUser>24</ondemandMaxRowsInBufferPerUser>
          <shortName>Tenant test shortname</shortName>
        </environments>
        <environments>
          <displayName>API test Environment</displayName>
          <eid>0002</eid>
          <helpdeskURL>http://help-menu-link.net</helpdeskURL>
          <inactive>false</inactive>
          <ondemandMaxCallAgeHoursInBuffer>72</ondemandMaxCallAgeHoursInBuffer>
          <ondemandMaxRowsInBufferPerUser>24</ondemandMaxRowsInBufferPerUser>
          <shortName>Tenant test 2 shortname</shortName>
        </environments>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listEnvironmentsResponse>
  </S:Body>
</S:Envelope>
```

ListExtensionRules (v3)

Overview

Returns a list of recording rules.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Environment ID of the tenant we are looking for	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
extensionRules	List< ExtensionRule >	List of available recording rules
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListExtensionRules transaction.

Example ListExtensionRules transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listExtensionRules>
      <token>YWygO3Nw0LlqWWThMKxBa18G3zQ8HKq3</token>
      <eid>0000</eid>
    </v3:listExtensionRules>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listExtensionRulesResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <extensionRules>
          <description>Description of the Dev Test Recording rule</description>
          <eid>0000</eid>
```

```
        <id>1</id>
        <name>Dev Test Recording rule</name>
    </extensionRules>
    <status>
        <statusCode>OK</statusCode>
    </status>
</return>
</ns2:listExtensionRulesResponse>
</S:Body>
</S:Envelope>
```

ListExtensions (v3)

Overview

Returns an extension list.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	ExtensionFilter	Defines what extensions to search for	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
extensionCount	Integer	Number of extensions returned (returned only if justCount in the filter parameter is true)
extensions	List< Extension >	Returned extensions (returned only if justCount in the filter parameter is false)
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS

Examples

▼ Example ListExtensions transaction.

Example ListExtensions transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listExtensions>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
```



```

-->
</environmentFilter>
<!-- <extension></extension> -->
<extensionExact>0</extensionExact>
<!-- <hasUser>1</hasUser> --> <!-- Commenting this line causes to list both user asso
<inactive>0</inactive>
<justCount>0</justCount>
</filter>
</v3:listExtensions>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listExtensionsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12003</extension>
          <id>47</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Krasznai Péter</displayName>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <id>25</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>peti</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-11-19T14:35:26.310Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
          </user>
          <video>true</video>
          <voice>true</voice>
        </extensions>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12778</extension>
          <id>49</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Istvan Toth</displayName>
            <eid>0000</eid>
            <email>toth@verbalabs.com</email>
            <environmentShortName>Ref.</environmentShortName>
            <id>27</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>toth</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
          </user>
        </extensions>
      </return>
    </ns2:listExtensionsResponse>
  </S:Body>
</S:Envelope>

```

```
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>l2401</extension>
    <id>53</id>
    <im>true</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>true</screenCaptureEnabled>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Wolf Attila</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>28</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>wolf</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>l2402</extension>
    <id>27</id>
    <im>true</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>true</screenCaptureEnabled>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Bajzat Tamas</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>13</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>bajzat</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>l2779</extension>
    <id>16</id>
```

```

<im>>false</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>>false</screenCaptureEnabled>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>mate</displayName>
  <eid>0000</eid>
  <email/>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>9</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>mate</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-10-12T15:47:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<video>>false</video>
<voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>12780</extension>
  <id>24</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Aron Diofasi</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>12</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>aron</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>>true</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>13403</extension>
  <id>2</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>

```

```

        <crmUserId/>
        <customDateFormat/>
        <customTimeFormat/>
        <displayName>olibali</displayName>
        <eid>0000</eid>
        <email/>
        <environmentShortName>Ref.</environmentShortName>
        <externalId/>
        <id>3</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>olibali</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-08-28T09:17:00Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>norbi@verbalabs.com</extension>
    <id>46</id>
    <im>true</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>true</screenCaptureEnabled>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Kakas Norbert</displayName>
        <eid>0000</eid>
        <email>kakas@verba.com</email>
        <environmentShortName>Ref.</environmentShortName>
        <id>24</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>norbi</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<status>
    <statusCode>OK</statusCode>
</status>
</return>
</ns2:listExtensionsResponse>
</S:Body>
</S:Envelope>

```

▼ Example ListExtensions transaction where the extensions has associated users.

Example ListExtensions transaction where the extensions has associated users.

Request :

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
    <soapenv:Header/>
    <soapenv:Body>
        <v3:listExtensions>

```

```

<token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
<filter>
  <environmentFilter>
    <eid>0000</eid>
    <eidExact>0</eidExact>
    <inactive>0</inactive>
    <!-- Needed if eid is not present
    <shortName></shortName>
    <shortNameExact></shortNameExact>
    -->
  </environmentFilter>
  <!-- <extension></extension> -->
  <extensionExact>0</extensionExact>
  <hasUser>1</hasUser>
  <inactive>0</inactive>
  <justCount>0</justCount>
</filter>
</v3:listExtensions>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listExtensionsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12003</extension>
          <id>47</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Krasznai Péter</displayName>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <id>25</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>peti</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-11-19T14:35:26.310Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
          </user>
          <video>true</video>
          <voice>true</voice>
        </extensions>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12007</extension>
          <id>30</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Szabolcs Daroczy</displayName>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <id>16</id>

```

```
<language>en</language>
<locked>>false</locked>
<loginName>daroczy</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<passwordHash>.....</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-11-19T14:35:26.310Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<video>>true</video>
<voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>+12011</extension>
  <id>41</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Moczar Gabor</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>23</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>moczar</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>true</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>+12401</extension>
  <id>52</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Wolf Attila</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>28</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>wolf</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
</extensions>
```

```
<video>true</video>
<voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>balazs@verbalabs.com</extension>
  <id>1</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>olibali</displayName>
    <eid>0000</eid>
    <email/>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>3</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>olibali</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-08-28T09:17:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>true</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>bartok@VERBALABS.COM</extension>
  <id>29</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Bartók István</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>15</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>bartoki</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>true</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
```

```
<extension>daroczy@VERBALABS.COM</extension>
<id>32</id>
<im>true</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>true</screenCaptureEnabled>
<user>
  <apiAccessOnly>false</apiAccessOnly>
  <displayName>Szabolcs Daroczy</displayName>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <id>16</id>
  <language>en</language>
  <locked>false</locked>
  <loginName>daroczy</loginName>
  <needChangePassword>false</needChangePassword>
  <nonModifiable>false</nonModifiable>
  <passwordExpires>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-11-19T14:35:26.310Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<video>true</video>
<voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>fenyvesi@VERBALABS.COM</extension>
  <id>33</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Fenyvesi Gabor</displayName>
    <eid>0000</eid>
    <email>gfenyvesi@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>17</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>fenyvesi</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>true</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>iptradeTest1</extension>
  <id>8</id>
  <im>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>false</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
```



```

    <displayName>IPTUser1</displayName>
    <eid>0000</eid>
    <email/>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>6</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>IPTUser1</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-15T12:16:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>iptradeTest2</extension>
  <id>9</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>IPTUser2</displayName>
    <eid>0000</eid>
    <email>Abdula@VerbaMstTest.ccsctp.net</email>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>7</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>IPTUser2</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-15T12:17:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>jim@VERBALABS.COM</extension>
  <id>36</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Jim Rusch</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>18</id>

```

```

        <language>en</language>
        <locked>>false</locked>
        <loginName>jim</loginName>
        <needChangePassword>>false</needChangePassword>
        <nonModifiable>>false</nonModifiable>
        <passwordExpires>>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>>true</video>
    <voice>>true</voice>
</extensions>
<status>
    <statusCode>OK</statusCode>
</status>
</return>
</ns2:listExtensionsResponse>
</S:Body>
</S:Envelope>

```

▼ Example ListExtensions transaction where the extension has no associated users.

Example ListExtensions transaction where the extension has no associated users.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listExtensions>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <extension></extension> -->
        <extensionExact>0</extensionExact>
        <hasUser>0</hasUser>
        <inactive>0</inactive>
        <justCount>0</justCount>
      </filter>
    </v3:listExtensions>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listExtensionsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12004</extension>
          <id>21</id>
          <im>>false</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>>false</screenCaptureEnabled>
          <video>>false</video>
          <voice>>true</voice>
        </extensions>
      </return>
    </ns2:listExtensionsResponse>
  </S:Body>
</S:Envelope>

```

```
<eid>0000</eid>
<environmentShortName>Ref.</environmentShortName>
<extension>l2004</extension>
<id>20</id>
<im>>false</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>>false</screenCaptureEnabled>
<video>>false</video>
<voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>l350</extension>
  <id>22</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>8888</extension>
  <id>13</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>chatroom</extension>
  <id>10</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>mgonzalez@verbalabs.com</extension>
  <id>19</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>ondemandchatroom</extension>
  <id>11</id>
  <im>>true</im>
  <recordingMode>ON_DEMAND</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>false</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>peter.krasznai@uptrack.com</extension>
  <id>17</id>
```

```
<im>false</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>false</screenCaptureEnabled>
<video>false</video>
<voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>peti@verbalabs.com</extension>
  <id>18</id>
  <im>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>false</screenCaptureEnabled>
  <video>false</video>
  <voice>true</voice>
</extensions>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:listExtensionsResponse>
</S:Body>
</S:Envelope>
```

ListForwardTypes (v3)

Overview

Returns a list of forwarding types.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_UNAUTHORIZED
forwardTypes	List< ForwardType >	Forward types list which can be associated to extensions

Examples

▼ Example ListForwardTypes transaction

Example ListForwardTypes transaction

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listForwardTypes>
      <token>YWygO3Nw0LlqWWThMKxBal8G3zQ8HKq3</token>
    </v3:listForwardTypes>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listForwardTypesResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <forwardTypes>
          <id>-1</id>
          <idStr>all</idStr>
          <name>All</name>
          <seq>100</seq>
        </forwardTypes>
      <forwardTypes>
```

```
        <id>1</id>
        <idStr>fwd</idStr>
        <name>Forwarded</name>
        <seq>200</seq>
    </forwardTypes>
    <forwardTypes>
        <id>2</id>
        <idStr>xfer</idStr>
        <name>Transferred</name>
        <seq>300</seq>
    </forwardTypes>
    <forwardTypes>
        <id>3</id>
        <idStr>teamcall</idStr>
        <name>Team Call</name>
        <seq>400</seq>
    </forwardTypes>
    <forwardTypes>
        <id>4</id>
        <idStr>delegate</idStr>
        <name>Delegated</name>
        <seq>500</seq>
    </forwardTypes>
    <status>
        <statusCode>OK</statusCode>
    </status>
</return>
</ns2:listForwardTypesResponse>
</S:Body>
</S:Envelope>
```

ListGroups (v3)

Overview

Lists groups.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	GroupFilter	Filter parameters	Mandatory

Response

Parameters of the API response in **getGroups** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND• ERROR_TOO_MANY_RESULT
groupCount	Integer	Number of returned Groups (returned only if justCount in the filter parameter is true)
groups	Group	Group list (returned only if justCount in the filter parameter is false)

Examples

▼ Example ListGroups transaction with skipUsers false.

Example ListGroups transaction with skipUsers false.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listGroups>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
```

```

        <shortNameExact></shortNameExact>
        -->
    </environmentFilter>
<!-- <groupId></groupId> -->
<justCount>0</justCount>
<!-- <name></name> -->
<nameExact>0</nameExact>
<skipUsers>0</skipUsers>
<!-- <userLogin></userLogin> -->
<userLoginExact>0</userLoginExact>
<!-- <userName></userName> -->
<userNameExact>0</userNameExact>
    </filter>
</v3:listGroups>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <name>Default</name>
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<language>en</language>
<locked>>false</locked>
<loginName>lori</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<passwordHash>.....</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-11-19T14:35:26.310Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>23</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Moczar Gabor</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>23</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>moczar</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>24</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Kakas Norbert</displayName>
    <eid>0000</eid>
    <email>kakas@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>24</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>norbi</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
```

```
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>25</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Krasznai Péter</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>25</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>peti</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>26</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Somi Bencze</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>26</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>somi</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>27</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Istvan Toth</displayName>
    <eid>0000</eid>
    <email>toth@verbalabs.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>27</id>
    <language>en</language>
```

```

        <locked>false</locked>
        <loginName>toth</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
    <admin>false</admin>
    <member>true</member>
    <primary>true</primary>
    <supervisor>false</supervisor>
    <uniqueIdUnmodifiable>28</uniqueIdUnmodifiable>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Wolf Attila</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>28</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>wolf</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</groups>
<groups>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>2</id>
    <name>Developers</name>
    <nonModifiable>false</nonModifiable>
    <users>
        <admin>false</admin>
        <member>true</member>
        <primary>false</primary>
        <supervisor>true</supervisor>
        <uniqueIdUnmodifiable>31</uniqueIdUnmodifiable>
        <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Balázs Oláh</displayName>
            <eid>0000</eid>
            <email>olah@verba.com</email>
            <environmentShortName>Ref.</environmentShortName>
            <id>14</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>balazs</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>

```

```

        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:53:03.733Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
    <admin>true</admin>
    <member>true</member>
    <primary>false</primary>
    <supervisor>true</supervisor>
    <uniqueIdUnmodifiable>30</uniqueIdUnmodifiable>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Kakas Norbert</displayName>
        <eid>0000</eid>
        <email>kakas@verba.com</email>
        <environmentShortName>Ref.</environmentShortName>
        <id>24</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>norbi</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:53:03.687Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</groups>
<groups>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>3</id>
    <name>Sales</name>
    <nonModifiable>false</nonModifiable>
    <users>
        <admin>false</admin>
        <member>true</member>
        <primary>false</primary>
        <supervisor>false</supervisor>
        <uniqueIdUnmodifiable>33</uniqueIdUnmodifiable>
        <user>
            <agentId/>
            <apiAccessOnly>false</apiAccessOnly>
            <crmUserId/>
            <customDateFormat/>
            <customTimeFormat/>
            <displayName>IPTUser1</displayName>
            <eid>0000</eid>
            <email/>
            <environmentShortName>Ref.</environmentShortName>
            <externalId/>
            <id>6</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>IPTUser1</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-09-15T12:16:00Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
        </user>
    </users>
</groups>

```

```

        </user>
        <validFromUnmodifiable>2015-11-19T14:53:33.343Z</validFromUnmodifiable>
        <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
    </users>
    <users>
        <admin>>false</admin>
        <member>>true</member>
        <primary>>false</primary>
        <supervisor>>false</supervisor>
        <uniqueIdUnmodifiable>32</uniqueIdUnmodifiable>
        <user>
            <agentId/>
            <apiAccessOnly>>false</apiAccessOnly>
            <crmUserId/>
            <customDateFormat/>
            <customTimeFormat/>
            <displayName>IPTUser2</displayName>
            <eid>0000</eid>
            <email>Abdula@VerbaMsftTest.ccsctp.net</email>
            <environmentShortName>Ref.</environmentShortName>
            <externalId/>
            <id>7</id>
            <language>en</language>
            <locked>>false</locked>
            <loginName>IPTUser2</loginName>
            <needChangePassword>>false</needChangePassword>
            <nonModifiable>>false</nonModifiable>
            <passwordExpires>>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-09-15T12:17:00Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
        </user>
        <validFromUnmodifiable>2015-11-19T14:53:33.337Z</validFromUnmodifiable>
        <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
    </users>
</groups>
<status>
    <statusCode>OK</statusCode>
</status>
</return>
</ns2:listGroupsResponse>
</S:Body>
</S:Envelope>

```

▼ Example ListGroups transaction with skipUsers true.

Example ListGroups transaction with skipUsers true.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listGroups>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <groupId></groupId> -->
        <justCount>0</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>1</skipUsers>

```

```

        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
    </filter>
</v3:listGroups>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <name>Default</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>Developers</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>3</id>
          <name>Sales</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>

```

▼ Example ListGroups just count while skipUsers is false.

Example ListGroups just count while skipUsers is false.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listGroups>
      <token>uMeNlt2mG5K3l7lMeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <groupId></groupId> -->
        <justCount>1</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>0</skipUsers>
        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
      </filter>
    </v3:listGroups>
  </soapenv:Body>
</soapenv:Envelope>

```

```

        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
    </filter>
</v3:listGroups>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <groupCount>32</groupCount> <!-- In request skipUsers is false so we count group memb
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>

```

▼ Example ListGroups just count while skipUsers is true.

Example ListGroups just count while skipUsers is true.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listGroups>
      <token>uMeNlt2mG5K3l7lMeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <groupId></groupId> -->
        <justCount>1</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>1</skipUsers>
        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
      </filter>
    </v3:listGroups>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <groupCount>3</groupCount> <!-- In request skipUsers is true so we count groups only
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>

```

```
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>
```

▼ Example ListGroups filtering for group id.

Example ListGroups filtering for group id.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listGroups>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <groupId>2</groupId>
        <justCount>0</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>1</skipUsers>
        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
      </filter>
    </v3:listGroups>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>Developers</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>
```


ListImportSources (v3)

Overview

Returns a list of import sources.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_UNAUTHORIZED• ERROR_TOO_MANY_RESULT
importSources	List< ImportSource >	List of import sources

Examples

▼ Example ListImportSources transaction

Example ListImportSources transaction

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listImportSources>
      <token>YWygO3Nw0LlqWWThMKxBa18G3zQ8HKq3</token>
      <eid>0000</eid>
    </v3:listImportSources>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listImportSourcesResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <importSources>
          <id>-1</id>
          <name>All</name>
        </importSources>
      </return>
    </ns2:listImportSourcesResponse>
  </S:Body>
</S:Envelope>
```

```
<importSources>
  <id>1</id>
  <name>Generic import source</name>
</importSources>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:listImportSourcesResponse>
</S:Body>
</S:Envelope>
```

ListSites (v3)

Overview

Returns a list of sites.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
sites	List< Site >	List of available approval workflows
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_UNAUTHORIZED• ERROR_TOO_MANY_RESULT

Examples

▼ Example ListSites transaction.

Example ListSites transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listSites>
      <token>YWygO3Nw0LlqWWThMKxBa18G3zQ8HKq3</token>
    </v3:listSites>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listSitesResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <sites>
          <description>Test purpose</description>
          <id>76FA85F2-924E-45A3-9C2A-40293AA30FE5</id>
          <name>Test site</name>
          <settingsJSON>{}</settingsJSON>
        </sites>
      </return>
    </ns2:listSitesResponse>
  </S:Body>
</S:Envelope>
```

```
        <siteGroup>false</siteGroup>
    </sites>
    <status>
        <statusCode>OK</statusCode>
    </status>
</return>
</ns2:listSitesResponse>
</S:Body>
</S:Envelope>
```

ListSourcePlatforms (v3)

Overview

Returns a list of recorded platforms.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_UNAUTHORIZED
sourcePlatforms	List< SourcePlatform >	List of recorded platforms

Examples

▼ Example ListSourcePlatforms transaction

Example ListSourcePlatforms transaction

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listSourcePlatforms>
      <token>YWygO3Nw0LlqWWThMKxBal8G3zQ8HKq3</token>
    </v3:listSourcePlatforms>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listSourcePlatformsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <sourcePlatforms>
          <id>acme-sip</id>
          <name>ACME SIPREC</name>
        </sourcePlatforms>
        <sourcePlatforms>
          <id>analogue</id>
          <name>Analogue</name>
        </sourcePlatforms>
      </return>
    </ns2:listSourcePlatformsResponse>
  </S:Body>
</S:Envelope>
```

```
</sourcePlatforms>
<sourcePlatforms>
  <id>avaya-dmcc</id>
  <name>Avaya DMCC/MR</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>avaya-sbce</id>
  <name>Avaya SBCE</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>bosch-tx</id>
  <name>Bosch Telex</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>broadsoft-sip</id>
  <name>BroadSoft SIPREC</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>cisco-cube</id>
  <name>Cisco CUBE</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>cisco-ew</id>
  <name>Cisco EW</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>cisco-gw</id>
  <name>Cisco Gateway</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>cisco-im</id>
  <name>Cisco IM</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>mediasense</id>
  <name>Cisco MediaSense</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>cisco-network</id>
  <name>Cisco Network Based</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>cisco-sccp</id>
  <name>Cisco SCCP</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>cloud9</id>
  <name>Cloud9</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>erecorderhd</id>
  <name>CyberTwice eRecorder HD</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>dialin</id>
  <name>Dial-in Recording</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>generic</id>
  <name>Generic</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>h323</id>
  <name>Generic H.323</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>generic-rtp</id>
  <name>Generic RTP</name>
</sourcePlatforms>
<sourcePlatforms>
```

```
<id>sip</id>
  <name>Generic SIP</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>generic-sip</id>
  <name>Generic SIPREC</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>genesys-tserver</id>
  <name>Genesys T-Server</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>huawei</id>
  <name>Huawei UC</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>ip-trade</id>
  <name>IP Trade</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>ipc-unigy</id>
  <name>IPC Unigy</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>metaswitch-sip</id>
  <name>Metaswitch Perimeta SIPREC</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>msteams</id>
  <name>Microsoft Teams</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>msteams-im</id>
  <name>Microsoft Teams IM</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>sfb</id>
  <name>SfB/Lync</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>sfb-ew</id>
  <name>SfB/Lync EW</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>generic-smpp</id>
  <name>SMS (SMPP)</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>speakerbus</id>
  <name>Speakerbus</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>tango</id>
  <name>Tango Networks</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>truphone</id>
  <name>Truphone</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>restapi</id>
  <name>Verba REST API</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>verint</id>
  <name>Verint</name>
</sourcePlatforms>
<sourcePlatforms>
  <id>alphacom</id>
  <name>Zenitel AlphaCom</name>
```

```
        </sourcePlatforms>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listSourcePlatformsResponse>
  </S:Body>
</S:Envelope>
```


ListStorageFolders (v3)

Overview

Lists Storage Folders.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	StorageFolderFilter	Storage folder filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	GetStorageFoldersResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListStorageFolders transaction.

Example ListStorageFolders transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listStorageFolders>
      <token>TvmWUbL3w0H5G1ajgh1fCjfc6wtOA537</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <id></id> -->
        <!-- <name></name> -->
      </filter>
    </v3:listStorageFolders>
```

```
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStorageFoldersResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>false</emailTls>
          <exportTarget>>true</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>17</id>
          <name>AAA-TSM</name>
          <path>fileSpace</path>
          <storageType>tsm</storageType>
          <userLogin/>
          <userPassword>Ogrwt40fRps=</userPassword>
        </storageFolders>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>false</emailTls>
          <exportTarget>>false</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>2</id>
          <name>Amazon S3 TEST</name>
          <path>verbatest</path>
          <serverName>eu-west-1</serverName>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolders>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>true</emailTls>
          <exportTarget>>true</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>8</id>
          <name>EWS Test</name>
          <path>IngestionMbx@VerbaMsftTest.ccsctp.net</path>
          <port>443</port>
          <serverName>https://3rdpartyingestion.cloudapp.net/service/ThirdPartyIngestion.svc</serverName>
          <storageType>ews</storageType>
          <userLogin>IngestionMbx@VerbaTest.ccsctp.com</userLogin>
          <userPassword>.....</userPassword>
        </storageFolders>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>false</emailTls>
          <exportTarget>>false</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>18</id>
          <name>mr-for-upload</name>
          <path>c:\xyz</path>
          <port>20111</port>
          <serverName>mr</serverName>
          <storageType>mr</storageType>
          <userLogin/>
          <userPassword>.....</userPassword>
        </storageFolders>
      </storageFolders>
    </ns2:listStorageFoldersResponse>
  </S:Body>
</S:Envelope>
```

```
<eid>0000</eid>
<emailTls>>false</emailTls>
<exportTarget>>false</exportTarget>
<exportTargetEveryone>>true</exportTargetEveryone>
<id>1</id>
<name>Recycle Bin</name>
<path>C:\Program Files (x86)\Verba\media\recycle-bin</path>
<port>20111</port>
<storageType>mr</storageType>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>false</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>12</id>
  <name>RS1</name>
  <path>\\RS\SHARE</path>
  <storageType>nas</storageType>
  <userLogin>verbalabs\svc_storage3</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>19</id>
  <name>SFTP - Storage Target</name>
  <path>/C:/sftp_verba/my_media_folder</path>
  <port>22</port>
  <serverName>192.168.1.141</serverName>
  <storageType>sftp</storageType>
  <userLogin>Administrator</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verbalabs.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>14</id>
  <name>smtp test1</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>16</id>
  <name>Tivoli</name>
  <path>VERBA</path>
  <storageType>tsm</storageType>
  <userLogin/>
  <userPassword>.....</userPassword>
</storageFolders>
</return>
</ns2:listStorageFoldersResponse>
</S:Body>
```

</S:Envelope>

▼ Example ListStorageFolders, filtering for a specific Storage Folder name.

Example ListStorageFolders filtering for a specific Storage Folder name.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listStorageFolders>
      <token>TvmWUbl3w0H5G1ajgh1fcJfc6wtOA537</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <id></id> -->
        <name>Amazon S3 Test</name>
      </filter>
    </v3:listStorageFolders>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStorageFoldersResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>false</emailTls>
          <exportTarget>false</exportTarget>
          <exportTargetEveryone>true</exportTargetEveryone>
          <id>2</id>
          <name>Amazon S3 TEST</name>
          <path>verbatest</path>
          <serverName>eu-west-1</serverName>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolders>
      </return>
    </ns2:listStorageFoldersResponse>
  </S:Body>
</S:Envelope>
```

ListStorageFoldersByEid (v3)

Overview

Lists Storage Folders by eid.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Storage folder eid filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	GetStorageFoldersResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListStorageFoldersByEid transaction.

Example ListStorageFoldersByEid transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listStorageFoldersByEid>
      <token>iVHqMY3IpaK0X7Vf5QHxoalxtQUwrtTt</token>
      <eid>0000</eid>
    </v3:listStorageFoldersByEid>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStorageFoldersByEidResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listStorageFoldersByEidResponse>
  </S:Body>
</S:Envelope>
```

```
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>17</id>
  <name>AAA-TSM</name>
  <path>fileSpace</path>
  <storageType>tsm</storageType>
  <userLogin/>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verba.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>5</id>
  <name>HP Digital Safe Storage Target</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verba.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>false</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>13</id>
  <name>Kaimanó</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verbalabs.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>14</id>
  <name>smtp test1</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
</return>
</ns2:listStorageFoldersByEidResponse>
</S:Body>
</S:Envelope>
```

ListStoragePolicies (v3)

Overview

Lists Storage Policies.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	StoragePolicyFilter	Storage Policy filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicies	List< storagePolicies >	

Examples

▼ Example ListStoragePolicies transaction. Filter: eid == '0000' and action == 'upload'.

Example ListStoragePolicies transaction. Filter: eid == '0000' and action == 'upload'.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listStoragePolicies>
      <token>iVHqMY3IpaK0X7Vf5QHxoalxtQUwrtTt</token>
      <filter>
        <action>upload</action>
        <inactive>0</inactive>
        <!-- <name></name> -->
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <!--
          <shortName></shortName>
          <shortNameExact>?</shortNameExact>
          -->
```

```

        <inactive>0</inactive>
      </environmentFilter>
    </filter>
  </v3:listStoragePolicies>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStoragePoliciesResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicies>
          <action>upload</action>
          <callFilter>WHERE section.owner_eid = '0000'
AND section.source_caller_id = 'xxx'</callFilter>
          <customSql>>false</customSql>
          <decrypt>true</decrypt>
          <eid>0000</eid>
          <enabled>true</enabled>
          <firstTranscode>>false</firstTranscode>
          <format>pcml6</format>
          <id>1022</id>
          <keepCdr>>false</keepCdr>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>test-upload</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>200</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>true</exportTargetEveryone>
            <id>18</id>
            <name>mr-for-upload</name>
            <path>c:\xyz</path>
            <port>20111</port>
            <serverName>mr</serverName>
            <storageType>mr</storageType>
            <userLogin/>
            <userPassword>Ogrwt4OfRps=</userPassword>
          </storageFolder>
        </storagePolicies>
      </return>
    </ns2:listStoragePoliciesResponse>
  </S:Body>
</S:Envelope>

```

▼ Example ListStoragePolicies transaction. Filter: eid == '0000' and name == 'Test Data Retention'.

Example ListStoragePolicies transaction. Filter: eid == '0000' and action == 'upload'.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listStoragePolicies>
      <token>iVHqMY3IpaKOX7Vf5QHxoalxtQUwrtTt</token>
      <filter>
        <!-- <action></action> -->
        <inactive>0</inactive>
        <name>Test Data Retention</name>
        <environmentFilter>
          <eid>0000</eid>

```



```
        <eidExact>0</eidExact>
    <!--
    <shortName></shortName>
    <shortNameExact>?</shortNameExact>
    -->
    <inactive>0</inactive>
</environmentFilter>
</filter>
</v3:listStoragePolicies>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStoragePoliciesResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicies>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>
          <enabled>>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format>mp3</format>
          <id>1036</id>
          <keepCdr>>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>33</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
            <storageType>amazon_s3</storageType>
            <userLogin>.....</userLogin>
            <userPassword>.....</userPassword>
          </storageFolder>
        </storagePolicies>
      </return>
    </ns2:listStoragePoliciesResponse>
  </S:Body>
</S:Envelope>
```

ListStoragePoliciesByEid (v3)

Overview

Lists Storage Policies by eid.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Storage Policy eid filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicies	List< storagePolicies >	

Examples

▼ Example ListStoragePoliciesByEid transaction.

Example ListStoragePoliciesByEid transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listStoragePoliciesByEid>
      <token>E4d4Amg764HUz1rjRKfg0acE0qmdjoas</token>
      <eid>0000</eid>
    </v3:listStoragePoliciesByEid>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStoragePoliciesByEidResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
```

```

<status>
  <statusCode>OK</statusCode>
</status>
<storagePolicies>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>
  <decrypt>>true</decrypt>
  <eid>0000</eid>
  <enabled>>false</enabled>
  <firstTranscode>>false</firstTranscode>
  <id>1020</id>
  <keepCdr>>false</keepCdr>
  <moveToRecycleBin>>false</moveToRecycleBin>
  <name>AAA-TSM-Policy</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>1</olderThanYears>
  <onlyForArchived>>false</onlyForArchived>
  <priority>180</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailTls>>false</emailTls>
    <exportTarget>>true</exportTarget>
    <exportTargetEveryone>>true</exportTargetEveryone>
    <id>17</id>
    <name>AAA-TSM</name>
    <path>fileSpace</path>
    <storageType>tsm</storageType>
    <userLogin/>
    <userPassword>.....</userPassword>
  </storageFolder>
</storagePolicies>
<storagePolicies>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>
  <decrypt>>true</decrypt>
  <eid>0000</eid>
  <enabled>>false</enabled>
  <firstTranscode>>false</firstTranscode>
  <id>1015</id>
  <keepCdr>>false</keepCdr>
  <moveToRecycleBin>>false</moveToRecycleBin>
  <name>test</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>0</olderThanYears>
  <onlyForArchived>>false</onlyForArchived>
  <priority>140</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailFrom>info@verbalabs.com</emailFrom>
    <emailTls>true</emailTls>
    <exportTarget>true</exportTarget>
    <exportTargetEveryone>true</exportTargetEveryone>
    <id>14</id>
    <name>smtp test1</name>
    <path>olah@verba.com</path>
    <port>465</port>
    <serverName>smtp.gmail.com</serverName>
    <storageType>smtp</storageType>
    <userLogin>olah@verba.com</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</storagePolicies>
<storagePolicies>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>

```

```

    <decrypt>true</decrypt>
    <eid>0000</eid>
    <enabled>true</enabled>
    <engineId/>
    <firstTranscode>>false</firstTranscode>
    <format>mp3</format>
    <id>1036</id>
    <keepCdr>true</keepCdr>
    <languageId/>
    <moveToRecycleBin>>false</moveToRecycleBin>
    <name>Test Data Retention</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>>false</onlyForArchived>
    <priority>33</priority>
    <storageFolder>
      <certPublic/>
      <eid>0000</eid>
      <emailTls>>false</emailTls>
      <exportTarget>>false</exportTarget>
      <exportTargetEveryone>>true</exportTargetEveryone>
      <id>2</id>
      <name>Amazon S3 TEST</name>
      <path>verbatest</path>
      <serverName>eu-west-1</serverName>
      <storageType>amazon_s3</storageType>
      <userLogin>.....</userLogin>
      <userPassword>.....</userPassword>
    </storageFolder>
  </storagePolicies>
  <storagePolicies>
    <action>upload</action>
    <callFilter>WHERE section.owner_eid = '0000'
AND section.source_caller_id = 'xxx'</callFilter>
    <customSql>>false</customSql>
    <decrypt>true</decrypt>
    <eid>0000</eid>
    <enabled>true</enabled>
    <firstTranscode>>false</firstTranscode>
    <format>pcm16</format>
    <id>1022</id>
    <keepCdr>>false</keepCdr>
    <moveToRecycleBin>>false</moveToRecycleBin>
    <name>test-upload</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>>false</onlyForArchived>
    <priority>200</priority>
    <storageFolder>
      <certPublic/>
      <eid>0000</eid>
      <emailTls>>false</emailTls>
      <exportTarget>>false</exportTarget>
      <exportTargetEveryone>>true</exportTargetEveryone>
      <id>18</id>
      <name>mr-for-upload</name>
      <path>c:\xyz</path>
      <port>20111</port>
      <serverName>mr</serverName>
      <storageType>mr</storageType>
      <userLogin/>
      <userPassword>.....</userPassword>
    </storageFolder>
  </storagePolicies>
  <storagePolicies>
    <action>export</action>
    <callFilter>WHERE section.owner_eid = '0000'</callFilter>
    <customSql>>false</customSql>
    <decrypt>true</decrypt>
    <eid>0000</eid>

```

```
<enabled>false</enabled>
<firstTranscode>false</firstTranscode>
<id>1014</id>
<keepCdr>false</keepCdr>
<moveToRecycleBin>false</moveToRecycleBin>
<name>testy</name>
<olderThanMinutes>0</olderThanMinutes>
<olderThanYears>0</olderThanYears>
<onlyForArchived>false</onlyForArchived>
<priority>130</priority>
<storageFolder>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verba.com</emailFrom>
  <emailTls>true</emailTls>
  <exportTarget>false</exportTarget>
  <exportTargetEveryone>true</exportTargetEveryone>
  <id>13</id>
  <name>Kakimanó</name>
  <path>olaho@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olaho@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolder>
</storagePolicies>
<storagePolicies>
  <action>upload</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>false</customSql>
  <decrypt>true</decrypt>
  <eid>0000</eid>
  <enabled>false</enabled>
  <firstTranscode>false</firstTranscode>
  <format>pcm16</format>
  <id>1006</id>
  <keepCdr>false</keepCdr>
  <moveToRecycleBin>false</moveToRecycleBin>
  <name>upload to mr</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>0</olderThanYears>
  <onlyForArchived>false</onlyForArchived>
  <priority>50</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailTls>false</emailTls>
    <exportTarget>false</exportTarget>
    <exportTargetEveryone>true</exportTargetEveryone>
    <id>10</id>
    <name>MR1</name>
    <path>\\MR\SHARE</path>
    <storageType>nas</storageType>
    <userLogin>verbalabs\svc_storage1</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</storagePolicies>
</return>
</ns2:listStoragePoliciesByEidResponse>
</S:Body>
</S:Envelope>
```

ListUsers (v3)

Overview

Lists users.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	UserFilter	Filter parameters	Mandatory

Response

Parameters of the API response in **listUsers** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND• ERROR_TOO_MANY_RESULT
userCount	Integer	Number of returned Users (returned only if justCount in the filter parameter is true)
users	User	User list (returned only if justCount in the filter parameter is false)

Examples

▼ Example ListUsers transaction, skipping extension, group and role information.

Example ListUsers transaction, skipping extension, group and role information.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listUsers>
      <token>YWygO3Nw0LlqWWThMKxBal8G3zQ8HKq3</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!--
          <shortName></shortName>
```

```

        <shortNameExact></shortNameExact>
        -->
    </environmentFilter>
    <!-- <extension></extension> -->
    <extensionExact>0</extensionExact>
    <!-- <externalId></externalId> -->
    <externalIdExact>0</externalIdExact>
    <!-- <group></group> -->
    <groupExact>0</groupExact>
    <inactive>0</inactive>
    <justCount>0</justCount>
    <!-- <loginName></loginName> -->
    <loginNameExact>0</loginNameExact>
    <!-- <role></role> -->
    <roleExact>0</roleExact>

    <!-- skip extensions, group memberships, roles -->
    <skipExtensions>1</skipExtensions>
    <skipGroups>1</skipGroups>
    <skipRoles>1</skipRoles>
</filter>
</v3:listUsers>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listUsersResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <users>
          <apiAccessOnly>>false</apiAccessOnly>
          <displayName>Verba Administrator</displayName>
          <eid>0000</eid>
          <email/>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <language>en</language>
          <locked>>false</locked>
          <loginName>Administrator</loginName>
          <needChangePassword>>false</needChangePassword>
          <nonModifiable>>false</nonModifiable>
          <passwordExpires>>false</passwordExpires>
          <timeZone>Europe/Budapest</timeZone>
          <userType>user_type_verba</userType>
          <validFrom>2014-08-28T07:42:37.193Z</validFrom>
          <validTo>2099-12-31T00:00:00Z</validTo>
        </users>
        <users>
          <apiAccessOnly>>false</apiAccessOnly>
          <displayName>Aron Diofasi</displayName>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>12</id>
          <language>en</language>
          <locked>>false</locked>
          <loginName>aron</loginName>
          <needChangePassword>>false</needChangePassword>
          <nonModifiable>>false</nonModifiable>
          <passwordExpires>>false</passwordExpires>
          <timeZone>Europe/Budapest</timeZone>
          <userType>user_type_verba</userType>
          <validFrom>2015-11-19T14:35:26.310Z</validFrom>
          <validTo>2099-12-31T00:00:00Z</validTo>
        </users>
      </users>
    </ns2:listUsersResponse>
  </S:Body>
</S:Envelope>

```

```

        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Bajzat Tamas</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>13</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>bajzat</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </users>
</return>
</ns2:listUsersResponse>
</S:Body>
</S:Envelope>

```

Example ListUsers transaction. Filtering for a group. Skipping group information.

Example ListUsers transaction. Filtering for a group. Skipping group information.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listUsers>
      <token>YWygO3Nw0LlqWWThMKxBal8G3zQ8HKq3</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!--
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <extension></extension> -->
        <extensionExact>0</extensionExact>
        <!-- <externalId></externalId> -->
        <externalIdExact>0</externalIdExact>
        <group>Nest group2</group>
        <groupExact>0</groupExact>
        <inactive>0</inactive>
        <justCount>0</justCount>
        <!-- <loginName></loginName> -->
        <loginNameExact>0</loginNameExact>
        <!-- <role></role> -->
        <roleExact>0</roleExact>
        <skipExtensions>0</skipExtensions>
        <skipGroups>1</skipGroups>
        <skipRoles>0</skipRoles>
      </filter>
    </v3:listUsers>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listUsersResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <users>

```



```

<agentId/>
<apiAccessOnly>>false</apiAccessOnly>
<crmUserId/>
<customDateFormat/>
<customTimeFormat/>
<displayName>IPTUser2</displayName>
<eid>0000</eid>
<email>Abdula@VerbaMsftTest.ccsctp.net</email>
<environmentShortName>Ref.</environmentShortName>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>iptradeTest2</extension>
  <id>9</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<externalId/>
<id>7</id>
<language>en</language>
<locked>>false</locked>
<loginName>IPTUser2</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<roles>r_quality_management_agent</roles>
<roles>r_standard_user</roles>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-15T12:17:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</users>
<users>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>mate</displayName>
  <eid>0000</eid>
  <email/>
  <environmentShortName>Ref.</environmentShortName>
  <extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>+12779</extension>
    <id>15</id>
    <im>>false</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>>false</screenCaptureEnabled>
    <video>>false</video>
    <voice>>true</voice>
  </extensions>
  <extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>12779</extension>
    <id>16</id>
    <im>>false</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>>false</screenCaptureEnabled>
    <video>>false</video>
  </extensions>

```

▼ Example ListUsers transaction. Just count the users in a group.

Example ListUsers transaction. Just count the users in a group.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listUsers>
      <token>YWygO3Nw0LlqWWThMKxBal8G3zQ8HKq3</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- <shortName></shortName>
          <shortNameExact></shortNameExact> -->
        </environmentFilter>
        <!-- <extension></extension> -->
        <extensionExact>0</extensionExact>
        <!-- <externalId></externalId> -->
        <externalIdExact>0</externalIdExact>
        <group>Nest group2</group>
        <groupExact>0</groupExact>
        <inactive>0</inactive>
        <justCount>1</justCount> <!-- Just count is TRUE -->
        <!-- <loginName></loginName> -->
        <loginNameExact>0</loginNameExact>
        <!-- <role></role> -->
        <roleExact>0</roleExact>
        <!--
        <skipExtensions>0</skipExtensions>
        <skipGroups>0</skipGroups>
        <skipRoles>0</skipRoles>
        -->
      </filter>
    </v3:listUsers>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listUsersResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <userCount>4</userCount>
      </return>
    </ns2:listUsersResponse>
  </S:Body>
</S:Envelope>
```

ListWorkflows (v3)

Overview

Returns a list of announcement audio files for an announcement type.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Environment ID of the tenant we are looking for	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
workflows	List< Workflow >	List of available approval workflows
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_TOO_MANY_RESULT

Examples

▼ Example ListWorkflows transaction.

Example ListWorkflows transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:listWorkflows>
      <token>YWygO3Nw0LlqWWThMKxBa18G3zQ8HKq3</token>
      <eid>0000</eid>
    </v3:listWorkflows>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listWorkflowsResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
```

```
<statusCode>OK</statusCode>
</status>
<workflows>
  <autoApprove>true</autoApprove>
  <description>This workflow is intended to be used by Compliance Officers to genera
  <eid>0000</eid>
  <enabled>true</enabled>
  <existsRequest>false</existsRequest>
  <id>1004</id>
  <name>Auto-Approve workflow for Compliance Officers</name>
  <notifTemplateId>3</notifTemplateId>
  <notifTemplateLang>en</notifTemplateLang>
  <priority>20</priority>
</workflows>
<workflows>
  <autoApprove>false</autoApprove>
  <description/>
  <eid>0000</eid>
  <enabled>true</enabled>
  <existsRequest>true</existsRequest>
  <id>1</id>
  <name>Basic Approval Workflow</name>
  <notifTemplateId>3</notifTemplateId>
  <notifTemplateLang>en</notifTemplateLang>
  <priority>10</priority>
</workflows>
<workflows>
  <autoApprove>false</autoApprove>
  <description>This workflow is for external compliance officers who request access
  <eid>0000</eid>
  <enabled>true</enabled>
  <existsRequest>true</existsRequest>
  <id>2</id>
  <name>External investigator access</name>
  <notifTemplateId>3</notifTemplateId>
  <notifTemplateLang>en</notifTemplateLang>
  <priority>5</priority>
</workflows>
<workflows>
  <autoApprove>false</autoApprove>
  <description>2-step workflow for most users. Request sent to local manager first.
  <eid>0000</eid>
  <enabled>true</enabled>
  <existsRequest>false</existsRequest>
  <id>1002</id>
  <name>Standard company workflow</name>
  <notifTemplateId>3</notifTemplateId>
  <notifTemplateLang>en</notifTemplateLang>
  <priority>10</priority>
</workflows>
<workflows>
  <autoApprove>false</autoApprove>
  <description>3-step workflow designed for attorneys' requests in the US. First goe
  <eid>0000</eid>
  <enabled>true</enabled>
  <existsRequest>false</existsRequest>
  <id>1003</id>
  <name>US-specific attorney workflow</name>
  <notifTemplateId>3</notifTemplateId>
  <notifTemplateLang>en</notifTemplateLang>
  <priority>30</priority>
</workflows>
</return>
</ns2:listWorkflowsResponse>
</S:Body>
</S:Envelope>
```


ReleaseToken (v3)

Overview

Releases a token

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	Token to be deleted	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_UNAUTHORIZED

Examples

▼ Example ReleaseToken transaction.

Example ReleaseToken transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:releaseToken>
      <token>8VedLjOI56djHA5Q2SryAEmOaSuxF05m</token>
    </v3:releaseToken>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:releaseTokenResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:releaseTokenResponse>
  </S:Body>
</S:Envelope>
```

▼ Example ReleaseToken on an invalid token.

Example ReleaseToken on an invalid token.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:releaseToken>
      <token>8VedLj0I56djHA5Q2SryAEm0aSuXF05m</token>
    </v3:releaseToken>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:releaseTokenResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <message>This token is expired or never got authenticated.</message>
        <statusCode>ERROR_UNAUTHORIZED</statusCode>
      </return>
    </ns2:releaseTokenResponse>
  </S:Body>
</S:Envelope>
```

RequestToken (v3)

Overview

Requests an authentication token

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
eid	String		Mandatory
loginName	String	Login ID of the API user	Mandatory
password	String	Password of the API user	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
token	String	Token to be used in subsequent API calls

Examples

▼ Example RequestToken transaction.

Example RequestToken transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:requestToken>
      <eid>0000</eid>
      <loginName>verba_api_user</loginName>
      <password>api_user_password</password>
    </v3:requestToken>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
```



```

    <ns2:requestTokenResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <token>OLZqneyISmy5eoKeGE418X0nvzuu7L1</token>
      </return>
    </ns2:requestTokenResponse>
  </S:Body>
</S:Envelope>

```

▼ Example RequestToken transaction with bad password.

Example RequestToken transaction with bad password.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:requestToken>
      <eid>0000</eid>
      <loginName>verba_api_user</loginName>
      <password>api_user_wrong_password</password>
    </v3:requestToken>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:requestTokenResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>com.verba.web.user.UserNotFoundException</message>
          <statusCode>ERROR_GENERAL</statusCode>
        </status>
      </return>
    </ns2:requestTokenResponse>
  </S:Body>
</S:Envelope>

```

▼ Example RequestToken transaction with bad permissions.

Example RequestToken transaction with bad permissions.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:requestToken>
      <eid>0000</eid>
      <loginName>verba_standard_user</loginName>
      <password>api_user_password</password>
    </v3:requestToken>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:requestTokenResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>com.verba.web.api.KnownException: User should be a System Supervisor.</me
          <statusCode>ERROR_GENERAL</statusCode>
        </status>
      </return>
    </ns2:requestTokenResponse>
  </S:Body>
</S:Envelope>

```

UpdateEnvironment (v3)

Overview

Updates an environment.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
environment	Environment	Updated environment values	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example UpdateEnvironment transaction.

Example UpdateEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:updateEnvironment>
      <token>qJwKFPZ2wb2LPhcZbwhHh674Yu2rQtIv</token>
      <environment>
        <eid>0001</eid>
        <displayName>DisplayName</displayName>
        <helpdeskURL>www.thiat.net</helpdeskURL>
        <inactive>0</inactive>
        <ondemandMaxCallAgeHoursInBuffer>60</ondemandMaxCallAgeHoursInBuffer>
        <ondemandMaxRowsInBufferPerUser>60</ondemandMaxRowsInBufferPerUser>
        <!--Zero or more repetitions:-->
        <partitions>1000</partitions>
        <partitions>2000</partitions>
        <partitions>3000</partitions>
      </environment>
    </v3:updateEnvironment>
  </soapenv:Body>
</soapenv:Envelope>
```

```
        <shortName>ShortName</shortName>
    </environment>
</v3:updateEnvironment>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateEnvironmentResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:updateEnvironmentResponse>
  </S:Body>
</S:Envelope>
```

UpdateExtension (v3)

Overview

Updates an extension.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
extension	Extension	Specifies the extension	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example UpdateExtension transaction.

Example UpdateExtension transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:updateExtension>
      <token>FipASZ3Y336Kvmv7W1BV7aXY7hDFeMxq</token>
      <extension>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->

        <!-- The ID of the existing Extension can be queried with the GetExtension call -->
        <id>20100</id>

        <extensionId>verbatestuser2@verbalabs.com</extensionId>
```

```

<recordingModeType>CONTROLLED</recordingModeType>

<modalities>
  <modalitiesForWS>
    <directionsForWS>
      <id>-1</id>
    </directionsForWS>
    <id>voice</id>
  </modalitiesForWS>
  <modalitiesForWS>
    <directionsForWS>
      <id>-1</id>
    </directionsForWS>
    <id>im</id>
  </modalitiesForWS>
  <modalitiesForWS>
    <directionsForWS>
      <id>-1</id>
    </directionsForWS>
    <id>video</id>
  </modalitiesForWS>
</modalities>

<screenCaptureEnabled>1</screenCaptureEnabled>

<!--
  If the user tag is not present then the extension-user association will be deleted
  You should always be sure that you have a user tag with a valid ID in it!!
-->
<user>
  <id>25</id>
</user>

</extension>
</v3:updateExtension>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateExtensionResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:updateExtensionResponse>
  </S:Body>
</S:Envelope>

```

UpdateGroup (v3)

Overview

Updates a group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
group	Group	Specifies the updated group	Mandatory
updateUsers	boolean	Specifies whether to update the users section of the group or not	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
group	Group	

Examples

▼ Example UpdateGroup transaction without user update.

Example UpdateGroup transaction without user update.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:updateGroup>
      <token>fp9chQ4hA7vsa3Wymx8gxMF3vLo2Tu6G</token>
      <group>
        <eid>0000</eid>
        <!-- <environmentShortName></environmentShortName> -->
        <id>2</id>
        <name>New Group Name</name>
        <nonModifiable>0</nonModifiable>
      </group>
    </v3:updateGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

```
<updateUsers>0</updateUsers>
</v3:updateGroup>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateGroupResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>New Group Name</name>
          <nonModifiable>>false</nonModifiable>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>false</primary>
            <supervisor>>true</supervisor>
            <uniqueIdUnmodifiable>31</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>false</apiAccessOnly>
              <displayName>Balázs Oláh</displayName>
              <eid>0000</eid>
              <email>olah@verba.com</email>
              <environmentShortName>Ref.</environmentShortName>
              <id>14</id>
              <language>en</language>
              <locked>>false</locked>
              <loginName>balazs</loginName>
              <needChangePassword>>false</needChangePassword>
              <nonModifiable>>false</nonModifiable>
              <passwordExpires>>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-11-19T14:35:26.310Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-11-19T14:53:03.733Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
          <users>
            <admin>>true</admin>
            <member>>true</member>
            <primary>>false</primary>
            <supervisor>>true</supervisor>
            <uniqueIdUnmodifiable>30</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>false</apiAccessOnly>
              <displayName>Kakas Norbert</displayName>
              <eid>0000</eid>
              <email>kakas@verba.com</email>
              <environmentShortName>Ref.</environmentShortName>
              <id>24</id>
              <language>en</language>
              <locked>>false</locked>
              <loginName>norbi</loginName>
              <needChangePassword>>false</needChangePassword>
              <nonModifiable>>false</nonModifiable>
              <passwordExpires>>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-11-19T14:35:26.310Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
          </users>
        </group>
      </return>
    </ns2:updateGroupResponse>
  </S:Body>
</S:Envelope>
```

```

        <validFromUnmodifiable>2015-11-19T14:53:03.687Z</validFromUnmodifiable>
        <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
    </users>
    <users>
        <admin>true</admin>
        <member>true</member>
        <primary>true</primary>
        <supervisor>true</supervisor>
        <uniqueIdUnmodifiable>39</uniqueIdUnmodifiable>
    <user>
        <agentId/>
        <apiAccessOnly>false</apiAccessOnly>
        <customDateFormat/>
        <customTimeFormat/>
        <displayName>Verba Test User</displayName>
        <eid>0000</eid>
        <email>verbatest@verbalabs.com</email>
        <environmentShortName>Ref.</environmentShortName>
        <externalId/>
        <id>36</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>verbatest</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <observerGroupId>0</observerGroupId>
        <observerUserId>0</observerUserId>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-09-03T11:56:00Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-20T16:23:33.887Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</group>
<status>
    <statusCode>OK</statusCode>
</status>
</return>
</ns2:updateGroupResponse>
</S:Body>
</S:Envelope>

```

▼ Example UpdateGroup transaction. Delete all users except the one with id 36.

Example UpdateGroup transaction. Delete all users except the one with id 36.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:updateGroup>
      <token>s9GtyBR8vN3JXuwQoMsRtviEiX5zi0Wn</token>
      <group>
        <eid>0000</eid>
        <!-- <environmentShortName></environmentShortName> -->
        <id>2</id>
        <!-- <name>New group name</name> -->
        <nonModifiable>0</nonModifiable>

        <!--Zero or more repetitions:-->
        <users>
          <admin>1</admin>
          <member>1</member>
          <primary>1</primary>
          <supervisor>0</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>

```



```
<validFromUnmodifiable>0</validFromUnmodifiable>
<validUntilUnmodifiable>0</validUntilUnmodifiable>

<user>
  <id>36</id>
</user>

</users>

</group>
<updateUsers>1</updateUsers> <!-- Set to TRUE! -->
</v3:updateGroup>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateGroupResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>New group name</name>
          <nonModifiable>false</nonModifiable>
          <users>
            <admin>true</admin>
            <member>true</member>
            <primary>true</primary>
            <supervisor>false</supervisor>
            <uniqueIdUnmodifiable>51</uniqueIdUnmodifiable>
            <user>
              <agentId/>
              <apiAccessOnly>false</apiAccessOnly>
              <customDateFormat/>
              <customTimeFormat/>
              <displayName>Verba Test User</displayName>
              <eid>0000</eid>
              <email>verbatest@verbalabs.com</email>
              <environmentShortName>Ref.</environmentShortName>
              <externalId/>
              <id>36</id>
              <language>en</language>
              <locked>false</locked>
              <loginName>verbatest</loginName>
              <needChangePassword>false</needChangePassword>
              <nonModifiable>false</nonModifiable>
              <observerGroupId>0</observerGroupId>
              <observerUserId>0</observerUserId>
              <passwordExpires>false</passwordExpires>
              <passwordHash>673as22ecba23ca</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-09-03T11:56:00Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-11-26T16:34:51.037Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
        </group>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:updateGroupResponse>
  </S:Body>
</S:Envelope>
```

UpdateStorageFolder (v3)

Overview

Updates a Storage Folder.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storageFolder	StorageFolder	Updated Storage Folder information	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storageFolder	StorageFolder	

Examples

▼ Example UpdateStorageFolder transaction.

Example UpdateStorageFolder transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:updateStorageFolder>
      <token>2Q14vHt8txwHZZeVGuZuMVuP6Czgg0cX</token>
      <storageFolder>
        <!-- To understand each property you should:
          * login to the Verba Web Interface
          * create a dummy Storage Target
          * use the ListStorageFolders API call to get the dummy Storage Target's properties.
        -->
        <accountId></accountId>
        <apiLogin></apiLogin>
        <apiPassword></apiPassword>
```

```

    <apiUrl></apiUrl>
    <applicationId></applicationId>
    <certPublic></certPublic>
    <eid>0000</eid>
    <emailFrom></emailFrom>
    <emailTls>0</emailTls>
    <exportTarget>1</exportTarget>
    <exportTargetEveryone>0</exportTargetEveryone>
    <id>25</id>
    <name>Verba updated Storage Folder</name>
    <path>amazon_s3</path>
    <port>22</port>
    <serverName>eu-west-1</serverName>
    <snaplockVolume></snaplockVolume>
    <sourceId></sourceId>
    <storageType>amazon_s3</storageType>
    <userLogin>.....</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</v3:updateStorageFolder>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateStorageFolderResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolder>
          <accountId/>
          <apiLogin/>
          <apiPassword/>
          <apiUrl/>
          <applicationId/>
          <certPublic/>
          <eid>0000</eid>
          <emailFrom/>
          <emailTls>false</emailTls>
          <exportTarget>true</exportTarget>
          <exportTargetEveryone>false</exportTargetEveryone>
          <id>25</id>
          <name>Verba updated Storage Folder</name>
          <path>amazon_s3</path>
          <port>22</port>
          <serverName>eu-west-1</serverName>
          <snaplockVolume/>
          <sourceId/>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolder>
      </return>
    </ns2:updateStorageFolderResponse>
  </S:Body>
</S:Envelope>

```

UpdateStoragePolicy (v3)

Overview

Updates a Storage Policy.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storagePolicy	StoragePolicy	Specifies the updated Storage Policy	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example UpdateStoragePolicy transaction.

Example UpdateStoragePolicy transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:updateStoragePolicy>
      <token>2Q14vHt8txwHZZeVGuZuMVuP6Czgg0cX</token>
      <storagePolicy>
        <id>1038</id>
        <action>export</action>
        <callFilter>WHERE section.owner_eid = '0000'</callFilter>
        <customSql>>false</customSql>
        <decrypt>1</decrypt>
        <eid>0000</eid>
        <enabled>1</enabled>
        <engineId></engineId>
      </storagePolicy>
    </v3:updateStoragePolicy>
  </soapenv:Body>
</soapenv:Envelope>
```

```

    <firstTranscode>0</firstTranscode>
    <format></format>
    <keepCdr>1</keepCdr>
    <languageId></languageId>
    <moveToRecycleBin>0</moveToRecycleBin>
    <name>Test Data Retention</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>0</onlyForArchived>
    <priority>34</priority>

    <storageFolder>
      <id>2</id>
    </storageFolder>

  </storagePolicy>
</v3:updateStoragePolicy>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateStoragePolicyResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>
          <enabled>>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format/>
          <id>1038</id>
          <keepCdr>>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>34</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
            <storageType>amazon_s3</storageType>
            <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
            <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaiVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
          </storageFolder>
        </storagePolicy>
      </return>
    </ns2:updateStoragePolicyResponse>
  </S:Body>
</S:Envelope>

```


UpdateUser (v3)

Overview

Updates a user.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
user	User	Specifies the updated group	Mandatory
updateGroupMembership	boolean	Specifies if the update contains group membership changes too.	Optional

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
user	User	

Examples

▼ Example UpdateUser transaction with adding the user to a second group.

Example UpdateUser transaction with adding the user to a second group.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v3="http://v3.p
  <soapenv:Header/>
  <soapenv:Body>
    <v3:updateUser>
      <token>2Q14vHt8txwHZZeVGuZuMVuP6Czgg0cX</token>
    <updateGroupMembership>1</updateGroupMembership>
    <user>
      <agentId></agentId>
      <externalId></externalId>
      <crmUserId></crmUserId>

      <customDateFormat></customDateFormat>
```

```

<customTimeFormat></customTimeFormat>

<loginName>verbatestUpdate</loginName>
<needChangePassword>0</needChangePassword>
<displayName>Verba Test User</displayName>
<email>verbatestUpdate@verbalabs.com</email>
<userType>user_type_verba</userType> <!-- Standard user type -->

<eid>0000</eid>
<!-- Needed if eid is not present
<environmentShortName></environmentShortName>
-->

<!--Zero or more repetitions:-->
<extensions>
  <eid>0000</eid>
  <!-- Needed if eid is not present
  <environmentShortName></environmentShortName>
  -->

  <extension>+12444</extension>

  <recordingMode>FULL</recordingMode>
  <im>1</im>
  <voice>1</voice>
  <video>0</video>
  <screenCaptureEnabled>0</screenCaptureEnabled>
</extensions>
<extensions>
  <eid>0000</eid>
  <!-- Needed if eid is not present
  <environmentShortName></environmentShortName>
  -->
  <extension>12444</extension>

  <recordingMode>FULL</recordingMode>
  <im>1</im>
  <voice>1</voice>
  <video>0</video>
  <screenCaptureEnabled>0</screenCaptureEnabled>
</extensions>
<extensions>
  <eid>0000</eid>
  <!-- Needed if eid is not present
  <environmentShortName></environmentShortName>
  -->

  <extension>verbatestUpdate@verbalabs.com</extension>

  <recordingMode>FULL</recordingMode>
  <im>1</im>
  <voice>1</voice>
  <video>0</video>
  <screenCaptureEnabled>0</screenCaptureEnabled>
</extensions>

<!--Zero or more repetitions:-->
<groupMemberships>
  <member>1</member>
  <primary>1</primary>
  <supervisor>1</supervisor>
  <admin>1</admin>
  <group>
    <eid>0000</eid>
    <!-- <environmentShortName>?</environmentShortName>-->
    <id>2</id>
  </group>
  <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
  <validFromUnmodifiable>0</validFromUnmodifiable>
  <validUntilUnmodifiable>0</validUntilUnmodifiable>

```



```

        </groupMemberships>
<groupMemberships>
    <member>1</member>
    <primary>0</primary>
    <supervisor>0</supervisor>
    <admin>0</admin>
    <group>
        <eid>0000</eid>
        <!-- <environmentShortName>?</environmentShortName>-->
        <id>3</id>
    </group>
    <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
    <validFromUnmodifiable>0</validFromUnmodifiable>
    <validUntilUnmodifiable>0</validUntilUnmodifiable>
</groupMemberships>

<language>en</language>
<timeZone>Europe/Budapest</timeZone>
<locked>0</locked>
<nonModifiable>0</nonModifiable>
<observerGroupId></observerGroupId>
<observerUserId></observerUserId>
<passwordExpires>0</passwordExpires>
<passwordHash>MD5HASH("your-password")</passwordHash>
<!-- <recorderLinePIN></recorderLinePIN> -->

<apiAccessOnly>0</apiAccessOnly>

<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>

<!--Zero or more repetitions:-->
<roles>r_standard_user</roles>
<roles>r_system_supervisor</roles>
<roles>r_system_administrator</roles>

</user>
</v3:updateUser>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateUserResponse xmlns:ns2="http://v3.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <user>
          <agentId/>
          <apiAccessOnly>>false</apiAccessOnly>
          <customDateFormat/>
          <customTimeFormat/>
          <displayName>Verba Test User</displayName>
          <eid>0000</eid>
          <email>verbatestupdate@verbalabs.com</email>
          <environmentShortName>Ref.</environmentShortName>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>verbatestupdate@verbalabs.com</extension>
            <id>61</id>
            <im>>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>>true</voice>
          </extensions>
        </user>
      </return>
    </ns2:updateUserResponse>
  </S:Body>
</S:Envelope>

```

```

<externalId/>
<groupMemberships>
  <admin>true</admin>
  <group>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>2</id>
    <name>New group name</name>
    <nonModifiable>>false</nonModifiable>
  </group>
<member>true</member>
<primary>true</primary>
<supervisor>true</supervisor>
<uniqueIdUnmodifiable>56</uniqueIdUnmodifiable>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>Verba Test User</displayName>
  <eid>0000</eid>
  <email>verbatestupdate@verbalabs.com</email>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>40</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>verbatestupdate</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <observerGroupId>0</observerGroupId>
  <observerUserId>0</observerUserId>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-09-03T11:56:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-30T01:26:50.460Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</groupMemberships>
<groupMemberships>
  <admin>>false</admin>
  <group>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>3</id>
    <name>Other group name</name>
    <nonModifiable>>false</nonModifiable>
  </group>
<member>true</member>
<primary>>false</primary>
<supervisor>>false</supervisor>
<uniqueIdUnmodifiable>57</uniqueIdUnmodifiable>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>Verba Test User</displayName>
  <eid>0000</eid>
  <email>verbatestupdate@verbalabs.com</email>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>40</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>verbatestupdate</loginName>
  <needChangePassword>>false</needChangePassword>

```

```
        <nonModifiable>false</nonModifiable>
        <observerGroupId>0</observerGroupId>
        <observerUserId>0</observerUserId>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-09-03T11:56:00Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-30T01:26:50.460Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</groupMemberships>
<id>40</id>
<language>en</language>
<locked>false</locked>
<loginName>verbatestUpdate</loginName>
<needChangePassword>false</needChangePassword>
<nonModifiable>false</nonModifiable>
<observerGroupId>0</observerGroupId>
<observerUserId>0</observerUserId>
<passwordExpires>false</passwordExpires>
<roles>r_standard_user</roles>
<roles>r_system_administrator</roles>
<roles>r_system_supervisor</roles>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
</return>
</ns2:updateUserResponse>
</S:Body>
</S:Envelope>
```

Provisioning API (v3) Data Types

- [AnnouncementTypeEnum \(v3\)](#) — Possible announcement types.
- [ApplyExtensionConfigurationResponse \(v3\)](#) — Returned extension configuration information.
- [ApplyExtensionConfigurationResponseServer \(v3\)](#) — Represents the extension configuration.
- [CallSourceType \(v3\)](#) — Possible call source types.
- [CallStatistic \(v3\)](#) — Represents a call statistic.
- [CallStatisticsFilter \(v3\)](#) — Used to filter call statistic.
- [CallStatisticsType \(v3\)](#) — Possible call statistic types.
- [CreateOrUpdateGroupResponse \(v3\)](#) — Returned group create/update information.
- [CreateOrUpdateStorageFolderResponse \(v3\)](#) — Returned storage folder create/update information.
- [CreateOrUpdateStoragePolicyResponse \(v3\)](#) — Returned storage policy create/update information.
- [CreateOrUpdateUserResponse \(v3\)](#) — Returned user create/update information.
- [Direction \(v3\)](#) — Represents a recorded direction entity.
- [Environment \(v3\)](#) — Represents a tenant.
- [EnvironmentFilter \(v3\)](#) — Used to filter tenants.
- [Extension \(v3\)](#) — Represents a phone extension.
- [ExtensionRule \(v3\)](#) — Represents a recording rule entity.
- [ExtensionFilter \(v3\)](#) — Used to filter extensions.
- [ForwardType \(v3\)](#) — Represents call forwarding types.
- [GetAnnouncementsResponse \(v3\)](#) — Returned list of announcement files for one announcement type.
- [GetEnvironmentResponse \(v3\)](#) — Returned tenant information.
- [GetEnvironmentsResponse \(v3\)](#) — Returned tenant information for all tenants.
- [GetExtensionResponse \(v3\)](#) — Returned extension information.
- [GetExtensionRulesResponse \(v3\)](#) — Returned a list of recording rules.
- [GetExtensionsResponse \(v3\)](#) — Returned extension information for all extensions.
- [GetForwardTypeResponse \(v3\)](#) — Returned list of forwarding types
- [GetGroupMembershipResponse \(v3\)](#) — Returned group membership information.
- [GetGroupMembershipsResponse \(v3\)](#) — Returned group membership information for all group memberships.
- [GetGroupResponse \(v3\)](#) — Returned group information.
- [GetGroupsResponse \(v3\)](#) — Returned group information.
- [GetImportSourcesResponse \(v3\)](#) — Returned list of import sources
- [GetSitesResponse \(v3\)](#) — Returned list of sites.
- [GetSourcePlatformResponse \(v3\)](#) — Returned list of recorded platforms
- [GetStorageFolderResponse \(v3\)](#) — Returned storage folder information.
- [GetStorageFoldersResponse \(v3\)](#) — Returned storage folder information for all storage folders.
- [GetStoragePoliciesResponse \(v3\)](#) — Returned storage policies information for all storage policies.
- [GetStoragePolicyResponse \(v3\)](#) — Returned storage policy information.
- [GetUserResponse \(v3\)](#) — Returned user information.
- [GetUsersResponse \(v3\)](#) — Returned user information for all users.
- [GetVersionResponse \(v3\)](#) — Returned Provision API version information.
- [GetWorkflowsResponse \(v3\)](#) — Returned a list of approval workflows.
- [Group \(v3\)](#) — Represents a group.
- [GroupFilter \(v3\)](#) — Used to filter groups.
- [GroupMembership \(v3\)](#) — Represents a user.
- [GroupMembershipFilter \(v3\)](#) — Used to filter group memberships.
- [ImportSource \(v3\)](#) — Represents an import source entity.
- [Location \(v3\)](#) — Represents the location.
- [Modality \(v3\)](#) — Represents a modality entity.
- [PasswordFormat \(v3\)](#) — Possible password format type values.
- [RecordingModeType \(v3\)](#) — Possible recording mode types.
- [Site \(v3\)](#) — Represents a site entity.
- [SourcePlatform \(v3\)](#) — Represents a source platform entity for the Recorded platforms.
- [StatisticsResponse \(v3\)](#) — Response of call statistic requests.
- [Status \(v3\)](#) — Return status of API calls.
- [StatusCode \(v3\)](#) — Return code for API calls.
- [StorageFolder \(v3\)](#) — Represents a storage folder.
- [StorageFolderFilter \(v3\)](#) — Used to filter storage folders.

- [StoragePolicy \(v3\)](#) — Represents a storage policy.
- [StoragePolicyFilter \(v3\)](#) — Used to filter storage policies.
- [TokenResponse \(v3\)](#) — Response of token requests.
- [User \(v3\)](#) — Represents a user.
- [UserFilter \(v3\)](#) — Used to filter users.
- [Workflow \(v3\)](#) — Represents an approval workflow entity.
- [StoragePolicyAction \(v3\)](#) — Possible storage policy action types.

AnnouncementTypeEnum (v3)

Possible announcement types.
This is a simple enumerated **String** type.

Possible values:

Value
CONFERENCE
INBOUND
OUTBOUND
MOH
INBOUND_CISCO
OUTBOUND_CISCO

ApplyExtensionConfigurationResponse (v3)

Overview

Returned extension configuration information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
statuses	List< ApplyExtensionConfigurationResponseServer >	Statuses

ApplyExtensionConfigurationResponseServer (v3)

Overview

Represents the extension configuration.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
server	Location			
status	Status			

CallSourceType (v3)

Possible call source types.

This is a simple enumerated **String** type.

Possible values:

Value
ONLINE
ARCHIVED
BOTH

CallStatistic (v3)

Overview

Represents a call statistic.

Members

Member variables of the entity:

Member	Type	Description
eid	String	Tenant ID (if we asked tenant statistics)
shortName	String	Tenant name (if we asked tenant statistics)
numberOfCalls	Integer	Number of calls according to statistics filter
lengthOfCallsSeconds	Long	
userId	Integer	Internal ID of the user (if we asked user statistics)
loginName	String	Login name of user (if we asked user statistics)

CallStatisticsFilter (v3)

Overview

Used to filter call statistic.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
type	CallStatisticsType			
timeFrom	Date			
timeTo	Date			
source	CallSourceType			

CallStatisticsType (v3)

Possible call statistic types.
This is a simple enumerated **String** type.

Possible values:

Value
BY_ENVIRONMENT
BY_USER

CreateOrUpdateGroupResponse (v3)

Overview

Returned group create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
group	Group	Created/updated group information

CreateOrUpdateStorageFolderResponse (v3)

Overview

Returned storage folder create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storageFolder	StorageFolder	Created/updated Storage Folder information

CreateOrUpdateStoragePolicyResponse (v3)

Overview

Returned storage policy create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storagePolicy	StoragePolicy	Created/updated Storage Policy

CreateOrUpdateUserResponse (v3)

Overview

Returned user create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
user	User	Created/updated user

Direction (v3)

Overview

Represents a recorded direction entity.

Members

Member variables of the entity:

Member	Type	Description
id	Integer	Possible values for different directions: <ul style="list-style-type: none">• -1: All• 0: Internal• 1: PSTN In• 2: PSTN Out• 6: External• 10: Federated In• 11: Federated Out• 12: Contact Center In• 13: Contact Center Out• 14: Conference

Environment (v3)

Overview

Represents a tenant.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
eid	String	Enterprise ID (4 characters long identifier)	Needed if shortName is not present	4
shortName	String	Enterprise short name	Needed if eid is not present	64
displayName	String	Display name of the environment		64
inactive	boolean	No login allowed into inactive environments		
helpdeskURL	String	Web URL that points to the environment specific support page		100
ondemandMaxRowsInBufferPerUser	Integer	Number of calls kept in the ondemand call buffer per user		
ondemandMaxCallAgeHoursInBuffer	Integer	Maximum age of calls kept in the ondemand call buffer		
partitions	String	A list of CUCM partitions which enables the system to assign calls to configured tenants, and support non-unique recorded numbers across the tenants / partitions.	Zero or more repetitions	

EnvironmentFilter (v3)

Overview

Used to filter tenants.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
eid	String	ID of the tenant we are looking for	Needed if shortName is not present	4
eidExact	boolean	If true the eid parameter represents the complete ID, not a filter		
shortName	String	Name of the tenant we are looking for	Needed if eid is not present	64
shortNameExact	boolean	If true the shortName parameter represents the complete name, not a filter		
inactive	boolean	If true we are searching inactive tenants		

Extension (v3)

Overview

Represents a phone extension.

The Java entity name is `ExtensionWS`

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
id	Integer	Generated unique identification	Needed for Extension update	
eid	String	Enterprise ID (4 characters long)	Needed if environmentShortName is not present	4
environmentShortName	String	Enterprise short name	Needed if eid is not present	64
description	String	Description of the extension		
type	Integer	Possible values of the types: <ul style="list-style-type: none">• 0: Number/Address• 1: Phone number pattern• 10: User/Agent ID• 20: Persistent Chat Room• 30: Team		128
extensionId	String	Phone number		128
recordingModeType	RecordingModeType			
extensionRuleId	Integer	Associated Recording rule ID		
screenCaptureEnabled	boolean			
user	User	User associated with this extension		
forwardTypes	List< ForwardType >	The list of the associated forwarding types		
sourcePlatforms	List< SourcePlatform >	The list of the associated recorded platforms		
importSources	List< ImportSource >	The list of the associated import sources		
modalities	List< Modality >	The list of the recorded modalities. Recording directions associated with modality.		

ExtensionRule (v3)

Overview

Represents a recording rule entity.

Members

Member variables of the entity:

Member	Type	Description
id	Integer	Generated unique identification
eid	String	Enterprise ID (4 characters long)
name	String	Human-readable name of the recording rule
description	String	Description of the recording rule

ExtensionFilter (v3)

Overview

Used to filter extensions.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
justCount	boolean			
environmentFilter	EnvironmentFilter			
extension	String			
extensionExact	boolean			
inactive	boolean			
hasUser	boolean			

ForwardType (v3)

Overview

Represents call forwarding types.

Based on these types, calls can be labeled as how 3rd party entities answered them.

Members

Member variables of the entity:

Member	Type	Description
id	Integer	Unique ID of the record.
idStr	String	Human-readable unique string key of the record. This value can be used to identify the forward type.
name	String	Human-readable name of the forward type.

GetAnnouncementsResponse (v3)

Overview

Returned list of announcement files for one announcement type.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
announcements	List<String>	Announcement audio files of an announcement type

GetEnvironmentResponse (v3)

Overview

Returned tenant information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
environment	Environment	Environment

GetEnvironmentsResponse (v3)

Overview

Returned tenant information for all tenants.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
environments	List< Environment >	Environments

GetExtensionResponse (v3)

Overview

Returned extension information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
extension	Extension	Extension information

GetExtensionRulesResponse (v3)

Overview

Returned a list of recording rules.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
extensionRules	List< ExtensionRule >	List of available recording rules

GetExtensionsResponse (v3)

Overview

Returned extension information for all extensions.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
extensions	List< Extension >	Extensions
extensionCount	Integer	Number of extensions

GetForwardTypeResponse (v3)

Overview

Returned list of forwarding types

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
forwardTypes	List< ForwardType >	List of forwarding types

GetGroupMembershipResponse (v3)

Overview

Returned group membership information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
groupMembership	GroupMembership	GroupMembership information

GetGroupMembershipsResponse (v3)

Overview

Returned group membership information for all group memberships.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
groupMemberships	List< GroupMembership >	GroupMemberships
groupMembershipCount	Integer	

GetGroupResponse (v3)

Overview

Returned group information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
group	Group	Group information

GetGroupsResponse (v3)

Overview

Returned group information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
groups	List< Group >	Groups
groupCount	Integer	

GetImportSourcesResponse (v3)

Overview

Returned list of import sources

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
importSources	List< ImportSource >	List of import sources

GetSitesResponse (v3)

Overview

Returned list of sites.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
sites	List< Site >	List of available sites

GetSourcePlatformResponse (v3)

Overview

Returned list of recorded platforms

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
sourcePlatforms	List< SourcePlatform >	List of recorded platforms

GetStorageFolderResponse (v3)

Overview

Returned storage folder information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storageFolder	StorageFolder	Storage Folder information

GetStorageFoldersResponse (v3)

Overview

Returned storage folder information for all storage folders.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storageFolders	List< StorageFolder >	Storage Folders

GetStoragePoliciesResponse (v3)

Overview

Returned storage policies information for all storage policies.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storagePolicies	List< StoragePolicy >	Storage Policies

GetStoragePolicyResponse (v3)

Overview

Returned storage policy information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storagePolicy	StoragePolicy	Storage Policy

GetUserResponse (v3)

Overview

Returned user information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
user	User	User information

GetUsersResponse (v3)

Overview

Returned user information for all users.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
users	List< User >	Users
userCount	Integer	

GetVersionResponse (v3)

Overview

Returned Provision API version information.

Members

Member variables of the entity:

Member	Type	Description
parts	Integer	Version of the currently used API as a number.
versionStr	String	Version of the currently used API as a string. (for example: v2)

GetWorkflowsResponse (v3)

Overview

Returned a list of approval workflows.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
workflows	List< Workflow >	List of available approval workflows

Group (v3)

Overview

Represents a group.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
id	Integer	User ID		
name	String	Display name of the group		64
eid	String	Enterprise ID (4 characters long)	Needed if environmentShortName is not present	4
environmentShortName	String	Enterprise short name	Needed if eid is not present	64
nonModifiable	boolean	If true, the group can not be modified through the web interface		
users	List< GroupMembership >	List of member users in the group		

GroupFilter (v3)

Overview

Used to filter groups.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
justCount	boolean			
groupId	Integer			
environmentFilter	EnvironmentFilter			
name	String	Character "%" can be used as a wildcard character if the "nameExact" parameter is false. Example: "Test group %" name results are the groups which name starts with "Test group"		
nameExact	boolean			
userLogin	String			
userLoginExact	boolean			
userName	String			
userNameExact	boolean			
skipUsers	boolean	If true, then the result doesn't show the members.		

GroupMembership (v3)

Overview

Represents a user.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
uniqueIdUnmodifiable	Integer	Read only unique ID of the group membership.		
primary	boolean	The primary group determines: <ul style="list-style-type: none">Verba XML Service for Cisco IP phones uses the comment template of the primary group (to avoid complexity) for each user.	Every user has to be assigned to a primary group.	
member	boolean	By granting group membership, the group supervisors are allowed to view the calls of the member. If you do not grant the group membership to a user, then group supervisor will not able to view the calls of that user. Group administrators and supervisors do not have to be group members.		
admin	boolean	For further information on group administrator right, refer to Group Administrator level on page 1.		
supervisor	boolean	For further information on group supervisor right, refer to Group Supervisor level on page 1.		
validFromUnmodifiable	Date	Read only start date of the group membership's validity period.		
validUntilUnmodifiable	Date	Read only end date of the group membership's validity period.		
user	User			
group	Group			

Optional custom date format for the user.

GroupMembershipFilter (v3)

Overview

Used to filter group memberships.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
uniqueId	Integer			
userId	Integer			
groupId	Integer			
onlyActive	boolean			

ImportSource (v3)

Overview

Represents an import source entity.

Members

Member variables of the entity:

Member	Type	Description
id	int	Unique ID of the record.
name	String	Human-readable name of the import source.

Location (v3)

Overview

Represents the location.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
eid	String	Enterprise ID (4 characters long identifier)	Needed if shortName is not present	4
location	String			

Modality (v3)

Overview

Represents a modality entity.

Members

Member variables of the entity:

Member	Type	Description
id	String	Possible values for different modalities: <ul style="list-style-type: none">• file_share• im• poll• screen• share• video• voice• whiteboard• sms
directionsForWS	List< Direction >	List of associated directions

PasswordFormat (v3)

Possible password format type values.
This is a simple enumerated **String** type.

Possible values:

Value
MD5
PBKDF2_MD5
PBKDF2

RecordingModeType (v3)

Possible recording mode types.
This is a simple enumerated **String** type.

Possible values:

Value
NONE
FULL
ON_DEMAND
CONTROLLED
RELAY_ONLY
NEVER

Site (v3)

Overview

Represents a site entity.

Members

Member variables of the entity:

Member	Type	Description
id	String	Unique ID of the record
siteGroup	boolean	
name	String	Human-readable name of the site
description	String	Description of the site
settingsJSON	String	
childrenDisplay	String	
siteGroupsDisplay	String	
creationDate	Date	Creation date of the site
createdBy	Integer	The ID of the user who created the site
createdByDisplay	String	Display name of the user who created the site
lastModificationDate	Date	Date of the last modification
lastModifiedBy	Integer	The ID of the user who modified the site at last time
lastModifiedByDisplay	String	Display name of the user who modified the site at the last time

SourcePlatform (v3)

Overview

Represents a source platform entity for the Recorded platforms.

Members

Member variables of the entity:

Member	Type	Description
id	int	Unique ID of the record.
name	String	Human-readable name of the recorded platform.

StatisticsResponse (v3)

Overview

Response of call statistic requests.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
callStatistics	List< CallStatistic >	Call statistic

Status (v3)

Overview

Return status of API calls.

Members

Member variables of the entity:

Member	Type	Description	Requirements
message	String	Return status in string format	
statusCode	StatusCode	Return code	

StatusCode (v3)

Return code for API calls.

This is a simple enumerated **String** type.

Possible values:

Value
OK
ERROR_GENERAL
ERROR_ILLEGAL_ARGUMENT
ERROR_UNAUTHORIZED
ERROR_ALREADY_EXISTS
ERROR_NOT_FOUND
ERROR_TOO_MANY_RESULT

StorageFolder (v3)

Overview

Represents a storage folder.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
id	Integer			
eid	String			
path	String			
name	String			
storageType	String			
userLogin	String			
userPassword	String			
apiUrl	String			
apiLogin	String			
apiPassword	String			
serverName	String			
port	Integer			
snaplockVolume	String			
applicationId	String			
accountId	String			
sourceId	String			
certPublic	String			
emailFrom	String			
emailTls	boolean			
exportTarget	boolean			
exportTargetEveryone	boolean			

StorageFolderFilter (v3)

Overview

Used to filter storage folders.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
id	Integer			
name	String			

StoragePolicy (v3)

Overview

Represents a storage policy.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
id	Integer			
eid	String		Mandatory	4
name	String		Mandatory	
enabled	boolean			
priority	Integer		Mandatory	
olderThanYears	Integer			
olderThanMinutes	Integer			
action	StoragePolicyAction		Mandatory	
callFilter	String			
storageFolder	StorageFolder		Mandatory	
firstTranscode	boolean			
onlyForArchived	boolean			
customSql	boolean			
decrypt	boolean			
format	String			
moveToRecycleBin	boolean			
keepCdr	boolean			
languageId	String			
engineId	String			

StoragePolicyFilter (v3)

Overview

Used to filter storage policies.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
id	Integer			
name	String			
action	String			
inactive	boolean			

TokenResponse (v3)

Overview

Response of token requests.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
token	String	Token value

User (v3)

Overview

Represents a user.

Members

Member variables of the entity:

Member	Type	Description	Required
id	Integer	User ID	
loginName	String	Login name	
passwordHash	String	Password hashed using MD5	
displayName	String	Long display name of the user	
email	String	Email address	
crmUserId	String	CRM User ID for integration with other systems	
language	String	User interface language	
timeZone	String	Time zone in standard Java time zone format	
validFrom	Date	Start of the user's validity period User does not see calls made before this date and can not log in until this date	
validTo	Date	End of the user's validity period User does not see calls made after this date and can not log in after this date	
locked	boolean	Locked status, locked users can not access the system	
eid	String	Enterprise ID (4 characters long)	Needed if environment is not present
environmentShortName	String	Enterprise short name	Needed if environment is not present
nonModifiable	boolean	Can the user's properties be modified	
passwordExpires	boolean	Shows whether the password will expire or not	
needChangePassword	boolean	Shows whether user Must Change Password at Next Logon	
observerUserId	Integer	Observer User ID for 'four eyes login'	
observerGroupId	Integer	Observer Group ID for 'four eyes login'	
userType	String	Type of the user: <ul style="list-style-type: none">Standard user - standard Verba system users with all the functionalities. (Value is: 'user_type_verba')Publishing Server user - Verba Publishing Server users only with very limited functionality. (Value is: 'user_type_shared_items')	
recorderLinePIN	String	Recorder Line PIN	

agentId	String	<p>Contact Center Agent ID or Cisco Owner User ID. It's visible on the Verba Web Interface under the User's properties only when the following registry is present:</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <pre>HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Verba\Web\ShowUserAgentID (DWORD) = 1</pre> </div>	
apiAccessOnly	boolean	API Access Only	
customDateFormat	String	Optional custom date format for the user	
customTimeFormat	String	Optional custom time format for the user	
externalId	String	External ID for integration with other systems	
extensions	List< Extension >	List of extensions associated with the user, a user has access to calls on extensions associated with it	
groupMemberships	List< GroupMembership >		
roles	List<String>		
workflowId	Integer	Linked approval workflow ID	
location	String	User location	
siteId	String	Linked site ID	
retentionDays	Integer	User-based data retention period	
retentionAutoDelete	boolean	Delete automatically the conversations after the retention period is over	
customs	List<String>	Custom user attributes 1-10	
annPromptInbound	boolean	Play notification for PSTN/federated inbound Sfb/Lync calls	
annPromptOutbound	boolean	Play notification for PSTN/federated outbound Sfb/Lync calls	
annPromptConference	boolean	Play notification for conference Sfb/Lync calls	
annFileInbound	String	PSTN/federated inbound announcement audio file for Sfb/Lync calls	
annFileOutbound	String	PSTN/federated outbound announcement audio file for Sfb/Lync calls	
annFileConference	String	Conference announcement audio file for Sfb/Lync calls	
annFileMoh	String	Music on hold announcement audio file for PSTN/federated outbound Sfb/Lync calls	
annMessageConference	String	IM notification message for Sfb/Lync conference calls	
annPromptInboundCisco	boolean	Play notification for PSTN/federated inbound Cisco calls	
annFileInboundCisco	String	Media Resource ID for Cisco Inbound Calls	
annPromptOutboundCisco	boolean	Play notification for PSTN/federated outbound Cisco calls	
annFileOutboundCisco	String	Media Resource ID for Cisco Outbound Calls	
annPromptInternalTeams	boolean	Play notification for internal Microsoft Teams calls	
annPromptInboundTeams	boolean	Play notification for PSTN/federated inbound Microsoft Teams calls	
annPromptOutboundTeams	boolean	Play notification for PSTN/federated outbound Microsoft Teams calls	

annPromptConferenceTeams	boolean	Play notification for conference Microsoft Teams calls	
--------------------------	---------	--	--

UserFilter (v3)

Overview

Used to filter users.

Members

Member variables of the entity:

Member	Type	Description	Requirements
userId	Integer		
justCount	boolean	If true the call only counts the users	
environmentFilter	EnvironmentFilter	Filter the tenants we are searching in	
loginName	String	LoginName we are searching for	
loginNameExact	boolean	If true the loginName parameter represents a complete loginName, not a filter	
extension	String	Phone number to search for	
extensionExact	boolean	If true the extension parameter represents a complete phone number, not a filter	
externalId	String		
externalIdExact	boolean		
group	String		
groupExact	boolean		
role	String		
roleExact	boolean		
skipExtensions	boolean	If true extensions are not returned	
skipGroups	boolean		
skipRoles	boolean		
inactive	boolean	If true we are searching inactive users	

Workflow (v3)

Overview

Represents an approval workflow entity.

The Java entity name is `WFWorkflow`

Members

Member variables of the entity:

Member	Type	Description
id	String	Unique ID of the record
eid	String	Enterprise ID (4 characters long identifier)
enabled	boolean	Is the workflow active
name	String	Human-readable name of the workflow
description	String	Description of the workflow
autoApprove	boolean	
priority	Integer	Specify the order how multiple workflows are executed
notifTeemplateld	Integer	The ID of the assigned Notification template
notifTeemplatLang	String	The language code of the assigned Notification template
copyOf	Integer	
existsRequest	boolean	
steps	List<WorkflowStep>	List of the individual steps of the current workflow
creationDate	Date	Creation date of the workflow
createdBy	Integer	The ID of the user who created the workflow
createdByDisplay	String	Display name of the user who created the workflow
lastModificationDate	Date	Date of the last modification
lastModifiedBy	Integer	The ID of the user who modified the workflow at last time
lastModifiedByDisplay	String	Display name of the user who modified the workflow at the last time

StoragePolicyAction (v3)

Possible storage policy action types.
This is a simple enumerated **String** type.

Possible values:

Value
archive
archive_db_only
copy
data_import
data_import_policies
data_processing_policies
data_retention_policies
deduplicate
delete
delete_ew
encrypt_sign
export
export_im
file_verification
increase_retention
move
purge_recycle_bin
speech_index
speech_index_delete
transcode
transcription
upload
voice_quality_check

Provisioning API version 2

Overview

This web services API allows service providers to automatically create users and tenants. The interface is implemented using Web Services.

- [Overview](#)
- [Requirement](#)
- [API Calls](#)
 - Authentication
 - Users
 - Groups
 - Extensions
 - Environments
 - Storage
 - Miscellaneous
- [Data types](#)
 - Main entities
 - Miscellaneous
 - Reponse types
- [Tips for developers](#)



Requirement

Make sure that the [version 2 API is enabled](#).





API Calls

The Provisioning API provides the following Web Services calls:






Authentication

-  [ReleaseToken \(v2\)](#) — Releases a token
-  [RequestToken \(v2\)](#) — Requests an authentication token





Groups


-  [CreateGroup \(v2\)](#) — Creates a new Group.
-  [DeleteGroup \(v2\)](#) — Deletes a Group.
-  [GetGroupByNameAndEnvironment \(v2\)](#) — Reads a Group.
-  [ListGroup \(v2\)](#) — Lists groups.

Users






-  [CreateUser \(v2\)](#) — Creates a user.
-  [DeleteUser \(v2\)](#) — Deletes a User.
-  [GetUserByLoginNameAndEnvironment \(v2\)](#) — Returns a user.
-  [ListUsers \(v2\)](#) — Lists users.
-  [UpdateUser \(v2\)](#) — Updates a user.

Extensions



-  [ApplyExtensionConfiguration \(v2\)](#) — Applies the extension configuration.
-  [CreateExtension \(v2\)](#) — Creates an extension.
-  [GetExtension \(v2\)](#) — Reads an extension.
- 

-  [UpdateGroup \(v2\)](#) — Updates a group.

Environments

-  [CreateEnvironment \(v2\)](#) — Create a new Environment.
-  [GetEnvironmentByEid \(v2\)](#) — Reads a tenant based on its ID.
-  [GetEnvironmentByShortName \(v2\)](#) — Reads a tenant based on its short name.
-  [ListEnvironments \(v2\)](#) — Returns an environment list.
-  [UpdateEnvironment \(v2\)](#) — Updates an environment.






Miscellaneous



-  [GetStatistics \(v2\)](#) — Reads user and tenant statistics.
-  [GetVersion \(v2\)](#) — Returns the API version.

Data types












The Provisioning Web Service uses three fundamental data types, that represent user provisioning related entities:

Main entities






-  [ApplyExtensionConfigurationResponseServer \(v2\)](#) — Represents the extension configuration.
-  [CallStatistic \(v2\)](#) — Represents a call statistic.
-  [Environment \(v2\)](#) — Represents a tenant.
-  [Extension \(v2\)](#) — Represents a phone extension.
-  [ExtensionFilter \(v2\)](#) — Used to filter extensions.














-  [ListExtensions \(v2\)](#) — Returns an extension list.
-  [UpdateExtension \(v2\)](#) — Updates an extension.

Storage





-  [CreateStorageFolder \(v2\)](#) — Creates a new Storage Folder.
-  [CreateStoragePolicy \(v2\)](#) — Creates a new Storage Policy.
-  [GetStorageFolderById \(v2\)](#) — Returns a Storage Folder information by id.
-  [GetStoragePolicyById \(v2\)](#) — Returns a Storage Policy information by id.
-  [GetStoragePolicyByName \(v2\)](#) — Returns a Storage Policy information by name.
-  [ListStorageFolders \(v2\)](#) — Lists Storage Folders.
-  [ListStorageFoldersByEid \(v2\)](#) — Lists Storage Folders by eid.
-  [ListStoragePolicies \(v2\)](#) — Lists Storage Policies.
-  [ListStoragePoliciesByEid \(v2\)](#) — Lists Storage Policies by eid.
-  [UpdateStorageFolder \(v2\)](#) — Updates a Storage Folder.
-  [UpdateStoragePolicy \(v2\)](#) — Updates a Storage Policy.


Miscellaneous

-  [CallSourceType \(v2\)](#) — Possible call source types.
-  [CallStatisticsFilter \(v2\)](#) — Used to filter call statistic.
-  [CallStatisticsType \(v2\)](#) — Possible call statistic types.
-  [EnvironmentFilter \(v2\)](#) — Used to filter tenants.
-  [ExtensionFilter \(v2\)](#) — Used to filter extensions.

- [Group \(v2\)](#) — Represents a group.
-  [GroupMembership \(v2\)](#) — Represents a user.
-  [Location \(v2\)](#) — Represents the location.
-  [Status \(v2\)](#) — Return status of API calls.
-  [StorageFolder \(v2\)](#) — Represents a storage folder.
-  [StoragePolicy \(v2\)](#) — Represents a storage policy.
-  [User \(v2\)](#) — Represents a user.
-  [GroupFilter \(v2\)](#) — Used to filter groups.
-  [GroupMembershipFilter \(v2\)](#) — Used to filter group memberships.
-  [RecordingModeType \(v2\)](#) — Possible recording mode types.
-  [StatusCode \(v2\)](#) — Return code for API calls.
-  [StorageFolderFilter \(v2\)](#) — Used to filter storage folders.
-  [StoragePolicyFilter \(v2\)](#) — Used to filter storage policies.
-  [UserFilter \(v2\)](#) — Used to filter users.

Response types

-  [ApplyExtensionConfigurationResponse \(v2\)](#) — Returned extension configuration information.
-  [CreateOrUpdateGroupResponse \(v2\)](#) — Returned group create/update information.
-  [CreateOrUpdateStorageFolderResponse \(v2\)](#) — Returned storage folder create/update information.
-  [CreateOrUpdateStoragePolicyResponse \(v2\)](#) — Returned storage policy create/update information.
-  [CreateOrUpdateUserResponse \(v2\)](#) — Returned user create/update information.
-  [GetEnvironmentResponse \(v2\)](#) — Returned tenant information.
-  [GetEnvironmentsResponse \(v2\)](#) — Returned tenant information for all tenants.
-  [GetExtensionResponse \(v2\)](#) — Returned extension information.
-  [GetExtensionsResponse \(v2\)](#) — Returned extension information for all extensions.
-  [GetGroupMembershipResponse \(v2\)](#) — Returned group membership information.
-  [GetGroupMembershipsResponse \(v2\)](#) — Returned group membership information for all group memberships.
-  [GetGroupResponse \(v2\)](#) — Returned group information.
-  [GetGroupsResponse \(v2\)](#) — Returned group information.
-  [GetStorageFolderResponse \(v2\)](#) — Returned storage folder information.
-  [GetStorageFoldersResponse \(v2\)](#) — Returned storage folder information for all storage folders.
-  [GetStoragePoliciesResponse \(v2\)](#) — Returned storage policies information for all storage policies.
-  [GetStoragePolicyResponse \(v2\)](#) — Returned storage policy information.
-  [GetUserResponse \(v2\)](#) — Returned user information.
-  [GetUsersResponse \(v2\)](#) — Returned user information for all users.
-  [GetVersionResponse \(v2\)](#) — Returned Provision API version information.
- 

- [StatisticsResponse \(v2\)](#) — Response of call statistic requests.
-  [TokenResponse \(v2\)](#) — Response of token requests.

Tips for developers

To make things faster during development we recommend using [SoapUI](#) which offers functional testing for SOAP and REST APIs.

Once you downloaded and installed it, simply create a new SOAP Project from the File menu and enter the <http://MediaRepositoryIpAddress:7002/provisioning?wsdl>

Provisioning API (v2) Calls

- [ApplyExtensionConfiguration \(v2\)](#) — Applies the extension configuration.
- [CreateEnvironment \(v2\)](#) — Create a new Environment.
- [CreateExtension \(v2\)](#) — Creates an extension.
- [CreateGroup \(v2\)](#) — Creates a new Group.
- [CreateStorageFolder \(v2\)](#) — Creates a new Storage Folder.
- [CreateStoragePolicy \(v2\)](#) — Creates a new Storage Policy.
- [CreateUser \(v2\)](#) — Creates a user.
- [DeleteGroup \(v2\)](#) — Deletes a Group.
- [DeleteUser \(v2\)](#) — Deletes a User.
- [GetEnvironmentByEid \(v2\)](#) — Reads a tenant based on its ID.
- [GetEnvironmentByShortName \(v2\)](#) — Reads a tenant based on its short name.
- [GetExtension \(v2\)](#) — Reads an extension.
- [GetGroupByNameAndEnvironment \(v2\)](#) — Reads a Group.
- [GetStatistics \(v2\)](#) — Reads user and tenant statistics.
- [GetStorageFolderById \(v2\)](#) — Returns a Storage Folder information by id.
- [GetStorageFolderByName \(v2\)](#) — Returns a Storage Folder information by name.
- [GetStoragePolicyById \(v2\)](#) — Returns a Storage Policy information by id.
- [GetStoragePolicyByName \(v2\)](#) — Returns a Storage Policy information by name.
- [GetUserByLoginNameAndEnvironment \(v2\)](#) — Returns a user.
- [GetVersion \(v2\)](#) — Returns the API version.
- [ListEnvironments \(v2\)](#) — Returns an environment list.
- [ListExtensions \(v2\)](#) — Returns an extension list.
- [ListGroup \(v2\)](#) — Lists groups.
- [ListStorageFoldersByEid \(v2\)](#) — Lists Storage Folders by eid.
- [ListStorageFolders \(v2\)](#) — Lists Storage Folders.
- [ListStoragePoliciesByEid \(v2\)](#) — Lists Storage Policies by eid.
- [ListStoragePolicies \(v2\)](#) — Lists Storage Policies.
- [ListUsers \(v2\)](#) — Lists users.
- [ReleaseToken \(v2\)](#) — Releases a token
- [RequestToken \(v2\)](#) — Requests an authentication token
- [UpdateEnvironment \(v2\)](#) — Updates an environment.
- [UpdateExtension \(v2\)](#) — Updates an extension.
- [UpdateGroup \(v2\)](#) — Updates a group.
- [UpdateStorageFolder \(v2\)](#) — Updates a Storage Folder.
- [UpdateStoragePolicy \(v2\)](#) — Updates a Storage Policy.
- [UpdateUser \(v2\)](#) — Updates a user.

ApplyExtensionConfiguration (v2)

Overview

Applies the extension configuration.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
theseServersOnly	List< Location >	The list of server you would like to send the extension configuration to. If left out then the extension configuration will be sent to all available servers in the Verba System.	
returnSuccessfulStatuses	boolean	If true we show all success and failure response states. If false we show only failure responses.	
forceEvenIfNotRegistered	boolean	If true we send to all servers regardless of their current extension configuration. If false we only send the extension configuration to those servers that have different extension configuration than in the central database.	

Response

Parameters of the API response:

Parameter	Type	Description
statuses	List< ApplyExtensionConfigurationResponseServer >	Contains the success or error message from each requested server.
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ApplyExtensionConfiguration to all servers.

Example ApplyExtensionConfiguration to all servers.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:applyExtensionConfiguration>
      <token>piyyOvWeg64IXskLzVMutqxikakzLV5D</token>

      <!--Zero or more repetitions:-->
      <!--
      <theseServersOnly>
```

```

        <eid>0000</eid>
        <location>server-name</location>
    </theseServersOnly>
-->

    <returnSuccessfulStatuses>1</returnSuccessfulStatuses>
    <forceEvenIfNotRegistered>1</forceEvenIfNotRegistered>
</v2:applyExtensionConfiguration>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:applyExtensionConfigurationResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com"
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-MR</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>FE1SFB</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>FE2SFB</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-PROXY1</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-PROXY2</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS2</location>
          </server>

```

```

        <status>
          <statusCode>OK</statusCode>
        </status>
      </statuses>
    </statuses>
    <server>
      <eid>0000</eid>
      <location>DEV-RS1</location>
    </server>
    <status>
      <statusCode>OK</statusCode>
    </status>
  </statuses>
</return>
</ns2:applyExtensionConfigurationResponse>
</S:Body>
</S:Envelope>

```

▼ Example ApplyExtensionConfiguration to specific servers.

Example ApplyExtensionConfiguration to specific servers.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:applyExtensionConfiguration>
      <token>piyyOvWeg64IXskLzVMutqxikakzLV5D</token>

      <!--Zero or more repetitions:-->
      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS1</location>
      </theseServersOnly>

      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS2</location>
      </theseServersOnly>

      <returnSuccessfulStatuses>1</returnSuccessfulStatuses>
      <forceEvenIfNotRegistered>1</forceEvenIfNotRegistered>
    </v2:applyExtensionConfiguration>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:applyExtensionConfigurationResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS1</location>
          </server>
          <status>
            <statusCode>OK</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS2</location>
          </server>
          <status>

```

```

        <statusCode>OK</statusCode>
      </status>
    </statuses>
  </return>
</ns2:applyExtensionConfigurationResponse>
</S:Body>
</S:Envelope>

```

▼ Example ApplyExtensionConfiguration to unavailable servers.

Example ApplyExtensionConfiguration to unavailable servers.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:applyExtensionConfiguration>
      <token>piyyOvWeg64IXskLzVMutqxikakzLV5D</token>

      <!--Zero or more repetitions:-->
      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS1</location>
      </theseServersOnly>

      <theseServersOnly>
        <eid>0000</eid>
        <location>DEV-RS2</location>
      </theseServersOnly>

      <returnSuccessfulStatuses>1</returnSuccessfulStatuses>
      <forceEvenIfNotRegistered>1</forceEvenIfNotRegistered>
    </v2:applyExtensionConfiguration>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:applyExtensionConfigurationResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com
      <return>
        <status>
          <message>2 server(s) failed</message>
          <statusCode>ERROR_GENERAL</statusCode>
        </status>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS1</location>
          </server>
          <status>
            <message>Could not apply extension configuration on 0000:DEV-RS1: java.lang.Exc
Please check if the service is in running state.</message>
            <statusCode>ERROR_GENERAL</statusCode>
          </status>
        </statuses>
        <statuses>
          <server>
            <eid>0000</eid>
            <location>DEV-RS2</location>
          </server>
          <status>
            <message>Could not apply extension configuration on 0000:DEV-RS2: java.lang.Exc
Please check if the service is in running state.</message>
            <statusCode>ERROR_GENERAL</statusCode>
          </status>
        </statuses>
      </return>
    </ns2:applyExtensionConfigurationResponse>
  </S:Body>
</S:Envelope>

```

</S:Body>
</S:Envelope>

CreateEnvironment (v2)

Overview

Create a new Environment.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
environment	Environment	Environment parameters	Mandatory
archiveAtAgeHours	Integer	Creates a default storage policy that archives after X hours	
deleteAtAgeHours	Integer	Creates a default storage policy that deletes after X hours	
archivePath	String	Configures the archive path for the environment If empty, the system uses a default based on these rules: <ul style="list-style-type: none">• if the [Verba\Storage\Archiving\DestinationPath] registry parameter is not empty, the value will be [Verba\Storage\Archiving\DestinationPath]\EnvShortName• if above is empty it becomes: [parent folder of AudioPath]\VerbaArchive\EnvShortName	

Response

Parameters of the API response in **getGroupsResponse** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example CreateEnvironment transaction.

Example CreateEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createEnvironment>
      <token>9QckC2nVeO3JM8qL6DVHFo3p0Mt7ytuD</token>
      <environment>
```

```
    <displayName>API test Environment</displayName>
    <eid>0001</eid>
    <helpdeskURL>http://help-menu-link.net</helpdeskURL>
    <inactive>0</inactive>
    <ondemandMaxCallAgeHoursInBuffer>72</ondemandMaxCallAgeHoursInBuffer>
    <ondemandMaxRowsInBufferPerUser>24</ondemandMaxRowsInBufferPerUser>
    <shortName>Tenant test shortname</shortName>
  </environment>
  <archiveAtAgeHours>12</archiveAtAgeHours>
  <!-- <archivePath></archivePath> Use default path -->
  <!-- <deleteAtAgeHours></deleteAtAgeHours> Don't delete recordings -->
</v2:createEnvironment>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createEnvironmentResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:createEnvironmentResponse>
  </S:Body>
</S:Envelope>
```

CreateExtension (v2)

Overview

Creates an extension.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
extension	Extension	Defines the new extension's properties.	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS

Examples

▼ Example CreateExtension transaction where the extension's recording mode is on-demand, voice-video-im-screen recorded and is associated with the user who's id is 4.

Example CreateExtension transaction where the extension's recording mode is on-demand, voice-video-im-screen recorded and is associated with the user who's id is 4.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createExtension>
      <token>tbESeqhBDsevSwi4HZdYAz8mKbBg8f6j</token>
      <extension>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->
        <extension>verbatimuser2@verbalabs.com</extension>
        <recordingMode>ON_DEMAND</recordingMode>
        <im>1</im>
        <video>1</video>
        <voice>1</voice>
```

```

        <screenCaptureEnabled>1</screenCaptureEnabled>
        <user>
            <id>4</id>
        </user>
    </extension>
</v2:createExtension>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createExtensionResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:createExtensionResponse>
  </S:Body>
</S:Envelope>

```

Example CreateExtension transaction where the extension's recording mode is full, only voice recorded and is associated with the user who's id is 3.

Example CreateExtension transaction where the extension's recording mode is full, only voice recorded and is associated with the user who's id is 3.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createExtension>
      <token>tbESeqhBDsevSwi4HZdYAz8mKbBg8f6j</token>
      <extension>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->
        <extension>verbatetestuser@verbalabs.com</extension>
        <recordingMode>FULL</recordingMode>
        <im>0</im>
        <video>0</video>
        <voice>1</voice>
        <screenCaptureEnabled>0</screenCaptureEnabled>
        <user>
          <id>3</id>
        </user>
      </extension>
    </v2:createExtension>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createExtensionResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:createExtensionResponse>
  </S:Body>
</S:Envelope>

```

Example CreateExtension with already exists response.

Example CreateExtension with already exists response.

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createExtensionResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>

```

```
    <message>This extension already exists in the database: 0000:verbatestuser@verbalabs.  
    <statusCode>ERROR_ALREADY_EXISTS</statusCode>  
  </return>  
</ns2:createExtensionResponse>  
</S:Body>  
</S:Envelope>
```

CreateGroup (v2)

Overview

Creates a new Group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
group	Group	New group's properties	Mandatory

Response

Parameters of the API response in **getGroupsResponse** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
group	Group	

Examples

▼ Example createGroup transaction.

Example createGroup transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createGroup>
      <token>T1r5Ur6AKmaoGemf6LG8EUZLFa671X1U</token>
      <group>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName>?</environmentShortName>
        -->
        <name>API test group</name>
        <nonModifiable>0</nonModifiable>
      </group>
    </v2:createGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createGroupResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>6</id>
          <name>API test group</name>
          <nonModifiable>false</nonModifiable>
        </group>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:createGroupResponse>
  </S:Body>
</S:Envelope>
```

▼ Example createGroup transaction. Assigning one admin user, one supervisor user, 2 standard users.

Example createGroup transaction. Assigning one admin user, one supervisor user, 2 standard users.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createGroup>
      <token>cU1VuDEkuu5w9jutzl2y4zFjBoh7gpOf</token>
      <group>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->
        <name>Nest group</name>
        <nonModifiable>0</nonModifiable>

        <!--Zero or more repetitions:-->

        <users> <!-- standard user -->
          <admin>0</admin>
          <member>1</member>
          <primary>0</primary>
          <supervisor>0</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
          <user>
            <id>6</id>
          </user>
        </users>

        <users> <!-- standard user -->
          <admin>0</admin>
          <member>1</member>
          <primary>0</primary>
          <supervisor>0</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
          <user>
            <id>7</id>
          </user>
        </users>

        <users> <!-- supervisor user -->
          <admin>0</admin>
          <member>1</member>
          <primary>0</primary>
          <supervisor>1</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
          <user>
```

```

        <id>8</id>
      </user>
    </users>

    <users> <!-- admin user -->
      <admin>1</admin>
      <member>1</member>
      <primary>0</primary>
      <supervisor>0</supervisor>
      <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
      <user>
        <id>9</id>
      </user>
    </users>

  </group>
</v2:createGroup>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createGroupResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>12</id>
          <name>Nest_group2</name>
          <nonModifiable>false</nonModifiable>
          <users>
            <admin>false</admin>
            <member>true</member>
            <primary>false</primary>
            <supervisor>false</supervisor>
            <uniqueIdUnmodifiable>45</uniqueIdUnmodifiable>
            <user>
              <agentId/>
              <apiAccessOnly>false</apiAccessOnly>
              <crmUserId/>
              <customDateFormat/>
              <customTimeFormat/>
              <displayName>IPTUser1</displayName>
              <eid>0000</eid>
              <email/>
              <environmentShortName>Ref.</environmentShortName>
              <externalId/>
              <id>6</id>
              <language>en</language>
              <locked>false</locked>
              <loginName>IPTUser1</loginName>
              <needChangePassword>false</needChangePassword>
              <nonModifiable>false</nonModifiable>
              <passwordExpires>false</passwordExpires>
              <passwordHash>e10adc3949ba59abbe56e057f20f883e</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-09-15T12:16:00Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-11-23T15:14:59.317Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
        </group>
      </return>
    </ns2:createGroupResponse>
  </S:Body>
</S:Envelope>

```



```

<uniqueIdUnmodifiable>46</uniqueIdUnmodifiable>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>IPTUser2</displayName>
  <eid>0000</eid>
  <email>Abdula@VerbaMsftTest.ccsctp.net</email>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>7</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>IPTUser2</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>e10adc3949ba59abbe56e057f20f883e</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-09-15T12:17:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-23T15:14:59.320Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>false</primary>
  <supervisor>>true</supervisor>
  <uniqueIdUnmodifiable>47</uniqueIdUnmodifiable>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>TPO</displayName>
    <eid>0000</eid>
    <email>KatieJ@VerbaMsftTest.ccsctp.net</email>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>8</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>TPO</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>e10adc3949ba59abbe56e057f20f883e</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-15T12:17:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-23T15:14:59.323Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>true</admin>
  <member>>true</member>
  <primary>>false</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>48</uniqueIdUnmodifiable>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>

```

```
<crmUserId/>
<customDateFormat/>
<customTimeFormat/>
<displayName>mate</displayName>
<eid>0000</eid>
<email/>
<environmentShortName>Ref.</environmentShortName>
<externalId/>
<id>9</id>
<language>en</language>
<locked>>false</locked>
<loginName>mate</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<passwordHash>d87869a979db0078521d5872944e966e</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-10-12T15:47:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-23T15:14:59.323Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</group>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:createGroupResponse>
</S:Body>
</S:Envelope>
```

CreateStorageFolder (v2)

Overview

Creates a new Storage Folder.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storageFolder	StorageFolder	New Storage Folder's properties	

Response

Parameters of the API response in **getGroupsResponse** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storageFolder	StorageFolder	

Examples

▼ Example createGroup transaction.

Example createGroup transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createStorageFolder>
      <token>U3eZLSdtMhWSSv9dOo1FFAqrze0soiwt</token>
      <storageFolder>
        <!-- To understand each property you should:
          * login to the Verba Web Interface
          * create a dummy Storage Target
          * use the ListStorageFolders API call to get the dummy Storage Target's properties.
        -->
        <accountId></accountId>
        <apiLogin></apiLogin>
        <apiPassword></apiPassword>
        <apiUrl></apiUrl>
        <applicationId></applicationId>
```

```

    <certPublic></certPublic>
    <eid>0000</eid>
    <emailFrom></emailFrom>
    <emailTls>0</emailTls>
    <exportTarget>1</exportTarget>
    <exportTargetEveryone>0</exportTargetEveryone>
    <name>Verba test</name>
    <path>amazon_s3</path>
    <port></port>
    <serverName>eu-west-1</serverName>
    <snaplockVolume></snaplockVolume>
    <sourceId></sourceId>
    <storageType>amazon_s3</storageType>
    <userLogin>.....</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</v2:createStorageFolder>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createStorageFolderResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolder>
          <accountId/>
          <apiLogin/>
          <apiPassword/>
          <apiUrl/>
          <applicationId/>
          <certPublic/>
          <eid>0000</eid>
          <emailFrom></emailFrom>
          <emailTls>>false</emailTls>
          <exportTarget>>true</exportTarget>
          <exportTargetEveryone>>false</exportTargetEveryone>
          <id>24</id>
          <name>Verba test</name>
          <path>amazon_s3</path>
          <port>0</port>
          <serverName>eu-west-1</serverName>
          <snaplockVolume/>
          <sourceId/>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolder>
      </return>
    </ns2:createStorageFolderResponse>
  </S:Body>
</S:Envelope>

```

CreateStoragePolicy (v2)

Overview

Creates a new Storage Policy.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storagePolicy	StoragePolicy	Storage folder filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example CreateStoragePolicy transaction.

Example CreateStoragePolicy transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createStoragePolicy>
      <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
      <storagePolicy>
        <action>export</action>
        <callFilter>WHERE section.owner_eid = '0000'</callFilter>
        <customSql>>false</customSql>
        <decrypt>1</decrypt>
        <eid>0000</eid>
        <enabled>1</enabled>
        <engineId></engineId>
        <firstTranscode>0</firstTranscode>
        <format></format>
        <keepCdr>1</keepCdr>
      </storagePolicy>
    </v2:createStoragePolicy>
  </soapenv:Body>
</soapenv:Envelope>
```

```

    <languageId></languageId>
    <moveToRecycleBin>0</moveToRecycleBin>
    <name>Test Data Retention</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>0</onlyForArchived>
    <priority>33</priority>

    <storageFolder>
      <id>2</id>
    </storageFolder>

  </storagePolicy>
</v2:createStoragePolicy>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createStoragePolicyResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>true</decrypt>
          <eid>0000</eid>
          <enabled>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format></format>
          <id>1036</id>
          <keepCdr>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>33</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
            <storageType>amazon_s3</storageType>
            <userLogin>AKIAIDR3I26OLTLTJVKA</userLogin>
            <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaIVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
          </storageFolder>
        </storagePolicy>
      </return>
    </ns2:createStoragePolicyResponse>
  </S:Body>
</S:Envelope>

```

▼ Example CreateStoragePolicy transaction. Transcode to mp3.

Example CreateStoragePolicy transaction. Transcode to mp3.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p

```

```

<soapenv:Header/>
<soapenv:Body>
  <v2:createStoragePolicy>
    <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
    <storagePolicy>
      <action>export</action>
      <callFilter>WHERE section.owner_eid = '0000'</callFilter>
      <customSql>>false</customSql>
      <decrypt>1</decrypt>
      <eid>0000</eid>
      <enabled>1</enabled>
      <engineId></engineId>
      <firstTranscode>0</firstTranscode>
      <format>mp3</format>
      <keepCdr>1</keepCdr>
      <languageId></languageId>
      <moveToRecycleBin>0</moveToRecycleBin>
      <name>Test Data Retention</name>
      <olderThanMinutes>0</olderThanMinutes>
      <olderThanYears>0</olderThanYears>
      <onlyForArchived>0</onlyForArchived>
      <priority>33</priority>

      <storageFolder>
        <id>2</id>
      </storageFolder>

    </storagePolicy>
  </v2:createStoragePolicy>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createStoragePolicyResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>
          <enabled>>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format>mp3</format>
          <id>1036</id>
          <keepCdr>>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>33</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
          </storageFolder>
        </storagePolicy>
      </return>
    </ns2:createStoragePolicyResponse>
  </S:Body>
</S:Envelope>

```

```
        <storageType>amazon_s3</storageType>
        <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
        <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaIVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
    </storageFolder>
  </storagePolicy>
</return>
</ns2:createStoragePolicyResponse>
</S:Body>
</S:Envelope>
```


CreateUser (v2)

Overview

Creates a user.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
user	User	Specifies the user (credentials, type, parameters, roles), the user's extensions (if any), the user's groups (if any)	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	CreateOrUpdateUserResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS

Examples

▼ Example CreateUser transaction.

Example CreateUser transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:createUser>
      <token>14ycnUJIuDBAbvO8h1L5GtAcsHZIF5pz</token>
      <user>
        <agentId></agentId>
        <externalId></externalId>
        <crmUserId></crmUserId>

        <customDateFormat></customDateFormat>
        <customTimeFormat></customTimeFormat>

        <loginName>verbatest</loginName>
```

```

<needChangePassword>0</needChangePassword>
<displayName>Verba Test User</displayName>
<email>verbatest@verbalabs.com</email>
<userType>user_type_verba</userType> <!-- Standard user type -->

<eid>0000</eid>
<!-- Needed if eid is not present
<environmentShortName></environmentShortName>
-->

<!--Zero or more repetitions:-->
<groupMemberships>
  <member>1</member>
  <primary>1</primary>
  <supervisor>1</supervisor>
  <admin>1</admin>
  <group>
    <eid>0000</eid>
    <!-- <environmentShortName?></environmentShortName?>-->
    <id>2</id> <!-- Valid existing group ID -->
  </group>
  <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
  <validFromUnmodifiable>0</validFromUnmodifiable>
  <validUntilUnmodifiable>0</validUntilUnmodifiable>
</groupMemberships>

<language>en</language>
<timeZone>Europe/Budapest</timeZone>
<locked>0</locked>
<nonModifiable>0</nonModifiable>
<observerGroupId>3</observerGroupId> <!-- Valid existing group ID -->
<observerUserId>1</observerUserId> <!-- Valid existing user ID -->
<passwordExpires>0</passwordExpires>
<passwordHash>MD5HASH("your-password")</passwordHash>
<!-- <recorderLinePIN></recorderLinePIN> -->

<apiAccessOnly>0</apiAccessOnly>

<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>

<!--Zero or more repetitions:-->
<roles>r_standard_user</roles>
<roles>r_system_supervisor</roles>
<roles>r_system_administrator</roles>

</user>
</v2:createUser>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createUserResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <user>
          <agentId/>
          <apiAccessOnly>>false</apiAccessOnly>
          <customDateFormat/>
          <customTimeFormat/>
          <displayName>Verba Test User</displayName>
          <eid>0000</eid>
          <email>verbatest@verbalabs.com</email>
          <environmentShortName>Ref.</environmentShortName>
          <extensions>

```

```

    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>+12444</extension>
    <id>58</id>
    <im>true</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>>false</screenCaptureEnabled>
    <video>>false</video>
    <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>12444</extension>
  <id>59</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>verbatest@verbalabs.com</extension>
  <id>60</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>true</voice>
</extensions>
<externalId/>
<groupMemberships>
  <admin>true</admin>
  <group>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>2</id>
    <name>Developers</name>
    <nonModifiable>>false</nonModifiable>
  </group>
  <member>true</member>
  <primary>true</primary>
  <supervisor>true</supervisor>
  <uniqueIdUnmodifiable>39</uniqueIdUnmodifiable>
</user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>Verba Test User</displayName>
  <eid>0000</eid>
  <email>verbatest@verbalabs.com</email>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>36</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>verbatest</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <observerGroupId>0</observerGroupId>
  <observerUserId>0</observerUserId>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-09-03T11:56:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>

```

```
    </user>
    <validFromUnmodifiable>2015-11-20T16:23:33.887Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
  </groupMemberships>
  <id>36</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>verbatest</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <observerGroupId>0</observerGroupId>
  <observerUserId>0</observerUserId>
  <passwordExpires>>false</passwordExpires>
  <roles>r_standard_user</roles>
  <roles>r_system_administrator</roles>
  <roles>r_system_supervisor</roles>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-09-03T11:56:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
</return>
</ns2:createUserResponse>
</S:Body>
</S:Envelope>
```

DeleteGroup (v2)

Overview

Deletes a Group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
groupId	Integer	Deleteable group's id	Mandatory

Response

Parameters of the API response in **DeleteGroup** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example DeleteGroup transaction.

Example DeleteGroup transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:deleteGroup>
      <token>oJYrqC0mSEEmHEoO9tcMBOV3NKJLvmyS</token>
      <groupId>10</groupId>
    </v2:deleteGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteGroupResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:deleteGroupResponse>
  </S:Body>
</S:Envelope>
```

```
    </ns2:deleteGroupResponse>
  </S:Body>
</S:Envelope>
```

▼ Example DeleteGroup transaction. The Default group is not deleteable.

Example DeleteGroup transaction. The Default group is not deleteable.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:deleteGroup>
      <token>oJYrqC0mSEEmHEo09tcMBOV3NKJLvmyS</token>
      <groupId>1</groupId>
    </v2:deleteGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteGroupResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <message>This is the default group and so it can not be deleted.</message>
        <statusCode>ERROR_ILLEGAL_ARGUMENT</statusCode>
      </return>
    </ns2:deleteGroupResponse>
  </S:Body>
</S:Envelope>
```

DeleteUser (v2)

Overview

Deletes a User.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
userId	Integer	The id of the user we would like to delete.	Mandatory

Response

Parameters of the API response in **DeleteUser** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example DeleteUser transaction.

Example DeleteGroup transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:deleteUser>
      <token>70oPY1HDzqW5mt6ZNH9pUjvjsaG7ZfF7</token>
      <userId>3</userId>
    </v2:deleteUser>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:deleteUserResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:deleteUserResponse>
```

</S:Body>
</S:Envelope>

GetEnvironmentByEid (v2)

Overview

Reads a tenant based on its ID.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Environment ID of the tenant we are looking for	Mandatory

Response

Parameters of the API response in **getGroupsResponse** type called **return**:

Parameter	Type	Description
status	GetEnvironmentResponse	Possible statusCodes: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND

Examples

▼ Example GetEnvironmentByEid transaction.

Example GetEnvironmentByEid transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getEnvironmentByEid>
      <token>CwF1v5KhYh9IP780249cgZjyRJuJe3xM</token>
      <eid>0000</eid>
    </v2:getEnvironmentByEid>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getEnvironmentByEidResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <environment>
```

```
<displayName>Reference environment</displayName>
<eid>0000</eid>
<inactive>>false</inactive>
<shortName>Ref.</shortName>
<helpdeskURL>http://help-menu-url.com</helpdeskURL> <!-- If this field is empty th
<!-- <ondemandMaxRowsInBufferPerUser></ondemandMaxRowsInBufferPerUser> -->
<!-- <ondemandMaxCallAgeHoursInBuffer></ondemandMaxCallAgeHoursInBuffer> -->
</environment>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:getEnvironmentByEidResponse>
</S:Body>
</S:Envelope>
```

GetEnvironmentByShortName (v2)

Overview

Reads a tenant based on its short name.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
shortName	String	Environment short name of the tenant we are looking for	Mandatory

Response

Parameters of the API response in **GetEnvironmentByShortName** type called **return**:

Parameter	Type	Description
status	GetEnvironmentResponse	Possible statusCodes: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND

Examples

▼ Example GetEnvironmentByShortName transaction.

Example GetEnvironmentByShortName transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getEnvironmentByShortName>
      <token>xjK9AVj1Lc4ciA4tBxEelKBrC5astJYj</token>
      <shortName>Ref.</shortName>
    </v2:getEnvironmentByShortName>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getEnvironmentByShortNameResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/"
      <return>
        <environment>
```

```
        <displayName>Reference environment</displayName>
        <eid>0000</eid>
        <helpdeskURL>http://valami.hu</helpdeskURL>
        <inactive>>false</inactive>
        <shortName>Ref.</shortName>
    </environment>
    <status>
        <statusCode>OK</statusCode>
    </status>
</return>
</ns2:getEnvironmentByShortNameResponse>
</S:Body>
</S:Envelope>
```

GetExtension (v2)

Overview

Reads an extension.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
environmentFilter	EnvironmentFilter	Specifies the environment	Mandatory
extension	String	Specifies the extension	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
extension	GetExtensionResponse	Extensions

Examples

▼ Example GetExtension transaction.

Example GetExtension transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getExtension>
      <token>vpAWrB4SIQk7NNuHGvRLV2FM7rjLQjB6</token>
      <environmentFilter>
        <eid>0000</eid>
        <eidExact>0</eidExact>
        <inactive>0</inactive>
        <!-- Needed if eid is not present
        <shortName></shortName>
        <shortNameExact></shortNameExact>
```

```
        -->
        </environmentFilter>
        <extension>verbatestuser2@verbalabs.com</extension> <!-- Mandatory! -->
    </v2:getExtension>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getExtensionResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <extension>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>verbatestuser2@verbalabs.com</extension>
          <id>56</id>
          <im>false</im>
          <recordingMode>ON_DEMAND</recordingMode>
          <screenCaptureEnabled>false</screenCaptureEnabled>
          <user>
            <agentId/>
            <apiAccessOnly>false</apiAccessOnly>
            <crmUserId/>
            <customDateFormat/>
            <customTimeFormat/>
            <displayName>strange-emailx</displayName>
            <eid>0000</eid>
            <email>louise.o'donnell@verbalabs.com</email>
            <environmentShortName>Ref.</environmentShortName>
            <externalId/>
            <id>4</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>strange-email</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-09-03T11:56:00Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
          </user>
          <video>false</video>
          <voice>true</voice>
        </extension>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:getExtensionResponse>
  </S:Body>
</S:Envelope>
```

GetGroupByNameAndEnvironment (v2)

Overview

Reads a Group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
name	String	The name of the	Mandatory
environment	String	The environment	Mandatory
environmentParamsShortName	boolean	If true the environment parameter is a short name otherwise it's an eid	Mandatory

Response

Parameters of the API response in **GetGroupByNameAndEnvironment** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
group	Group	

Examples

▼ Example GetGroupByNameAndEnvironment transaction.

Example GetGroupByNameAndEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getGroupByNameAndEnvironment>
      <token>xjK9AVj1Lc4ciA4tBxEe1KBrC5astJYj</token>
      <name>Default</name>
      <environment>0000</environment>
      <environmentParamIsShortName>0</environmentParamIsShortName>
    </v2:getGroupByNameAndEnvironment>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getGroupByNameAndEnvironmentResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.co">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <name>Default</name>
          <nonModifiable>>false</nonModifiable>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>true</primary>
            <supervisor>>false</supervisor>
            <uniqueIdUnmodifiable>1</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>false</apiAccessOnly>
              <displayName>Verba Administrator</displayName>
              <eid>0000</eid>
              <email/>
              <environmentShortName>Ref.</environmentShortName>
              <id>1</id>
              <language>en</language>
              <locked>>false</locked>
              <loginName>Administrator</loginName>
              <needChangePassword>>false</needChangePassword>
              <nonModifiable>>false</nonModifiable>
              <passwordExpires>>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2014-08-28T07:42:37.193Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-08-28T07:42:37.287Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>true</primary>
            <supervisor>>false</supervisor>
            <uniqueIdUnmodifiable>2</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>true</apiAccessOnly>
              <displayName>Verba Desktop Api User</displayName>
              <eid>0000</eid>
              <environmentShortName>Ref.</environmentShortName>
              <id>2</id>
              <language>en</language>
              <locked>>false</locked>
              <loginName>verbadesktopapi</loginName>
              <needChangePassword>>false</needChangePassword>
              <nonModifiable>>false</nonModifiable>
              <passwordExpires>>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <userType>user_type_verba</userType>
              <validFrom>2015-08-28T07:43:45.493Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-08-28T07:43:45.493Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>false</primary>
            <supervisor>>false</supervisor>
          </users>
        </group>
      </return>
    </ns2:getGroupByNameAndEnvironmentResponse>
  </S:Body>
</S:Envelope>
```



```
<uniqueIdUnmodifiable>3</uniqueIdUnmodifiable>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>olibali</displayName>
  <eid>0000</eid>
  <email/>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>3</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>olibali</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-08-28T09:17:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-08-28T09:17:00Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>11</uniqueIdUnmodifiable>
  <user>
    <agentId/>
    <apiAccessOnly>>true</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>verba_api_user</displayName>
    <eid>0000</eid>
    <email/>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>11</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>verba_api_user</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T12:01:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T12:01:00Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>19</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Ken Willoughby</displayName>
```

```

    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>19</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>ken</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>20</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Kovats Gergely</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>20</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>kovats</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>21</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Bálint Kuhár</displayName>
    <eid>0000</eid>
    <email>kuhar@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>21</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>kuhar</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>

```

```

    <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>22</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Lori Peterson</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>22</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>lori</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>23</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Moczar Gabor</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>23</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>moczar</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>24</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Kakas Norbert</displayName>
    <eid>0000</eid>
    <email>kakas@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>24</id>

```

```
<language>en</language>
<locked>>false</locked>
<loginName>norbi</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<passwordHash>.....</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-11-19T14:35:26.310Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>25</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Krasznai Péter</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>25</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>peti</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</group>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:getGroupByNameAndEnvironmentResponse>
</S:Body>
</S:Envelope>
```

GetStatistics (v2)

Overview

Reads user and tenant statistics.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	CallStatisticsFilter	Statistics filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	StatisticsResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example GetStatistics transaction.

Example GetStatistics transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStatistics>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
        -->
        </environmentFilter>
        <source>BOTH</source>
        <timeFrom>2015.01.01 08:00:00.000</timeFrom>
        <timeTo>2015.12.01 18:00:00.000</timeTo>
        <type>BY_USER</type>
      </filter>
    </v2:getStatistics>
  </soapenv:Body>
</soapenv:Envelope>
```

```
        </filter>
    </v2:getStatistics>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStatisticsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <callStatistics>
          <eid>0000</eid>
          <lengthOfCallsSeconds>235</lengthOfCallsSeconds>
          <loginName>IPTUser</loginName>
          <numberOfCalls>30</numberOfCalls>
          <shortName>Ref.</shortName>
          <userId>7</userId>
        </callStatistics>
        <callStatistics>
          <eid>0000</eid>
          <lengthOfCallsSeconds>22</lengthOfCallsSeconds>
          <loginName>balazs</loginName>
          <numberOfCalls>1</numberOfCalls>
          <shortName>Ref.</shortName>
          <userId>3</userId>
        </callStatistics>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:getStatisticsResponse>
  </S:Body>
</S:Envelope>
```

GetStorageFolderById (v2)

Overview

Returns a Storage Folder information by id.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
id	Integer	The requested Storage Policy's id	Mandatory

Response

Parameters of the API response in **GetStorageFolderById** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND
storageFolder	StorageFolder	

Examples

▼ Example GetStorageFolderById transaction.

Example GetStorageFolderById transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStorageFolderById>
      <token>z5bqHedL87j39ntkv4ZLt4yVCGeA26B9</token>
      <id>2</id>
    </v2:getStorageFolderById>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByIdResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
```

```

    <return>
      <status>
        <statusCode>OK</statusCode>
      </status>
      <storageFolder>
        <certPublic/>
        <eid>0000</eid>
        <emailTls>>false</emailTls>
        <exportTarget>>false</exportTarget>
        <exportTargetEveryone>>true</exportTargetEveryone>
        <id>2</id>
        <name>Amazon S3 TEST</name>
        <path>verbatest</path>
        <serverName>eu-west-1</serverName>
        <storageType>amazon_s3</storageType>
        <userLogin>.....</userLogin>
        <userPassword>.....</userPassword>
      </storageFolder>
    </return>
  </ns2:getStorageFolderByIdResponse>
</S:Body>
</S:Envelope>

```

▼ Example GetStorageFolderById transaction with bad id in the request.

Example GetStorageFolderById transaction with bad id in the request.

Request :

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStorageFolderById>
      <token>jA994t1I4jS6kbb4ENvKYThglekdi2wz</token>
      <id>4</id>
    </v2:getStorageFolderById>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByIdResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>No such Storage Target: id=4</message>
          <statusCode>ERROR_NOT_FOUND</statusCode>
        </status>
      </return>
    </ns2:getStorageFolderByIdResponse>
  </S:Body>
</S:Envelope>

```


GetStorageFolderByName (v2)

Overview

Returns a Storage Folder information by name.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	The requested Storage Folder's eid	Mandatory
name	String	The requested Storage Folder's name	Mandatory

Response

Parameters of the API response in **GetStorageFolderByName** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND
StorageFolder	StorageFolder	

Examples

▼ Example GetStorageFolderByName transaction.

Example GetStorageFolderByName transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStorageFolderByName>
      <token>h0QNnaRB5dX5RXJULcmiFT9MpKX2VPZTz</token>
      <eid>0000</eid>
      <name>Amazon S3 TEST</name>
    </v2:getStorageFolderByName>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByNameResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolder>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>false</emailTls>
          <exportTarget>false</exportTarget>
          <exportTargetEveryone>true</exportTargetEveryone>
          <id>2</id>
          <name>Amazon S3 TEST</name>
          <path>verbatest</path>
          <serverName>eu-west-1</serverName>
          <storageType>amazon_s3</storageType>
          <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
          <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaIVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab</us
        </storageFolder>
      </return>
    </ns2:getStorageFolderByNameResponse>
  </S:Body>
</S:Envelope>

```

▼ Example GetStorageFolderByName transaction with bad name in the request.

Example GetStorageFolderByName transaction with bad name in the request.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStorageFolderByName>
      <token>jA994t1I4jS6kbb4ENvKYThglekdi2wz</token>
      <eid>0000</eid>
      <name>NotExists</name>
    </v2:getStorageFolderByName>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStorageFolderByNameResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>No such Storage Target: {ENVIRONMENT: eid=0000 (exact)} name=EWS</messag
          <statusCode>ERROR_NOT_FOUND</statusCode>
        </status>
      </return>
    </ns2:getStorageFolderByNameResponse>
  </S:Body>
</S:Envelope>

```

GetStoragePolicyById (v2)

Overview

Returns a Storage Policy information by id.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
id	Integer	The requested Storage Policy's id	Mandatory

Response

Parameters of the API response in **GetStoragePolicyById** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example GetStoragePolicyById transaction.

Example GetStoragePolicyById transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStoragePolicyById>
      <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
      <id>3</id>
    </v2:getStoragePolicyById>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStoragePolicyByIdResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
```

```

<status>
  <statusCode>OK</statusCode>
</status>
<storagePolicy>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>
  <decrypt>>true</decrypt>
  <eid>0000</eid>
  <enabled>>false</enabled>
  <firstTranscode>>false</firstTranscode>
  <format>mp3</format>
  <id>3</id>
  <keepCdr>>false</keepCdr>
  <moveToRecycleBin>>false</moveToRecycleBin>
  <name>Amazon testy</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>0</olderThanYears>
  <onlyForArchived>>false</onlyForArchived>
  <priority>10</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailTls>>false</emailTls>
    <exportTarget>>false</exportTarget>
    <exportTargetEveryone>>true</exportTargetEveryone>
    <id>2</id>
    <name>Amazon S3 TEST</name>
    <path>verbatest</path>
    <serverName>eu-west-1</serverName>
    <storageType>amazon_s3</storageType>
    <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
    <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaiVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
  </storageFolder>
</storagePolicy>
</return>
</ns2:getStoragePolicyByIdResponse>
</S:Body>
</S:Envelope>

```

▼ Example GetStoragePolicyById transaction.

Example GetStoragePolicyById transaction.

Request :

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStoragePolicyById>
      <token>n6nxbbGLZjFwpgGNubnS54f0FjZbkCj1</token>
      <id>6</id>
    </v2:getStoragePolicyById>
  </soapenv:Body>
</soapenv:Envelope>

```

Response :

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getStoragePolicyByIdResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>

```

```
<enabled>>false</enabled>
<firstTranscode>>false</firstTranscode>
<id>6</id>
<keepCdr>>false</keepCdr>
<moveToRecycleBin>>false</moveToRecycleBin>
<name>EWS Test Export</name>
<olderThanMinutes>0</olderThanMinutes>
<olderThanYears>0</olderThanYears>
<onlyForArchived>>false</onlyForArchived>
<priority>40</priority>
<storageFolder>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>8</id>
  <name>EWS Test</name>
  <path>Ingestion@VerbaTest.ccsctp.net</path>
  <port>443</port>
  <serverName>https://3rdpartyingestio.cloudapp.net/service/ThirdPartyIngestion.s
  <storageType>ews</storageType>
  <userLogin>Ingestion@VerbaTest.ccsctp.net</userLogin>
  <userPassword>.....</userPassword>
</storageFolder>
</storagePolicy>
</return>
</ns2:getStoragePolicyByIdResponse>
</S:Body>
</S:Envelope>
```

GetStoragePolicyByName (v2)

Overview

Returns a Storage Policy information by name.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	The requested Storage Policy's eid	Mandatory
name	String	The requested Storage Policy's name	Mandatory

Response

Parameters of the API response in **GetStoragePolicyByName** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example GetStoragePolicyByName transaction.

Example GetStoragePolicyByName transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getStoragePolicyByName>
      <token>kmViATcGv0fqsPgBmsiUn47Bm8U811WX</token>
      <eid>0000</eid>
      <name>ASDF002</name>
    </v2:getStoragePolicyByName>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
```

```
<ns2:getStoragePolicyByNameResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
  <return>
    <status>
      <statusCode>OK</statusCode>
    </status>
    <storagePolicy>
      <action>export</action>
      <callFilter>WHERE section.owner_eid = '0000'</callFilter>
      <customSql>>false</customSql>
      <decrypt>>true</decrypt>
      <eid>0000</eid>
      <enabled>>true</enabled>
      <firstTranscode>>false</firstTranscode>
      <id>1030</id>
      <keepCdr>>false</keepCdr>
      <moveToRecycleBin>>false</moveToRecycleBin>
      <name>ASDF002</name>
      <olderThanMinutes>0</olderThanMinutes>
      <olderThanYears>0</olderThanYears>
      <onlyForArchived>>false</onlyForArchived>
      <priority>250</priority>
      <storageFolder>
        <certPublic/>
        <eid>0000</eid>
        <emailTls>>true</emailTls>
        <exportTarget>>true</exportTarget>
        <exportTargetEveryone>>true</exportTargetEveryone>
        <id>8</id>
        <name>EWS Test</name>
        <path>Ingestion@VerbaTest.ccsctp.net</path>
        <port>443</port>
        <serverName>https://3rdpartyingestion.cloudapp.net/service/ThirdPartyIngestion.
        <storageType>ews</storageType>
        <userLogin>Ingestion@VerbaTest.ccsctp.net</userLogin>
        <userPassword>.....</userPassword>
      </storageFolder>
    </storagePolicy>
  </return>
</ns2:getStoragePolicyByNameResponse>
</S:Body>
</S:Envelope>
```

GetUserByLoginNameAndEnvironment (v2)

Overview

Returns a user.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
loginName	String		Mandatory
environment	String		Mandatory
environmentParamsShortName	boolean		Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS
user	User	

Examples

▼ Example GetUserByLoginNameAndEnvironment transaction.

Example GetUserByLoginNameAndEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getUserByLoginNameAndEnvironment>
      <token>WnGS6R24I0e7An7YIHWWvC1LRA0avFzA</token>
      <loginName>verbatest</loginName>
      <environment>0000</environment>
      <environmentParamsShortName>0</environmentParamsShortName>
    </v2:getUserByLoginNameAndEnvironment>
```



```
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getUserByLoginNameAndEnvironmentResponse xmlns:ns2="http://v2.provisioning.ws.web.verb
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <user>
          <agentId/>
          <apiAccessOnly>>false</apiAccessOnly>
          <customDateFormat/>
          <customTimeFormat/>
          <displayName>Verba Test User</displayName>
          <eid>0000</eid>
          <email>verbatest@verbalabs.com</email>
          <environmentShortName>Ref.</environmentShortName>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>+12444</extension>
            <id>58</id>
            <im>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>true</voice>
          </extensions>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>12444</extension>
            <id>59</id>
            <im>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>true</voice>
          </extensions>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>verbatest@verbalabs.com</extension>
            <id>60</id>
            <im>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>true</voice>
          </extensions>
          <externalId/>
          <groupMemberships>
            <admin>true</admin>
            <group>
              <eid>0000</eid>
              <environmentShortName>Ref.</environmentShortName>
              <id>2</id>
              <name>Developers</name>
              <nonModifiable>>false</nonModifiable>
            </group>
            <member>true</member>
            <primary>true</primary>
            <supervisor>true</supervisor>
            <uniqueIdUnmodifiable>39</uniqueIdUnmodifiable>
          </groupMemberships>
        </user>
        <agentId/>
```

```
<apiAccessOnly>false</apiAccessOnly>
<customDateFormat/>
<customTimeFormat/>
<displayName>Verba Test User</displayName>
<eid>0000</eid>
<email>verbatest@verbalabs.com</email>
<environmentShortName>Ref.</environmentShortName>
<externalId/>
<id>36</id>
<language>en</language>
<locked>false</locked>
<loginName>verbatest</loginName>
<needChangePassword>false</needChangePassword>
<nonModifiable>false</nonModifiable>
<observerGroupId>0</observerGroupId>
<observerUserId>0</observerUserId>
<passwordExpires>false</passwordExpires>
<passwordHash>673as22ecba23ca</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-20T16:23:33.887Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</groupMemberships>
<id>36</id>
<language>en</language>
<locked>false</locked>
<loginName>verbatest</loginName>
<needChangePassword>false</needChangePassword>
<nonModifiable>false</nonModifiable>
<observerGroupId>0</observerGroupId>
<observerUserId>0</observerUserId>
<passwordExpires>false</passwordExpires>
<roles>r_standard_user</roles>
<roles>r_system_administrator</roles>
<roles>r_system_supervisor</roles>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
</return>
</ns2:getUserByLoginNameAndEnvironmentResponse>
</S:Body>
</S:Envelope>
```

GetVersion (v2)

Overview

Returns the API version.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
getVersion		Tells the system to return the currently used API's version	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	VersionResponse	Provision API version information.

Examples

▼ Example GetVersion transaction.

Example GetVersion transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:getVersion/>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:getVersionResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <parts>2</parts>
        <versionStr>v2</versionStr>
      </return>
    </ns2:getVersionResponse>
  </S:Body>
</S:Envelope>
```

ListEnvironments (v2)

Overview

Returns an environment list.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	EnvironmentFilter	Defines what environment to search for	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
environments	List< Environment >	Returned extensions (returned only if justCount in the filter parameter is false)
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListEnvironments transaction.

Example ListEnvironments transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listEnvironments>
      <token>h0QNnaRB5dX5RXJU1cmiFT9MpKX2VPZT</token>
      <filter>

        <!-- use eid or shortName, but not both
        <eid></eid>
        <eidExact>0</eidExact>
        -->

        <!--
        <shortName></shortName>
        <shortNameExact>0</shortNameExact>
        -->
```

```
        <!-- As I used neither of them it will list all -->
        <inactive>0</inactive>
    </filter>
</v2:listEnvironments>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listEnvironmentsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <environments>
          <displayName>Reference environment</displayName>
          <eid>0000</eid>
          <helpdeskURL>http://valami.hu</helpdeskURL>
          <inactive>false</inactive>
          <shortName>Ref.</shortName>
        </environments>
        <environments>
          <displayName>API test Environment</displayName>
          <eid>0001</eid>
          <helpdeskURL>http://help-menu-link.net</helpdeskURL>
          <inactive>false</inactive>
          <ondemandMaxCallAgeHoursInBuffer>72</ondemandMaxCallAgeHoursInBuffer>
          <ondemandMaxRowsInBufferPerUser>24</ondemandMaxRowsInBufferPerUser>
          <shortName>Tenant test shortname</shortName>
        </environments>
        <environments>
          <displayName>API test Environment</displayName>
          <eid>0002</eid>
          <helpdeskURL>http://help-menu-link.net</helpdeskURL>
          <inactive>false</inactive>
          <ondemandMaxCallAgeHoursInBuffer>72</ondemandMaxCallAgeHoursInBuffer>
          <ondemandMaxRowsInBufferPerUser>24</ondemandMaxRowsInBufferPerUser>
          <shortName>Tenant test 2 shortname</shortName>
        </environments>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listEnvironmentsResponse>
  </S:Body>
</S:Envelope>
```

ListExtensions (v2)

Overview

Returns an extension list.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	ExtensionFilter	Defines what extensions to search for	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
extensionCount	Integer	Number of extensions returned (returned only if justCount in the filter parameter is true)
extensions	List< Extension >	Returned extensions (returned only if justCount in the filter parameter is false)
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_ALREADY_EXISTS

Examples

▼ Example ListExtensions transaction.

Example ListExtensions transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listExtensions>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
```

```

-->
</environmentFilter>
<!-- <extension></extension> -->
<extensionExact>0</extensionExact>
<!-- <hasUser>1</hasUser> --> <!-- Commenting this line causes to list both user asso
<inactive>0</inactive>
<justCount>0</justCount>
</filter>
</v2:listExtensions>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listExtensionsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12003</extension>
          <id>47</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Krasznai Péter</displayName>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <id>25</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>peti</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-11-19T14:35:26.310Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
          </user>
          <video>true</video>
          <voice>true</voice>
        </extensions>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12778</extension>
          <id>49</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Istvan Toth</displayName>
            <eid>0000</eid>
            <email>toth@verbalabs.com</email>
            <environmentShortName>Ref.</environmentShortName>
            <id>27</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>toth</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
          </user>
        </extensions>
      </return>
    </ns2:listExtensionsResponse>
  </S:Body>
</S:Envelope>

```

```
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>l2401</extension>
    <id>53</id>
    <im>true</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>true</screenCaptureEnabled>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Wolf Attila</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>28</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>wolf</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>l2402</extension>
    <id>27</id>
    <im>true</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>true</screenCaptureEnabled>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Bajzat Tamas</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>13</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>bajzat</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>l2779</extension>
    <id>16</id>
```



```
<im>>false</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>>false</screenCaptureEnabled>
<user>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>mate</displayName>
  <eid>0000</eid>
  <email/>
  <environmentShortName>Ref.</environmentShortName>
  <externalId/>
  <id>9</id>
  <language>en</language>
  <locked>>false</locked>
  <loginName>mate</loginName>
  <needChangePassword>>false</needChangePassword>
  <nonModifiable>>false</nonModifiable>
  <passwordExpires>>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-10-12T15:47:00Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<video>>false</video>
<voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>12780</extension>
  <id>24</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Aron Diofasi</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>12</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>aron</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>>true</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>13403</extension>
  <id>2</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
```

```

        <crmUserId/>
        <customDateFormat/>
        <customTimeFormat/>
        <displayName>olibali</displayName>
        <eid>0000</eid>
        <email/>
        <environmentShortName>Ref.</environmentShortName>
        <externalId/>
        <id>3</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>olibali</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-08-28T09:17:00Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>norbi@verbalabs.com</extension>
    <id>46</id>
    <im>true</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>true</screenCaptureEnabled>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Kakas Norbert</displayName>
        <eid>0000</eid>
        <email>kakas@verba.com</email>
        <environmentShortName>Ref.</environmentShortName>
        <id>24</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>norbi</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>true</video>
    <voice>true</voice>
</extensions>
<status>
    <statusCode>OK</statusCode>
</status>
</return>
</ns2:listExtensionsResponse>
</S:Body>
</S:Envelope>

```

▼ Example ListExtensions transaction where the extensions has associated users.

Example ListExtensions transaction where the extensions has associated users.

Request :

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
    <soapenv:Header/>
    <soapenv:Body>
        <v2:listExtensions>

```

```

<token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
<filter>
  <environmentFilter>
    <eid>0000</eid>
    <eidExact>0</eidExact>
    <inactive>0</inactive>
    <!-- Needed if eid is not present
    <shortName></shortName>
    <shortNameExact></shortNameExact>
    -->
  </environmentFilter>
  <!-- <extension></extension> -->
  <extensionExact>0</extensionExact>
  <hasUser>1</hasUser>
  <inactive>0</inactive>
  <justCount>0</justCount>
</filter>
</v2:listExtensions>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listExtensionsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12003</extension>
          <id>47</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Krasznai Péter</displayName>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <id>25</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>peti</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-11-19T14:35:26.310Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
          </user>
          <video>true</video>
          <voice>true</voice>
        </extensions>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12007</extension>
          <id>30</id>
          <im>true</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>true</screenCaptureEnabled>
          <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Szabolcs Daroczy</displayName>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <id>16</id>

```

```
<language>en</language>
<locked>>false</locked>
<loginName>daroczy</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<passwordHash>.....</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-11-19T14:35:26.310Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<video>>true</video>
<voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>+12011</extension>
  <id>41</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Moczar Gabor</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>23</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>moczar</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>>true</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>+12401</extension>
  <id>52</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Wolf Attila</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>28</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>wolf</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
</extensions>
```

```
<video>true</video>
<voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>balazs@verbalabs.com</extension>
  <id>1</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>olibali</displayName>
    <eid>0000</eid>
    <email/>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>3</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>olibali</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-08-28T09:17:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>true</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>bartok@VERBALABS.COM</extension>
  <id>29</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Bartók István</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>15</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>bartoki</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>true</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
```

```
<extension>daroczy@VERBALABS.COM</extension>
<id>32</id>
<im>true</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>true</screenCaptureEnabled>
<user>
  <apiAccessOnly>false</apiAccessOnly>
  <displayName>Szabolcs Daroczy</displayName>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <id>16</id>
  <language>en</language>
  <locked>false</locked>
  <loginName>daroczy</loginName>
  <needChangePassword>false</needChangePassword>
  <nonModifiable>false</nonModifiable>
  <passwordExpires>false</passwordExpires>
  <passwordHash>.....</passwordHash>
  <timeZone>Europe/Budapest</timeZone>
  <userType>user_type_verba</userType>
  <validFrom>2015-11-19T14:35:26.310Z</validFrom>
  <validTo>2099-12-31T00:00:00Z</validTo>
</user>
<video>true</video>
<voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>fenyvesi@VERBALABS.COM</extension>
  <id>33</id>
  <im>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Fenyvesi Gabor</displayName>
    <eid>0000</eid>
    <email>gfenyvesi@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>17</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>fenyvesi</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>true</video>
  <voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>iptradeTest1</extension>
  <id>8</id>
  <im>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>false</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
```

```

    <displayName>IPTUser1</displayName>
    <eid>0000</eid>
    <email/>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>6</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>IPTUser1</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-15T12:16:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>iptradeTest2</extension>
  <id>9</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <user>
    <agentId/>
    <apiAccessOnly>>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>IPTUser2</displayName>
    <eid>0000</eid>
    <email>Abdula@VerbaMstTest.ccsctp.net</email>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>7</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>IPTUser2</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-15T12:17:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>jim@VERBALABS.COM</extension>
  <id>36</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>true</screenCaptureEnabled>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Jim Rusch</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>18</id>

```

```

        <language>en</language>
        <locked>>false</locked>
        <loginName>jim</loginName>
        <needChangePassword>>false</needChangePassword>
        <nonModifiable>>false</nonModifiable>
        <passwordExpires>>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <video>>true</video>
    <voice>>true</voice>
</extensions>
<status>
    <statusCode>OK</statusCode>
</status>
</return>
</ns2:listExtensionsResponse>
</S:Body>
</S:Envelope>

```

▼ Example ListExtensions transaction where the extension has no associated users.

Example ListExtensions transaction where the extension has no associated users.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listExtensions>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <extension></extension> -->
        <extensionExact>0</extensionExact>
        <hasUser>0</hasUser>
        <inactive>0</inactive>
        <justCount>0</justCount>
      </filter>
    </v2:listExtensions>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listExtensionsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <extensions>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <extension>+12004</extension>
          <id>21</id>
          <im>>false</im>
          <recordingMode>FULL</recordingMode>
          <screenCaptureEnabled>>false</screenCaptureEnabled>
          <video>>false</video>
          <voice>>true</voice>
        </extensions>
      </return>
    </ns2:listExtensionsResponse>
  </S:Body>
</S:Envelope>

```



```
<eid>0000</eid>
<environmentShortName>Ref.</environmentShortName>
<extension>l2004</extension>
<id>20</id>
<im>>false</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>>false</screenCaptureEnabled>
<video>>false</video>
<voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>l350</extension>
  <id>22</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>8888</extension>
  <id>13</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>chatroom</extension>
  <id>10</id>
  <im>>true</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>mgonzalez@verbalabs.com</extension>
  <id>19</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>ondemandchatroom</extension>
  <id>11</id>
  <im>>true</im>
  <recordingMode>ON_DEMAND</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>false</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>peter.krasznai@uptrack.com</extension>
  <id>17</id>
```

```
<im>false</im>
<recordingMode>FULL</recordingMode>
<screenCaptureEnabled>false</screenCaptureEnabled>
<video>false</video>
<voice>true</voice>
</extensions>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>peti@verbalabs.com</extension>
  <id>18</id>
  <im>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>false</screenCaptureEnabled>
  <video>false</video>
  <voice>true</voice>
</extensions>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:listExtensionsResponse>
</S:Body>
</S:Envelope>
```

ListGroups (v2)

Overview

Lists groups.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	GroupFilter	Filter parameters	Mandatory

Response

Parameters of the API response in **getGroups** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND• ERROR_TOO_MANY_RESULT
groupCount	Integer	Number of returned Groups (returned only if justCount in the filter parameter is true)
groups	Group	Group list (returned only if justCount in the filter parameter is false)

Examples

▼ Example ListGroups transaction with skipUsers false.

Example ListGroups transaction with skipUsers false.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listGroups>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
```

```

        <shortNameExact></shortNameExact>
        -->
    </environmentFilter>
    <!-- <groupId></groupId> -->
    <justCount>0</justCount>
    <!-- <name></name> -->
    <nameExact>0</nameExact>
    <skipUsers>0</skipUsers>
    <!-- <userLogin></userLogin> -->
    <userLoginExact>0</userLoginExact>
    <!-- <userName></userName> -->
    <userNameExact>0</userNameExact>
    </filter>
</v2:listGroups>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <name>Default</name>
          <nonModifiable>>false</nonModifiable>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>true</primary>
            <supervisor>>false</supervisor>
            <uniqueIdUnmodifiable>1</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>false</apiAccessOnly>
              <displayName>Verba Administrator</displayName>
              <eid>0000</eid>
              <email/>
              <environmentShortName>Ref.</environmentShortName>
              <id>1</id>
              <language>en</language>
              <locked>>false</locked>
              <loginName>Administrator</loginName>
              <needChangePassword>>false</needChangePassword>
              <nonModifiable>>false</nonModifiable>
              <passwordExpires>>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2014-08-28T07:42:37.193Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-08-28T07:42:37.287Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
          <users>
            <admin>>false</admin>
            <member>>true</member>
            <primary>>true</primary>
            <supervisor>>false</supervisor>
            <uniqueIdUnmodifiable>2</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>>true</apiAccessOnly>
              <displayName>Verba Desktop Api User</displayName>
              <eid>0000</eid>
              <environmentShortName>Ref.</environmentShortName>
              <id>2</id>
              <language>en</language>
            </user>
          </users>
        </groups>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>

```

```
<locked>>false</locked>
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  </user>
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  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>>false</admin>
  <member>>true</member>
  <primary>>true</primary>
  <supervisor>>false</supervisor>
  <uniqueIdUnmodifiable>24</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>>false</apiAccessOnly>
    <displayName>Kakas Norbert</displayName>
    <eid>0000</eid>
    <email>kakas@verba.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>24</id>
    <language>en</language>
    <locked>>false</locked>
    <loginName>norbi</loginName>
    <needChangePassword>>false</needChangePassword>
    <nonModifiable>>false</nonModifiable>
    <passwordExpires>>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
```

```
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>25</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Krasznai Péter</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>25</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>peti</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>26</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Somi Bencze</displayName>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>26</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>somi</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-11-19T14:35:26.310Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
  <admin>false</admin>
  <member>true</member>
  <primary>true</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>27</uniqueIdUnmodifiable>
  <user>
    <apiAccessOnly>false</apiAccessOnly>
    <displayName>Istvan Toth</displayName>
    <eid>0000</eid>
    <email>toth@verbalabs.com</email>
    <environmentShortName>Ref.</environmentShortName>
    <id>27</id>
    <language>en</language>
```

```

        <locked>false</locked>
        <loginName>toth</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
    <admin>false</admin>
    <member>true</member>
    <primary>true</primary>
    <supervisor>false</supervisor>
    <uniqueIdUnmodifiable>28</uniqueIdUnmodifiable>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Wolf Attila</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>28</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>wolf</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:35:26.310Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</groups>
<groups>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>2</id>
    <name>Developers</name>
    <nonModifiable>false</nonModifiable>
    <users>
        <admin>false</admin>
        <member>true</member>
        <primary>false</primary>
        <supervisor>true</supervisor>
        <uniqueIdUnmodifiable>31</uniqueIdUnmodifiable>
        <user>
            <apiAccessOnly>false</apiAccessOnly>
            <displayName>Balázs Oláh</displayName>
            <eid>0000</eid>
            <email>olah@verba.com</email>
            <environmentShortName>Ref.</environmentShortName>
            <id>14</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>balazs</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>

```

```

        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:53:03.733Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
<users>
    <admin>true</admin>
    <member>true</member>
    <primary>false</primary>
    <supervisor>true</supervisor>
    <uniqueIdUnmodifiable>30</uniqueIdUnmodifiable>
    <user>
        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Kakas Norbert</displayName>
        <eid>0000</eid>
        <email>kakas@verba.com</email>
        <environmentShortName>Ref.</environmentShortName>
        <id>24</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>norbi</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-19T14:53:03.687Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</groups>
<groups>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <id>3</id>
    <name>Sales</name>
    <nonModifiable>false</nonModifiable>
    <users>
        <admin>false</admin>
        <member>true</member>
        <primary>false</primary>
        <supervisor>false</supervisor>
        <uniqueIdUnmodifiable>33</uniqueIdUnmodifiable>
        <user>
            <agentId/>
            <apiAccessOnly>false</apiAccessOnly>
            <crmUserId/>
            <customDateFormat/>
            <customTimeFormat/>
            <displayName>IPTUser1</displayName>
            <eid>0000</eid>
            <email/>
            <environmentShortName>Ref.</environmentShortName>
            <externalId/>
            <id>6</id>
            <language>en</language>
            <locked>false</locked>
            <loginName>IPTUser1</loginName>
            <needChangePassword>false</needChangePassword>
            <nonModifiable>false</nonModifiable>
            <passwordExpires>false</passwordExpires>
            <passwordHash>.....</passwordHash>
            <timeZone>Europe/Budapest</timeZone>
            <userType>user_type_verba</userType>
            <validFrom>2015-09-15T12:16:00Z</validFrom>
            <validTo>2099-12-31T00:00:00Z</validTo>
        </user>
    </users>
</groups>

```



```

    </user>
    <validFromUnmodifiable>2015-11-19T14:53:33.343Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
  </users>
</users>
  <admin>false</admin>
  <member>true</member>
  <primary>false</primary>
  <supervisor>false</supervisor>
  <uniqueIdUnmodifiable>32</uniqueIdUnmodifiable>
  <user>
    <agentId/>
    <apiAccessOnly>false</apiAccessOnly>
    <crmUserId/>
    <customDateFormat/>
    <customTimeFormat/>
    <displayName>IPTUser2</displayName>
    <eid>0000</eid>
    <email>Abdula@VerbaMsftTest.ccsctp.net</email>
    <environmentShortName>Ref.</environmentShortName>
    <externalId/>
    <id>7</id>
    <language>en</language>
    <locked>false</locked>
    <loginName>IPTUser2</loginName>
    <needChangePassword>false</needChangePassword>
    <nonModifiable>false</nonModifiable>
    <passwordExpires>false</passwordExpires>
    <passwordHash>.....</passwordHash>
    <timeZone>Europe/Budapest</timeZone>
    <userType>user_type_verba</userType>
    <validFrom>2015-09-15T12:17:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>
  </user>
  <validFromUnmodifiable>2015-11-19T14:53:33.337Z</validFromUnmodifiable>
  <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</groups>
<status>
  <statusCode>OK</statusCode>
</status>
</return>
</ns2:listGroupsResponse>
</S:Body>
</S:Envelope>

```

▼ Example ListGroups transaction with skipUsers true.

Example ListGroups transaction with skipUsers true.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listGroups>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present -->
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          <!-- -->
        </environmentFilter>
        <!-- <groupId></groupId> -->
        <justCount>0</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>1</skipUsers>
      </filter>
    </v2:listGroups>
  </soapenv:Body>
</soapenv:Envelope>

```

```

        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
    </filter>
</v2:listGroups>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <name>Default</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>Developers</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>3</id>
          <name>Sales</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>

```

▼ Example ListGroups just count while skipUsers is false.

Example ListGroups just count while skipUsers is false.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listGroups>
      <token>uMeNlt2mG5K3l7lMeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <groupId></groupId> -->
        <justCount>1</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>0</skipUsers>
        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
      </filter>
    </v2:listGroups>
  </soapenv:Body>
</soapenv:Envelope>

```

```

        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
    </filter>
</v2:listGroups>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <groupCount>32</groupCount> <!-- In request skipUsers is false so we count group memb
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>

```

▼ Example ListGroups just count while skipUsers is true.

Example ListGroups just count while skipUsers is true.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listGroups>
      <token>uMeNlt2mG5K3l7lMeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <groupId></groupId> -->
        <justCount>1</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>1</skipUsers>
        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
      </filter>
    </v2:listGroups>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <groupCount>3</groupCount> <!-- In request skipUsers is true so we count groups only
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>

```

```
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>
```

▼ Example ListGroups filtering for group id.

Example ListGroups filtering for group id.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listGroups>
      <token>uMeNlt2mG5K3l71MeV4eEDqyRB97RjAD</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <groupId>2</groupId>
        <justCount>0</justCount>
        <!-- <name></name> -->
        <nameExact>0</nameExact>
        <skipUsers>1</skipUsers>
        <!-- <userLogin></userLogin> -->
        <userLoginExact>0</userLoginExact>
        <!-- <userName></userName> -->
        <userNameExact>0</userNameExact>
      </filter>
    </v2:listGroups>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listGroupsResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <groups>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>Developers</name>
          <nonModifiable>false</nonModifiable>
        </groups>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listGroupsResponse>
  </S:Body>
</S:Envelope>
```

ListStorageFolders (v2)

Overview

Lists Storage Folders.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	StorageFolderFilter	Storage folder filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	GetStorageFoldersResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListStorageFolders transaction.

Example ListStorageFolders transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listStorageFolders>
      <token>TvmWUbL3w0H5G1ajgh1fCjfc6wtOA537</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <id></id> -->
        <!-- <name></name> -->
      </filter>
    </v2:listStorageFolders>
```

```
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStorageFoldersResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>false</emailTls>
          <exportTarget>>true</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>17</id>
          <name>AAA-TSM</name>
          <path>fileSpace</path>
          <storageType>tsm</storageType>
          <userLogin/>
          <userPassword>Ogrwt40fRps=</userPassword>
        </storageFolders>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>false</emailTls>
          <exportTarget>>false</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>2</id>
          <name>Amazon S3 TEST</name>
          <path>verbatest</path>
          <serverName>eu-west-1</serverName>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolders>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>true</emailTls>
          <exportTarget>>true</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>8</id>
          <name>EWS Test</name>
          <path>IngestionMbx@VerbaMsftTest.ccsctp.net</path>
          <port>443</port>
          <serverName>https://3rdpartyingestion.cloudapp.net/service/ThirdPartyIngestion.svc</serverName>
          <storageType>ews</storageType>
          <userLogin>IngestionMbx@VerbaTest.ccsctp.com</userLogin>
          <userPassword>.....</userPassword>
        </storageFolders>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>>false</emailTls>
          <exportTarget>>false</exportTarget>
          <exportTargetEveryone>>true</exportTargetEveryone>
          <id>18</id>
          <name>mr-for-upload</name>
          <path>c:\xyz</path>
          <port>20111</port>
          <serverName>mr</serverName>
          <storageType>mr</storageType>
          <userLogin/>
          <userPassword>.....</userPassword>
        </storageFolders>
      </storageFolders>
    </S:Body>
  </S:Envelope>
```

```
<eid>0000</eid>
<emailTls>>false</emailTls>
<exportTarget>>false</exportTarget>
<exportTargetEveryone>>true</exportTargetEveryone>
<id>1</id>
<name>Recycle Bin</name>
<path>C:\Program Files (x86)\Verba\media\recycle-bin</path>
<port>20111</port>
<storageType>mr</storageType>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>false</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>12</id>
  <name>RS1</name>
  <path>\\RS\SHARE</path>
  <storageType>nas</storageType>
  <userLogin>verbalabs\svc_storage3</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>19</id>
  <name>SFTP - Storage Target</name>
  <path>/C:/sftp_verba/my_media_folder</path>
  <port>22</port>
  <serverName>192.168.1.141</serverName>
  <storageType>sftp</storageType>
  <userLogin>Administrator</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verbalabs.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>14</id>
  <name>smtp test1</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>16</id>
  <name>Tivoli</name>
  <path>VERBA</path>
  <storageType>tsm</storageType>
  <userLogin/>
  <userPassword>.....</userPassword>
</storageFolders>
</return>
</ns2:listStorageFoldersResponse>
</S:Body>
```

</S:Envelope>

▼ Example ListStorageFolders, filtering for a specific Storage Folder name.

Example ListStorageFolders filtering for a specific Storage Folder name.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listStorageFolders>
      <token>TvmWUbl3w0H5G1ajgh1fcJfc6wtOA537</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- Needed if eid is not present
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <id></id> -->
        <name>Amazon S3 Test</name>
      </filter>
    </v2:listStorageFolders>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStorageFoldersResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolders>
          <certPublic/>
          <eid>0000</eid>
          <emailTls>false</emailTls>
          <exportTarget>false</exportTarget>
          <exportTargetEveryone>true</exportTargetEveryone>
          <id>2</id>
          <name>Amazon S3 TEST</name>
          <path>verbatest</path>
          <serverName>eu-west-1</serverName>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolders>
      </return>
    </ns2:listStorageFoldersResponse>
  </S:Body>
</S:Envelope>
```


ListStorageFoldersByEid (v2)

Overview

Lists Storage Folders by eid.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Storage folder eid filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	GetStorageFoldersResponse	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example ListStorageFoldersByEid transaction.

Example ListStorageFoldersByEid transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listStorageFoldersByEid>
      <token>iVHqMY3IpaK0X7Vf5QHxoalxtQUwrtTt</token>
      <eid>0000</eid>
    </v2:listStorageFoldersByEid>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStorageFoldersByEidResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:listStorageFoldersByEidResponse>
  </S:Body>
</S:Envelope>
```

```
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailTls>>false</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>17</id>
  <name>AAA-TSM</name>
  <path>fileSpace</path>
  <storageType>tsm</storageType>
  <userLogin/>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verba.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>5</id>
  <name>HP Digital Safe Storage Target</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verba.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>false</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>13</id>
  <name>Kaimanó</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
<storageFolders>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verbalabs.com</emailFrom>
  <emailTls>>true</emailTls>
  <exportTarget>>true</exportTarget>
  <exportTargetEveryone>>true</exportTargetEveryone>
  <id>14</id>
  <name>smtp test1</name>
  <path>olah@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olah@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolders>
</return>
</ns2:listStorageFoldersByEidResponse>
</S:Body>
</S:Envelope>
```

ListStoragePolicies (v2)

Overview

Lists Storage Policies.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	StoragePolicyFilter	Storage Policy filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicies	List< storagePolicies >	

Examples

▼ Example ListStoragePolicies transaction. Filter: eid == '0000' and action == 'upload'.

Example ListStoragePolicies transaction. Filter: eid == '0000' and action == 'upload'.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listStoragePolicies>
      <token>iVHqMY3IpaK0X7Vf5QHxoalxtQUwrtTt</token>
      <filter>
        <action>upload</action>
        <inactive>0</inactive>
        <!-- <name></name> -->
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <!--
          <shortName></shortName>
          <shortNameExact>?</shortNameExact>
          -->
```

```

        <inactive>0</inactive>
      </environmentFilter>
    </filter>
  </v2:listStoragePolicies>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStoragePoliciesResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicies>
          <action>upload</action>
          <callFilter>WHERE section.owner_eid = '0000'
AND section.source_caller_id = 'xxx'</callFilter>
          <customSql>>false</customSql>
          <decrypt>true</decrypt>
          <eid>0000</eid>
          <enabled>true</enabled>
          <firstTranscode>>false</firstTranscode>
          <format>pcml6</format>
          <id>1022</id>
          <keepCdr>>false</keepCdr>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>test-upload</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>200</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>18</id>
            <name>mr-for-upload</name>
            <path>c:\xyz</path>
            <port>20111</port>
            <serverName>mr</serverName>
            <storageType>mr</storageType>
            <userLogin/>
            <userPassword>Ogrwt4OfRps=</userPassword>
          </storageFolder>
        </storagePolicies>
      </return>
    </ns2:listStoragePoliciesResponse>
  </S:Body>
</S:Envelope>

```

▼ Example ListStoragePolicies transaction. Filter: eid == '0000' and name == 'Test Data Retention'.

Example ListStoragePolicies transaction. Filter: eid == '0000' and action == 'upload'.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listStoragePolicies>
      <token>iVHqMY3IpaKOX7Vf5QHxoalxtQUwrtTt</token>
      <filter>
        <!-- <action></action> -->
        <inactive>0</inactive>
        <name>Test Data Retention</name>
        <environmentFilter>
          <eid>0000</eid>

```

```
        <eidExact>0</eidExact>
    <!--
    <shortName></shortName>
    <shortNameExact>?</shortNameExact>
    -->
    <inactive>0</inactive>
</environmentFilter>
</filter>
</v2:listStoragePolicies>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStoragePoliciesResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicies>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>
          <enabled>>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format>mp3</format>
          <id>1036</id>
          <keepCdr>>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>33</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
            <storageType>amazon_s3</storageType>
            <userLogin>.....</userLogin>
            <userPassword>.....</userPassword>
          </storageFolder>
        </storagePolicies>
      </return>
    </ns2:listStoragePoliciesResponse>
  </S:Body>
</S:Envelope>
```

ListStoragePoliciesByEid (v2)

Overview

Lists Storage Policies by eid.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
eid	String	Storage Policy eid filter	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicies	List< storagePolicies >	

Examples

▼ Example ListStoragePoliciesByEid transaction.

Example ListStoragePoliciesByEid transaction.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listStoragePoliciesByEid>
      <token>E4d4Amg764HUz1rjRKfg0acE0qmdjoas</token>
      <eid>0000</eid>
    </v2:listStoragePoliciesByEid>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listStoragePoliciesByEidResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
```

```

<status>
  <statusCode>OK</statusCode>
</status>
<storagePolicies>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>
  <decrypt>>true</decrypt>
  <eid>0000</eid>
  <enabled>>false</enabled>
  <firstTranscode>>false</firstTranscode>
  <id>1020</id>
  <keepCdr>>false</keepCdr>
  <moveToRecycleBin>>false</moveToRecycleBin>
  <name>AAA-TSM-Policy</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>1</olderThanYears>
  <onlyForArchived>>false</onlyForArchived>
  <priority>180</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailTls>>false</emailTls>
    <exportTarget>>true</exportTarget>
    <exportTargetEveryone>>true</exportTargetEveryone>
    <id>17</id>
    <name>AAA-TSM</name>
    <path>fileSpace</path>
    <storageType>tsm</storageType>
    <userLogin/>
    <userPassword>.....</userPassword>
  </storageFolder>
</storagePolicies>
<storagePolicies>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>
  <decrypt>>true</decrypt>
  <eid>0000</eid>
  <enabled>>false</enabled>
  <firstTranscode>>false</firstTranscode>
  <id>1015</id>
  <keepCdr>>false</keepCdr>
  <moveToRecycleBin>>false</moveToRecycleBin>
  <name>test</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>0</olderThanYears>
  <onlyForArchived>>false</onlyForArchived>
  <priority>140</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailFrom>info@verbalabs.com</emailFrom>
    <emailTls>true</emailTls>
    <exportTarget>true</exportTarget>
    <exportTargetEveryone>true</exportTargetEveryone>
    <id>14</id>
    <name>smtp test1</name>
    <path>olah@verba.com</path>
    <port>465</port>
    <serverName>smtp.gmail.com</serverName>
    <storageType>smtp</storageType>
    <userLogin>olah@verba.com</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</storagePolicies>
<storagePolicies>
  <action>export</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>>false</customSql>

```

```

    <decrypt>true</decrypt>
    <eid>0000</eid>
    <enabled>true</enabled>
    <engineId/>
    <firstTranscode>>false</firstTranscode>
    <format>mp3</format>
    <id>1036</id>
    <keepCdr>true</keepCdr>
    <languageId/>
    <moveToRecycleBin>>false</moveToRecycleBin>
    <name>Test Data Retention</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>>false</onlyForArchived>
    <priority>33</priority>
    <storageFolder>
      <certPublic/>
      <eid>0000</eid>
      <emailTls>>false</emailTls>
      <exportTarget>>false</exportTarget>
      <exportTargetEveryone>>true</exportTargetEveryone>
      <id>2</id>
      <name>Amazon S3 TEST</name>
      <path>verbatest</path>
      <serverName>eu-west-1</serverName>
      <storageType>amazon_s3</storageType>
      <userLogin>.....</userLogin>
      <userPassword>.....</userPassword>
    </storageFolder>
  </storagePolicies>
  <storagePolicies>
    <action>upload</action>
    <callFilter>WHERE section.owner_eid = '0000'
AND section.source_caller_id = 'xxx'</callFilter>
    <customSql>>false</customSql>
    <decrypt>true</decrypt>
    <eid>0000</eid>
    <enabled>true</enabled>
    <firstTranscode>>false</firstTranscode>
    <format>pcm16</format>
    <id>1022</id>
    <keepCdr>>false</keepCdr>
    <moveToRecycleBin>>false</moveToRecycleBin>
    <name>test-upload</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>>false</onlyForArchived>
    <priority>200</priority>
    <storageFolder>
      <certPublic/>
      <eid>0000</eid>
      <emailTls>>false</emailTls>
      <exportTarget>>false</exportTarget>
      <exportTargetEveryone>>true</exportTargetEveryone>
      <id>18</id>
      <name>mr-for-upload</name>
      <path>c:\xyz</path>
      <port>20111</port>
      <serverName>mr</serverName>
      <storageType>mr</storageType>
      <userLogin/>
      <userPassword>.....</userPassword>
    </storageFolder>
  </storagePolicies>
  <storagePolicies>
    <action>export</action>
    <callFilter>WHERE section.owner_eid = '0000'</callFilter>
    <customSql>>false</customSql>
    <decrypt>true</decrypt>
    <eid>0000</eid>

```



```
<enabled>false</enabled>
<firstTranscode>false</firstTranscode>
<id>1014</id>
<keepCdr>false</keepCdr>
<moveToRecycleBin>false</moveToRecycleBin>
<name>testy</name>
<olderThanMinutes>0</olderThanMinutes>
<olderThanYears>0</olderThanYears>
<onlyForArchived>false</onlyForArchived>
<priority>130</priority>
<storageFolder>
  <certPublic/>
  <eid>0000</eid>
  <emailFrom>info@verba.com</emailFrom>
  <emailTls>true</emailTls>
  <exportTarget>false</exportTarget>
  <exportTargetEveryone>true</exportTargetEveryone>
  <id>13</id>
  <name>Kakimanó</name>
  <path>olaho@verba.com</path>
  <port>465</port>
  <serverName>smtp.gmail.com</serverName>
  <storageType>smtp</storageType>
  <userLogin>olaho@verba.com</userLogin>
  <userPassword>.....</userPassword>
</storageFolder>
</storagePolicies>
<storagePolicies>
  <action>upload</action>
  <callFilter>WHERE section.owner_eid = '0000'</callFilter>
  <customSql>false</customSql>
  <decrypt>true</decrypt>
  <eid>0000</eid>
  <enabled>false</enabled>
  <firstTranscode>false</firstTranscode>
  <format>pcm16</format>
  <id>1006</id>
  <keepCdr>false</keepCdr>
  <moveToRecycleBin>false</moveToRecycleBin>
  <name>upload to mr</name>
  <olderThanMinutes>0</olderThanMinutes>
  <olderThanYears>0</olderThanYears>
  <onlyForArchived>false</onlyForArchived>
  <priority>50</priority>
  <storageFolder>
    <certPublic/>
    <eid>0000</eid>
    <emailTls>false</emailTls>
    <exportTarget>false</exportTarget>
    <exportTargetEveryone>true</exportTargetEveryone>
    <id>10</id>
    <name>MR1</name>
    <path>\\MR\SHARE</path>
    <storageType>nas</storageType>
    <userLogin>verbalabs\svc_storage1</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</storagePolicies>
</return>
</ns2:listStoragePoliciesByEidResponse>
</S:Body>
</S:Envelope>
```

ListUsers (v2)

Overview

Lists users.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
filter	UserFilter	Filter parameters	Mandatory

Response

Parameters of the API response in **listUsers** type called **return**:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED• ERROR_NOT_FOUND• ERROR_TOO_MANY_RESULT
userCount	Integer	Number of returned Users (returned only if justCount in the filter parameter is true)
users	User	User list (returned only if justCount in the filter parameter is false)

Examples

▼ Example ListUsers transaction, skipping extension, group and role information.

Example ListUsers transaction, skipping extension, group and role information.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listUsers>
      <token>YWygO3Nw0LlqWWThMKxBal8G3zQ8HKq3</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!--
          <shortName></shortName>
```

```

        <shortNameExact></shortNameExact>
        -->
    </environmentFilter>
    <!-- <extension></extension> -->
    <extensionExact>0</extensionExact>
    <!-- <externalId></externalId> -->
    <externalIdExact>0</externalIdExact>
    <!-- <group></group> -->
    <groupExact>0</groupExact>
    <inactive>0</inactive>
    <justCount>0</justCount>
    <!-- <loginName></loginName> -->
    <loginNameExact>0</loginNameExact>
    <!-- <role></role> -->
    <roleExact>0</roleExact>

    <!-- skip extensions, group memberships, roles -->
    <skipExtensions>1</skipExtensions>
    <skipGroups>1</skipGroups>
    <skipRoles>1</skipRoles>
</filter>
</v2:listUsers>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listUsersResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <users>
          <apiAccessOnly>>false</apiAccessOnly>
          <displayName>Verba Administrator</displayName>
          <eid>0000</eid>
          <email/>
          <environmentShortName>Ref.</environmentShortName>
          <id>1</id>
          <language>en</language>
          <locked>>false</locked>
          <loginName>Administrator</loginName>
          <needChangePassword>>false</needChangePassword>
          <nonModifiable>>false</nonModifiable>
          <passwordExpires>>false</passwordExpires>
          <timeZone>Europe/Budapest</timeZone>
          <userType>user_type_verba</userType>
          <validFrom>2014-08-28T07:42:37.193Z</validFrom>
          <validTo>2099-12-31T00:00:00Z</validTo>
        </users>
        <users>
          <apiAccessOnly>>false</apiAccessOnly>
          <displayName>Aron Diofasi</displayName>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>12</id>
          <language>en</language>
          <locked>>false</locked>
          <loginName>aron</loginName>
          <needChangePassword>>false</needChangePassword>
          <nonModifiable>>false</nonModifiable>
          <passwordExpires>>false</passwordExpires>
          <timeZone>Europe/Budapest</timeZone>
          <userType>user_type_verba</userType>
          <validFrom>2015-11-19T14:35:26.310Z</validFrom>
          <validTo>2099-12-31T00:00:00Z</validTo>
        </users>
      </users>
    </ns2:listUsersResponse>
  </S:Body>
</S:Envelope>

```

```

        <apiAccessOnly>false</apiAccessOnly>
        <displayName>Bajzat Tamas</displayName>
        <eid>0000</eid>
        <environmentShortName>Ref.</environmentShortName>
        <id>13</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>bajzat</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <passwordExpires>false</passwordExpires>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-11-19T14:35:26.310Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </users>
</return>
</ns2:listUsersResponse>
</S:Body>
</S:Envelope>

```

Example ListUsers transaction. Filtering for a group. Skipping group information.

Example ListUsers transaction. Filtering for a group. Skipping group information.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listUsers>
      <token>YWygO3Nw0LlqWWThMKxBal8G3zQ8HKq3</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!--
          <shortName></shortName>
          <shortNameExact></shortNameExact>
          -->
        </environmentFilter>
        <!-- <extension></extension> -->
        <extensionExact>0</extensionExact>
        <!-- <externalId></externalId> -->
        <externalIdExact>0</externalIdExact>
        <group>Nest group2</group>
        <groupExact>0</groupExact>
        <inactive>0</inactive>
        <justCount>0</justCount>
        <!-- <loginName></loginName> -->
        <loginNameExact>0</loginNameExact>
        <!-- <role></role> -->
        <roleExact>0</roleExact>
        <skipExtensions>0</skipExtensions>
        <skipGroups>1</skipGroups>
        <skipRoles>0</skipRoles>
      </filter>
    </v2:listUsers>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listUsersResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <users>

```

```

<agentId/>
<apiAccessOnly>>false</apiAccessOnly>
<crmUserId/>
<customDateFormat/>
<customTimeFormat/>
<displayName>IPTUser2</displayName>
<eid>0000</eid>
<email>Abdula@VerbaMsftTest.ccsctp.net</email>
<environmentShortName>Ref.</environmentShortName>
<extensions>
  <eid>0000</eid>
  <environmentShortName>Ref.</environmentShortName>
  <extension>iptradeTest2</extension>
  <id>9</id>
  <im>>false</im>
  <recordingMode>FULL</recordingMode>
  <screenCaptureEnabled>>false</screenCaptureEnabled>
  <video>>false</video>
  <voice>>true</voice>
</extensions>
<externalId/>
<id>7</id>
<language>en</language>
<locked>>false</locked>
<loginName>IPTUser2</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<passwordExpires>>false</passwordExpires>
<roles>r_quality_management_agent</roles>
<roles>r_standard_user</roles>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-15T12:17:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</users>
<users>
  <agentId/>
  <apiAccessOnly>>false</apiAccessOnly>
  <crmUserId/>
  <customDateFormat/>
  <customTimeFormat/>
  <displayName>mate</displayName>
  <eid>0000</eid>
  <email/>
  <environmentShortName>Ref.</environmentShortName>
  <extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>+12779</extension>
    <id>15</id>
    <im>>false</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>>false</screenCaptureEnabled>
    <video>>false</video>
    <voice>>true</voice>
  </extensions>
  <extensions>
    <eid>0000</eid>
    <environmentShortName>Ref.</environmentShortName>
    <extension>12779</extension>
    <id>16</id>
    <im>>false</im>
    <recordingMode>FULL</recordingMode>
    <screenCaptureEnabled>>false</screenCaptureEnabled>
    <video>>false</video>
  </extensions>

```

▼ Example ListUsers transaction. Just count the users in a group.

Example ListUsers transaction. Just count the users in a group.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:listUsers>
      <token>YWygO3Nw0LlqWWThMKxBa18G3zQ8HKq3</token>
      <filter>
        <environmentFilter>
          <eid>0000</eid>
          <eidExact>0</eidExact>
          <inactive>0</inactive>
          <!-- <shortName></shortName>
          <shortNameExact></shortNameExact> -->
        </environmentFilter>
        <!-- <extension></extension> -->
        <extensionExact>0</extensionExact>
        <!-- <externalId></externalId> -->
        <externalIdExact>0</externalIdExact>
        <group>Nest group2</group>
        <groupExact>0</groupExact>
        <inactive>0</inactive>
        <justCount>1</justCount> <!-- Just count is TRUE -->
        <!-- <loginName></loginName> -->
        <loginNameExact>0</loginNameExact>
        <!-- <role></role> -->
        <roleExact>0</roleExact>
        <!--
        <skipExtensions>0</skipExtensions>
        <skipGroups>0</skipGroups>
        <skipRoles>0</skipRoles>
        -->
      </filter>
    </v2:listUsers>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:listUsersResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <userCount>4</userCount>
      </return>
    </ns2:listUsersResponse>
  </S:Body>
</S:Envelope>
```

ReleaseToken (v2)

Overview

Releases a token

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	Token to be deleted	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_UNAUTHORIZED

Examples

▼ Example ReleaseToken transaction.

Example ReleaseToken transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:releaseToken>
      <token>8VedLjOI56djHA5Q2SryAEmOaSuxF05m</token>
    </v2:releaseToken>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:releaseTokenResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:releaseTokenResponse>
  </S:Body>
</S:Envelope>
```

▼ Example ReleaseToken on an invalid token.

Example ReleaseToken on an invalid token.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:releaseToken>
      <token>8VedLj0I56djHA5Q2SryAEm0aSuXF05m</token>
    </v2:releaseToken>
  </soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:releaseTokenResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <message>This token is expired or never got authenticated.</message>
        <statusCode>ERROR_UNAUTHORIZED</statusCode>
      </return>
    </ns2:releaseTokenResponse>
  </S:Body>
</S:Envelope>
```


RequestToken (v2)

Overview

Requests an authentication token

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
eid	String		Mandatory
loginName	String	Login ID of the API user	Mandatory
password	String	Password of the API user	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
status	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
token	String	Token to be used in subsequent API calls

Examples

▼ Example RequestToken transaction.

Example RequestToken transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:requestToken>
      <eid>0000</eid>
      <loginName>verba_api_user</loginName>
      <password>api_user_password</password>
    </v2:requestToken>
  </soapenv:Body>
</soapenv:Envelope>
```

Response :

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
```

```

    <ns2:requestTokenResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <token>OLZqneyISmy5eoKeGE418X0nvzuu7L1</token>
      </return>
    </ns2:requestTokenResponse>
  </S:Body>
</S:Envelope>

```

▼ Example RequestToken transaction with bad password.

Example RequestToken transaction with bad password.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:requestToken>
      <eid>0000</eid>
      <loginName>verba_api_user</loginName>
      <password>api_user_wrong_password</password>
    </v2:requestToken>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:requestTokenResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>com.verba.web.user.UserNotFoundException</message>
          <statusCode>ERROR_GENERAL</statusCode>
        </status>
      </return>
    </ns2:requestTokenResponse>
  </S:Body>
</S:Envelope>

```

▼ Example RequestToken transaction with bad permissions.

Example RequestToken transaction with bad permissions.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:requestToken>
      <eid>0000</eid>
      <loginName>verba_standard_user</loginName>
      <password>api_user_password</password>
    </v2:requestToken>
  </soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:requestTokenResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <message>com.verba.web.api.KnownException: User should be a System Supervisor.</me
          <statusCode>ERROR_GENERAL</statusCode>
        </status>
      </return>
    </ns2:requestTokenResponse>
  </S:Body>
</S:Envelope>

```

UpdateEnvironment (v2)

Overview

Updates an environment.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
environment	Environment	Updated environment values	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example UpdateEnvironment transaction.

Example UpdateEnvironment transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:updateEnvironment>
      <token>qJwKFPZ2wb2LPhcZbwhHh674Yu2rQtIv</token>
      <environment>
        <eid>0001</eid>
        <displayName>DisplayName</displayName>
        <helpdeskURL>www.thiat.net</helpdeskURL>
        <inactive>0</inactive>
        <ondemandMaxCallAgeHoursInBuffer>60</ondemandMaxCallAgeHoursInBuffer>
        <ondemandMaxRowsInBufferPerUser>60</ondemandMaxRowsInBufferPerUser>
        <!--Zero or more repetitions:-->
        <partitions>1000</partitions>
        <partitions>2000</partitions>
        <partitions>3000</partitions>
      </environment>
    </v2:updateEnvironment>
  </soapenv:Body>
</soapenv:Envelope>
```

```
        <shortName>ShortName</shortName>
    </environment>
</v2:updateEnvironment>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateEnvironmentResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:updateEnvironmentResponse>
  </S:Body>
</S:Envelope>
```

UpdateExtension (v2)

Overview

Updates an extension.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
extension	Extension	Specifies the extension	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED

Examples

▼ Example UpdateExtension transaction.

Example UpdateExtension transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:updateExtension>
      <token>FipASZ3Y336Kvmv7W1BV7aXY7hDFeMxq</token>
      <extension>
        <eid>0000</eid>
        <!-- Needed if eid is not present
        <environmentShortName></environmentShortName>
        -->

        <extension>verbatetestuser2@verbalabs.com</extension>

        <recordingMode>CONTROLLED</recordingMode>

        <im>1</im>
```

```
<voice>1</voice>
<video>1</video>
<screenCaptureEnabled>1</screenCaptureEnabled>

<!--
  If the user tag is not present then the extension-user association will be deleted
  You should always be sure that you have a user tag with a valid ID in it!!
-->
<user>
  <id>25</id>
</user>

</extension>
</v2:updateExtension>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateExtensionResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <statusCode>OK</statusCode>
      </return>
    </ns2:updateExtensionResponse>
  </S:Body>
</S:Envelope>
```

UpdateGroup (v2)

Overview

Updates a group.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
group	Group	Specifies the updated group	Mandatory
updateUsers	boolean	Specifies whether to update the users section of the group or not	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
group	Group	

Examples

▼ Example UpdateGroup transaction without user update.

Example UpdateGroup transaction without user update.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:updateGroup>
      <token>fp9chQ4hA7vsa3Wymx8gxMF3vLo2Tu6G</token>
      <group>
        <eid>0000</eid>
        <!-- <environmentShortName></environmentShortName> -->
        <id>2</id>
        <name>New Group Name</name>
        <nonModifiable>0</nonModifiable>
      </group>
    </v2:updateGroup>
  </soapenv:Body>
</soapenv:Envelope>
```

```
    <updateUsers>0</updateUsers>
  </v2:updateGroup>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateGroupResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>New Group Name</name>
          <nonModifiable>false</nonModifiable>
          <users>
            <admin>false</admin>
            <member>true</member>
            <primary>false</primary>
            <supervisor>true</supervisor>
            <uniqueIdUnmodifiable>31</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>false</apiAccessOnly>
              <displayName>Balázs Oláh</displayName>
              <eid>0000</eid>
              <email>olahi@verba.com</email>
              <environmentShortName>Ref.</environmentShortName>
              <id>14</id>
              <language>en</language>
              <locked>false</locked>
              <loginName>balazs</loginName>
              <needChangePassword>false</needChangePassword>
              <nonModifiable>false</nonModifiable>
              <passwordExpires>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-11-19T14:35:26.310Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-11-19T14:53:03.733Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
          <users>
            <admin>true</admin>
            <member>true</member>
            <primary>false</primary>
            <supervisor>true</supervisor>
            <uniqueIdUnmodifiable>30</uniqueIdUnmodifiable>
            <user>
              <apiAccessOnly>false</apiAccessOnly>
              <displayName>Kakas Norbert</displayName>
              <eid>0000</eid>
              <email>kakas@verba.com</email>
              <environmentShortName>Ref.</environmentShortName>
              <id>24</id>
              <language>en</language>
              <locked>false</locked>
              <loginName>norbi</loginName>
              <needChangePassword>false</needChangePassword>
              <nonModifiable>false</nonModifiable>
              <passwordExpires>false</passwordExpires>
              <passwordHash>.....</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-11-19T14:35:26.310Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
          </users>
        </group>
      </return>
    </ns2:updateGroupResponse>
  </S:Body>
</S:Envelope>
```



```

        <validFromUnmodifiable>2015-11-19T14:53:03.687Z</validFromUnmodifiable>
        <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
    </users>
    <users>
        <admin>true</admin>
        <member>true</member>
        <primary>true</primary>
        <supervisor>true</supervisor>
        <uniqueIdUnmodifiable>39</uniqueIdUnmodifiable>
    <user>
        <agentId/>
        <apiAccessOnly>false</apiAccessOnly>
        <customDateFormat/>
        <customTimeFormat/>
        <displayName>Verba Test User</displayName>
        <eid>0000</eid>
        <email>verbatest@verbalabs.com</email>
        <environmentShortName>Ref.</environmentShortName>
        <externalId/>
        <id>36</id>
        <language>en</language>
        <locked>false</locked>
        <loginName>verbatest</loginName>
        <needChangePassword>false</needChangePassword>
        <nonModifiable>false</nonModifiable>
        <observerGroupId>0</observerGroupId>
        <observerUserId>0</observerUserId>
        <passwordExpires>false</passwordExpires>
        <passwordHash>.....</passwordHash>
        <timeZone>Europe/Budapest</timeZone>
        <userType>user_type_verba</userType>
        <validFrom>2015-09-03T11:56:00Z</validFrom>
        <validTo>2099-12-31T00:00:00Z</validTo>
    </user>
    <validFromUnmodifiable>2015-11-20T16:23:33.887Z</validFromUnmodifiable>
    <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</users>
</group>
<status>
    <statusCode>OK</statusCode>
</status>
</return>
</ns2:updateGroupResponse>
</S:Body>
</S:Envelope>

```

▼ Example UpdateGroup transaction. Delete all users except the one with id 36.

Example UpdateGroup transaction. Delete all users except the one with id 36.

Request:

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:updateGroup>
      <token>s9GtyBR8vN3JXuwQoMsRtviEiX5zi0Wn</token>
      <group>
        <eid>0000</eid>
        <!-- <environmentShortName></environmentShortName> -->
        <id>2</id>
        <!-- <name>New group name</name> -->
        <nonModifiable>0</nonModifiable>

        <!--Zero or more repetitions:-->
        <users>
          <admin>1</admin>
          <member>1</member>
          <primary>1</primary>
          <supervisor>0</supervisor>
          <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>

```

```
<validFromUnmodifiable>0</validFromUnmodifiable>
<validUntilUnmodifiable>0</validUntilUnmodifiable>

<user>
  <id>36</id>
</user>

</users>

</group>
<updateUsers>1</updateUsers> <!-- Set to TRUE! -->
</v2:updateGroup>
</soapenv:Body>
</soapenv:Envelope>
```

Response:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateGroupResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <group>
          <eid>0000</eid>
          <environmentShortName>Ref.</environmentShortName>
          <id>2</id>
          <name>New group name</name>
          <nonModifiable>false</nonModifiable>
          <users>
            <admin>true</admin>
            <member>true</member>
            <primary>true</primary>
            <supervisor>false</supervisor>
            <uniqueIdUnmodifiable>51</uniqueIdUnmodifiable>
            <user>
              <agentId/>
              <apiAccessOnly>false</apiAccessOnly>
              <customDateFormat/>
              <customTimeFormat/>
              <displayName>Verba Test User</displayName>
              <eid>0000</eid>
              <email>verbatest@verbalabs.com</email>
              <environmentShortName>Ref.</environmentShortName>
              <externalId/>
              <id>36</id>
              <language>en</language>
              <locked>false</locked>
              <loginName>verbatest</loginName>
              <needChangePassword>false</needChangePassword>
              <nonModifiable>false</nonModifiable>
              <observerGroupId>0</observerGroupId>
              <observerUserId>0</observerUserId>
              <passwordExpires>false</passwordExpires>
              <passwordHash>673as22ecba23ca</passwordHash>
              <timeZone>Europe/Budapest</timeZone>
              <userType>user_type_verba</userType>
              <validFrom>2015-09-03T11:56:00Z</validFrom>
              <validTo>2099-12-31T00:00:00Z</validTo>
            </user>
            <validFromUnmodifiable>2015-11-26T16:34:51.037Z</validFromUnmodifiable>
            <validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
          </users>
        </group>
        <status>
          <statusCode>OK</statusCode>
        </status>
      </return>
    </ns2:updateGroupResponse>
  </S:Body>
</S:Envelope>
```

UpdateStorageFolder (v2)

Overview

Updates a Storage Folder.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storageFolder	StorageFolder	Updated Storage Folder information	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storageFolder	StorageFolder	

Examples

▼ Example UpdateStorageFolder transaction.

Example UpdateStorageFolder transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:updateStorageFolder>
      <token>2Q14vHt8txwHZZeVGuZuMVuP6Czgg0cX</token>
      <storageFolder>
        <!-- To understand each property you should:
          * login to the Verba Web Interface
          * create a dummy Storage Target
          * use the ListStorageFolders API call to get the dummy Storage Target's properties.
        -->
        <accountId></accountId>
        <apiLogin></apiLogin>
        <apiPassword></apiPassword>
```

```

    <apiUrl></apiUrl>
    <applicationId></applicationId>
    <certPublic></certPublic>
    <eid>0000</eid>
    <emailFrom></emailFrom>
    <emailTls>0</emailTls>
    <exportTarget>1</exportTarget>
    <exportTargetEveryone>0</exportTargetEveryone>
    <id>25</id>
    <name>Verba updated Storage Folder</name>
    <path>amazon_s3</path>
    <port>22</port>
    <serverName>eu-west-1</serverName>
    <snaplockVolume></snaplockVolume>
    <sourceId></sourceId>
    <storageType>amazon_s3</storageType>
    <userLogin>.....</userLogin>
    <userPassword>.....</userPassword>
  </storageFolder>
</v2:updateStorageFolder>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateStorageFolderResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storageFolder>
          <accountId/>
          <apiLogin/>
          <apiPassword/>
          <apiUrl/>
          <applicationId/>
          <certPublic/>
          <eid>0000</eid>
          <emailFrom/>
          <emailTls>false</emailTls>
          <exportTarget>true</exportTarget>
          <exportTargetEveryone>false</exportTargetEveryone>
          <id>25</id>
          <name>Verba updated Storage Folder</name>
          <path>amazon_s3</path>
          <port>22</port>
          <serverName>eu-west-1</serverName>
          <snaplockVolume/>
          <sourceId/>
          <storageType>amazon_s3</storageType>
          <userLogin>.....</userLogin>
          <userPassword>.....</userPassword>
        </storageFolder>
      </return>
    </ns2:updateStorageFolderResponse>
  </S:Body>
</S:Envelope>

```

UpdateStoragePolicy (v2)

Overview

Updates a Storage Policy.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
storagePolicy	StoragePolicy	Specifies the updated Storage Policy	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
storagePolicy	StoragePolicy	

Examples

▼ Example UpdateStoragePolicy transaction.

Example UpdateStoragePolicy transaction.

Request :

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:updateStoragePolicy>
      <token>2Q14vHt8txwHZZeVGuZuMVuP6Czgg0cX</token>
      <storagePolicy>
        <id>1038</id>
        <action>export</action>
        <callFilter>WHERE section.owner_eid = '0000'</callFilter>
        <customSql>>false</customSql>
        <decrypt>1</decrypt>
        <eid>0000</eid>
        <enabled>1</enabled>
        <engineId></engineId>
```

```

    <firstTranscode>0</firstTranscode>
    <format></format>
    <keepCdr>1</keepCdr>
    <languageId></languageId>
    <moveToRecycleBin>0</moveToRecycleBin>
    <name>Test Data Retention</name>
    <olderThanMinutes>0</olderThanMinutes>
    <olderThanYears>0</olderThanYears>
    <onlyForArchived>0</onlyForArchived>
    <priority>34</priority>

    <storageFolder>
      <id>2</id>
    </storageFolder>

  </storagePolicy>
</v2:updateStoragePolicy>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateStoragePolicyResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <storagePolicy>
          <action>export</action>
          <callFilter>WHERE section.owner_eid = '0000'</callFilter>
          <customSql>>false</customSql>
          <decrypt>>true</decrypt>
          <eid>0000</eid>
          <enabled>>true</enabled>
          <engineId/>
          <firstTranscode>>false</firstTranscode>
          <format/>
          <id>1038</id>
          <keepCdr>>true</keepCdr>
          <languageId/>
          <moveToRecycleBin>>false</moveToRecycleBin>
          <name>Test Data Retention</name>
          <olderThanMinutes>0</olderThanMinutes>
          <olderThanYears>0</olderThanYears>
          <onlyForArchived>>false</onlyForArchived>
          <priority>34</priority>
          <storageFolder>
            <certPublic/>
            <eid>0000</eid>
            <emailTls>>false</emailTls>
            <exportTarget>>false</exportTarget>
            <exportTargetEveryone>>true</exportTargetEveryone>
            <id>2</id>
            <name>Amazon S3 TEST</name>
            <path>verbatest</path>
            <serverName>eu-west-1</serverName>
            <storageType>amazon_s3</storageType>
            <userLogin>AKIAIDR3I260LTLTJVKA</userLogin>
            <userPassword>HR3Q74zh93GiU/T0FTFm0syhdfZereaiVLaZxuDN/drsOKVb2CuUBjoK8LeDn0ab<
          </storageFolder>
        </storagePolicy>
      </return>
    </ns2:updateStoragePolicyResponse>
  </S:Body>
</S:Envelope>

```


UpdateUser (v2)

Overview

Updates a user.

The function is available as a Web Service request.

Request

Parameters of the API request:

Parameter	Type	Description	Requirements
token	String	API authentication token	Mandatory
user	User	Specifies the updated group	Mandatory

Response

Parameters of the API response:

Parameter	Type	Description
return	Status	Possible return values: <ul style="list-style-type: none">• OK• ERROR_GENERAL• ERROR_ILLEGAL_ARGUMENT• ERROR_UNAUTHORIZED
user	User	

Examples

▼ Example UpdateUser transaction.

Example UpdateUser transaction.

Request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:v2="http://v2.p
  <soapenv:Header/>
  <soapenv:Body>
    <v2:updateUser>
      <token>2Q14vHt8txwHZZeVGuZuMVuP6Czgg0cX</token>
      <user>
        <agentId></agentId>
        <externalId></externalId>
        <crmUserId></crmUserId>

        <customDateFormat></customDateFormat>
        <customTimeFormat></customTimeFormat>

        <loginName>verbatestUpdate</loginName>
```



```

<needChangePassword>0</needChangePassword>
<displayName>Verba Test User</displayName>
<email>verbatestUpdate@verbalabs.com</email>
<userType>user_type_verba</userType> <!-- Standard user type -->

<eid>0000</eid>
<!-- Needed if eid is not present
<environmentShortName></environmentShortName>
-->

<!--Zero or more repetitions:-->
<extensions>
  <eid>0000</eid>
  <!-- Needed if eid is not present
  <environmentShortName></environmentShortName>
  -->

  <extension>+12444</extension>

  <recordingMode>FULL</recordingMode>
  <im>1</im>
  <voice>1</voice>
  <video>0</video>
  <screenCaptureEnabled>0</screenCaptureEnabled>
</extensions>
<extensions>
  <eid>0000</eid>
  <!-- Needed if eid is not present
  <environmentShortName></environmentShortName>
  -->
  <extension>12444</extension>

  <recordingMode>FULL</recordingMode>
  <im>1</im>
  <voice>1</voice>
  <video>0</video>
  <screenCaptureEnabled>0</screenCaptureEnabled>
</extensions>
<extensions>
  <eid>0000</eid>
  <!-- Needed if eid is not present
  <environmentShortName></environmentShortName>
  -->

  <extension>verbatestUpdate@verbalabs.com</extension>

  <recordingMode>FULL</recordingMode>
  <im>1</im>
  <voice>1</voice>
  <video>0</video>
  <screenCaptureEnabled>0</screenCaptureEnabled>
</extensions>

<!--Zero or more repetitions:-->
<groupMemberships>
  <member>1</member>
  <primary>1</primary>
  <supervisor>1</supervisor>
  <admin>1</admin>
  <group>
    <eid>0000</eid>
    <!-- <environmentShortName>?</environmentShortName>-->
    <id>2</id>
  </group>
  <uniqueIdUnmodifiable>0</uniqueIdUnmodifiable>
  <validFromUnmodifiable>0</validFromUnmodifiable>
  <validUntilUnmodifiable>0</validUntilUnmodifiable>
</groupMemberships>

<language>en</language>

```

```

    <timeZone>Europe/Budapest</timeZone>
    <locked>0</locked>
    <nonModifiable>0</nonModifiable>
    <observerGroupId></observerGroupId>
    <observerUserId></observerUserId>
    <passwordExpires>0</passwordExpires>
    <passwordHash>MD5HASH("your-password")</passwordHash>
    <!-- <recorderLinePIN></recorderLinePIN> -->

    <apiAccessOnly>0</apiAccessOnly>

    <validFrom>2015-09-03T11:56:00Z</validFrom>
    <validTo>2099-12-31T00:00:00Z</validTo>

    <!--Zero or more repetitions:-->
    <roles>r_standard_user</roles>
    <roles>r_system_supervisor</roles>
    <roles>r_system_administrator</roles>

  </user>
</v2:updateUser>
</soapenv:Body>
</soapenv:Envelope>

```

Response:

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:updateUserResponse xmlns:ns2="http://v2.provisioning.ws.web.verba.com/">
      <return>
        <status>
          <statusCode>OK</statusCode>
        </status>
        <user>
          <agentId/>
          <apiAccessOnly>>false</apiAccessOnly>
          <customDateFormat/>
          <customTimeFormat/>
          <displayName>Verba Test User</displayName>
          <eid>0000</eid>
          <email>verbatestupdate@verbalabs.com</email>
          <environmentShortName>Ref.</environmentShortName>
          <extensions>
            <eid>0000</eid>
            <environmentShortName>Ref.</environmentShortName>
            <extension>verbatestupdate@verbalabs.com</extension>
            <id>61</id>
            <im>>true</im>
            <recordingMode>FULL</recordingMode>
            <screenCaptureEnabled>>false</screenCaptureEnabled>
            <video>>false</video>
            <voice>>true</voice>
          </extensions>
          <externalId/>
          <groupMemberships>
            <admin>>true</admin>
            <group>
              <eid>0000</eid>
              <environmentShortName>Ref.</environmentShortName>
              <id>2</id>
              <name>New group name</name>
              <nonModifiable>>false</nonModifiable>
            </group>
            <member>>true</member>
            <primary>>true</primary>
            <supervisor>>true</supervisor>
            <uniqueIdUnmodifiable>56</uniqueIdUnmodifiable>
          </groupMemberships>
          <user>
            <agentId/>
            <apiAccessOnly>>false</apiAccessOnly>

```

```
<customDateFormat/>
<customTimeFormat/>
<displayName>Verba Test User</displayName>
<eid>0000</eid>
<email>verbatestupdate@verbalabs.com</email>
<environmentShortName>Ref.</environmentShortName>
<externalId/>
<id>40</id>
<language>en</language>
<locked>>false</locked>
<loginName>verbatestupdate</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<observerGroupId>0</observerGroupId>
<observerUserId>0</observerUserId>
<passwordExpires>>false</passwordExpires>
<passwordHash>.....</passwordHash>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
<validFromUnmodifiable>2015-11-30T01:26:50.460Z</validFromUnmodifiable>
<validUntilUnmodifiable>2099-12-31T00:00:00Z</validUntilUnmodifiable>
</groupMemberships>
<id>40</id>
<language>en</language>
<locked>>false</locked>
<loginName>verbatestupdate</loginName>
<needChangePassword>>false</needChangePassword>
<nonModifiable>>false</nonModifiable>
<observerGroupId>0</observerGroupId>
<observerUserId>0</observerUserId>
<passwordExpires>>false</passwordExpires>
<roles>r_standard_user</roles>
<roles>r_system_administrator</roles>
<roles>r_system_supervisor</roles>
<timeZone>Europe/Budapest</timeZone>
<userType>user_type_verba</userType>
<validFrom>2015-09-03T11:56:00Z</validFrom>
<validTo>2099-12-31T00:00:00Z</validTo>
</user>
</return>
</ns2:updateUserResponse>
</S:Body>
</S:Envelope>
```

Provisioning API (v2) Data Types

- [ApplyExtensionConfigurationResponseServer \(v2\)](#) — Represents the extension configuration.
- [ApplyExtensionConfigurationResponse \(v2\)](#) — Returned extension configuration information.
- [CallSourceType \(v2\)](#) — Possible call source types.
- [CallStatisticsFilter \(v2\)](#) — Used to filter call statistic.
- [CallStatisticsType \(v2\)](#) — Possible call statistic types.
- [CallStatistic \(v2\)](#) — Represents a call statistic.
- [CreateOrUpdateGroupResponse \(v2\)](#) — Returned group create/update information.
- [CreateOrUpdateStorageFolderResponse \(v2\)](#) — Returned storage folder create/update information.
- [CreateOrUpdateStoragePolicyResponse \(v2\)](#) — Returned storage policy create/update information.
- [CreateOrUpdateUserResponse \(v2\)](#) — Returned user create/update information.
- [EnvironmentFilter \(v2\)](#) — Used to filter tenants.
- [Environment \(v2\)](#) — Represents a tenant.
- [ExtensionFilter \(v2\)](#) — Used to filter extensions.
- [Extension \(v2\)](#) — Represents a phone extension.
- [GetEnvironmentResponse \(v2\)](#) — Returned tenant information.
- [GetEnvironmentsResponse \(v2\)](#) — Returned tenant information for all tenants.
- [GetExtensionResponse \(v2\)](#) — Returned extension information.
- [GetExtensionsResponse \(v2\)](#) — Returned extension information for all extensions.
- [GetGroupMembershipResponse \(v2\)](#) — Returned group membership information.
- [GetGroupMembershipsResponse \(v2\)](#) — Returned group membership information for all group memberships.
- [GetGroupResponse \(v2\)](#) — Returned group information.
- [GetGroupsResponse \(v2\)](#) — Returned group information.
- [GetStorageFolderResponse \(v2\)](#) — Returned storage folder information.
- [GetStorageFoldersResponse \(v2\)](#) — Returned storage folder information for all storage folders.
- [GetStoragePoliciesResponse \(v2\)](#) — Returned storage policies information for all storage policies.
- [GetStoragePolicyResponse \(v2\)](#) — Returned storage policy information.
- [GetUserResponse \(v2\)](#) — Returned user information.
- [GetUsersResponse \(v2\)](#) — Returned user information for all users.
- [GetVersionResponse \(v2\)](#) — Returned Provision API version information.
- [GroupFilter \(v2\)](#) — Used to filter groups.
- [GroupMembershipFilter \(v2\)](#) — Used to filter group memberships.
- [GroupMembership \(v2\)](#) — Represents a user.
- [Group \(v2\)](#) — Represents a group.
- [Location \(v2\)](#) — Represents the location.
- [RecordingModeType \(v2\)](#) — Possible recording mode types.
- [StatisticsResponse \(v2\)](#) — Response of call statistic requests.
- [StatusCode \(v2\)](#) — Return code for API calls.
- [Status \(v2\)](#) — Return status of API calls.
- [StorageFolderFilter \(v2\)](#) — Used to filter storage folders.
- [StorageFolder \(v2\)](#) — Represents a storage folder.
- [StoragePolicyFilter \(v2\)](#) — Used to filter storage policies.
- [StoragePolicy \(v2\)](#) — Represents a storage policy.
- [TokenResponse \(v2\)](#) — Response of token requests.
- [UserFilter \(v2\)](#) — Used to filter users.
- [User \(v2\)](#) — Represents a user.

ApplyExtensionConfigurationResponse (v2)

Overview

Returned extension configuration information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
statuses	List< ApplyExtensionConfigurationResponseServer >	Statuses

ApplyExtensionConfigurationResponseServer (v2)

Overview

Represents the extension configuration.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
server	Location			
status	Status			

CallSourceType (v2)

Possible call source types.

This is a simple enumerated **String** type.

Possible values:

Value
ONLINE
ARCHIVED
BOTH

CallStatistic (v2)

Overview

Represents a call statistic.

Members

Member variables of the entity:

Member	Type	Description
eid	String	Tenant ID (if we asked tenant statistics)
shortName	String	Tenant name (if we asked tenant statistics)
numberOfCalls	Integer	Number of calls according to statistics filter
lengthOfCallsSeconds	Long	
userId	Integer	Internal ID of the user (if we asked user statistics)
loginName	String	Login name of user (if we asked user statistics)

CallStatisticsFilter (v2)

Overview

Used to filter call statistic.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
type	CallStatisticsType			
timeFrom	Date			
timeTo	Date			
source	CallSourceType			

CallStatisticsType (v2)

Possible call statistic types.
This is a simple enumerated **String** type.

Possible values:

Value
BY_ENVIRONMENT
BY_USER

CreateOrUpdateGroupResponse (v2)

Overview

Returned group create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
group	Group	Created/updated group information

CreateOrUpdateStorageFolderResponse (v2)

Overview

Returned storage folder create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storageFolder	StorageFolder	Created/updated Storage Folder information

CreateOrUpdateStoragePolicyResponse (v2)

Overview

Returned storage policy create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storagePolicy	StoragePolicy	Created/updated Storage Policy

CreateOrUpdateUserResponse (v2)

Overview

Returned user create/update information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
user	User	Created/updated user

Environment (v2)

Overview

Represents a tenant.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
eid	String	Enterprise ID (4 characters long identifier)	Needed if shortName is not present	4
shortName	String	Enterprise short name	Needed if eid is not present	64
displayName	String	Display name of the environment		64
inactive	boolean	No login allowed into inactive environments		
helpdeskURL	String	Web URL that points to the environment specific support page		100
ondemandMaxRowsInBufferPerUser	Integer	Number of calls kept in the ondemand call buffer per user		
ondemandMaxCallAgeHoursInBuffer	Integer	Maximum age of calls kept in the ondemand call buffer		
partitions	String	A list of CUCM partitions which enables the system to assign calls to configured tenants, and support non-unique recorded numbers across the tenants / partitions.	Zero or more repetitions	

EnvironmentFilter (v2)

Overview

Used to filter tenants.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
eid	String	ID of the tenant we are looking for	Needed if shortName is not present	4
eidExact	boolean	If true the eid parameter represents the complete ID, not a filter		
shortName	String	Name of the tenant we are looking for	Needed if eid is not present	64
shortNameExact	boolean	If true the shortName parameter represents the complete name, not a filter		
inactive	boolean	If true we are searching inactive tenants		

Extension (v2)

Overview

Represents a phone extension.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
eid	String	Enterprise ID (4 characters long)	Needed if environmentShortName is not present	4
environmentShortName	String	Enterprise short name	Needed if eid is not present	64
id	Integer			
extension	String	Phone number		128
recordingMode	RecordingModeType			
voice	boolean			
im	boolean			
video	boolean			
screenCaptureEnabled	boolean			
user	User	User associated with this extension		

ExtensionFilter (v2)

Overview

Used to filter extensions.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
justCount	boolean			
environmentFilter	EnvironmentFilter			
extension	String			
extensionExact	boolean			
inactive	boolean			
hasUser	boolean			

GetEnvironmentResponse (v2)

Overview

Returned tenant information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
environment	Environment	Environment

GetEnvironmentsResponse (v2)

Overview

Returned tenant information for all tenants.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
environments	List< Environment >	Environments

GetExtensionResponse (v2)

Overview

Returned extension information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
extension	Extension	Extension information

GetExtensionsResponse (v2)

Overview

Returned extension information for all extensions.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
extensions	List< Extension >	Extensions
extensionCount	Integer	Number of extensions

GetGroupMembershipResponse (v2)

Overview

Returned group membership information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
groupMembership	GroupMembership	GroupMembership information

GetGroupMembershipsResponse (v2)

Overview

Returned group membership information for all group memberships.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
groupMemberships	List< GroupMembership >	GroupMemberships
groupMembershipCount	Integer	

GetGroupResponse (v2)

Overview

Returned group information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
group	Group	Group information

GetGroupsResponse (v2)

Overview

Returned group information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
groups	List< Group >	Groups
groupCount	Integer	

GetStorageFolderResponse (v2)

Overview

Returned storage folder information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storageFolder	StorageFolder	Storage Folder information

GetStorageFoldersResponse (v2)

Overview

Returned storage folder information for all storage folders.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storageFolders	List< StorageFolder >	Storage Folders

GetStoragePoliciesResponse (v2)

Overview

Returned storage policies information for all storage policies.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storagePolicies	List< StoragePolicy >	Storage Policies

GetStoragePolicyResponse (v2)

Overview

Returned storage policy information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
storagePolicy	StoragePolicy	Storage Policy

GetUserResponse (v2)

Overview

Returned user information.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
user	User	User information

GetUsersResponse (v2)

Overview

Returned user information for all users.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
users	List< User >	Users
userCount	Integer	

GetVersionResponse (v2)

Overview

Returned Provision API version information.

Members

Member variables of the entity:

Member	Type	Description
parts	Integer	Version of the currently used API as a number.
versionStr	String	Version of the currently used API as a string. (for example: v2)

Group (v2)

Overview

Represents a group.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
id	Integer	User ID		
name	String	Display name of the group		64
eid	String	Enterprise ID (4 characters long)	Needed if environmentShortName is not present	4
environmentShortName	String	Enterprise short name	Needed if eid is not present	64
nonModifiable	boolean	If true, the group can not be modified through the web interface		
users	List< GroupMembership >	List of member users in the group		

GroupFilter (v2)

Overview

Used to filter groups.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
justCount	boolean			
groupId	Integer			
environmentFilter	EnvironmentFilter			
name	String			
nameExact	boolean			
userLogin	String			
userLoginExact	boolean			
userName	String			
userNameExact	boolean			
skipUsers	boolean			

GroupMembership (v2)

Overview

Represents a user.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
uniqueIdUnmodifiable	Integer	Read only unique ID of the group membership.		
primary	boolean	The primary group determines: <ul style="list-style-type: none">Verba XML Service for Cisco IP phones uses the comment template of the primary group (to avoid complexity) for each user.	Every user has to be assigned to a primary group.	
member	boolean	By granting group membership, the group supervisors are allowed to view the calls of the member. If you do not grant the group membership to a user, then group supervisor will not able to view the calls of that user. Group administrators and supervisors do not have to be group members.		
admin	boolean	For further information on group administrator right, refer to Group Administrator level on page 1.		
supervisor	boolean	For further information on group supervisor right, refer to Group Supervisor level on page 1.		
validFromUnmodifiable	Date	Read only start date of the group membership's validity period.		
validUntilUnmodifiable	Date	Read only end date of the group membership's validity period.		
user	User			
group	Group			

Optional custom date format for the user.

GroupMembershipFilter (v2)

Overview

Used to filter group memberships.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
uniqueId	Integer			
userId	Integer			
groupId	Integer			
onlyActive	boolean			

Location (v2)

Overview

Represents the location.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
eid	String	Enterprise ID (4 characters long identifier)	Needed if shortName is not present	4
location	String			

RecordingModeType (v2)

Possible recording mode types.
This is a simple enumerated **String** type.

Possible values:

Value
NONE
FULL
ON_DEMAND
CONTROLLED
RELAY_ONLY
NEVER

StatisticsResponse (v2)

Overview

Response of call statistic requests.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
callStatistics	List< CallStatistic >	Call statistic

Status (v2)

Overview

Return status of API calls.

Members

Member variables of the entity:

Member	Type	Description	Requirements
message	String	Return status in string format	
statusCode	StatusCode	Return code	

StatusCode (v2)

Return code for API calls.

This is a simple enumerated **String** type.

Possible values:

Value
OK
ERROR_GENERAL
ERROR_ILLEGAL_ARGUMENT
ERROR_UNAUTHORIZED
ERROR_ALREADY_EXISTS
ERROR_NOT_FOUND
ERROR_TOO_MANY_RESULT

StorageFolder (v2)

Overview

Represents a storage folder.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
id	Integer			
eid	String			
path	String			
name	String			
storageType	String			
userLogin	String			
userPassword	String			
apiUrl	String			
apiLogin	String			
apiPassword	String			
serverName	String			
port	Integer			
snaplockVolume	String			
applicationId	String			
accountId	String			
sourceId	String			
certPublic	String			
emailFrom	String			
emailTls	boolean			
exportTarget	boolean			
exportTargetEveryone	boolean			

StorageFolderFilter (v2)

Overview

Used to filter storage folders.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
id	Integer			
name	String			

StoragePolicy (v2)

Overview

Represents a storage policy.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
id	Integer			
eid	String			4
name	String			
enabled	boolean			
priority	Integer			
olderThanYears	Integer			
olderThanMinutes	Integer			
action	String			
callFilter	String			
storageFolder	StorageFolder			
firstTranscode	boolean			
onlyForArchived	boolean			
customSql	boolean			
decrypt	boolean			
format	String			
moveToRecycleBin	boolean			
keepCdr	boolean			
languageId	String			
engineId	String			

StoragePolicyFilter (v2)

Overview

Used to filter storage policies.

Members

Member variables of the entity:

Member	Type	Description	Requirements	Max. Length
environmentFilter	EnvironmentFilter			
id	Integer			
name	String			
action	String			
inactive	boolean			

TokenResponse (v2)

Overview

Response of token requests.

Members

Member variables of the entity:

Member	Type	Description
status	Status	Return status
token	String	Token value

User (v2)

Overview

Represents a user.

Members

Member variables of the entity:

Member	Type	Description	Requirement
id	Integer	User ID	
loginName	String	Login name	
passwordHash	String	Password hashed using MD5	
displayName	String	Long display name of the user	
email	String	Email address	
crmUserId	String	CRM User ID for integration with other systems	
language	String	User interface language	
timeZone	String	Time zone in standard Java time zone format	
validFrom	Date	Start of the user's validity period User does not see calls made before this date and can not log in until this date	
validTo	Date	End of the user's validity period User does not see calls made after this date and can not log in after this date	
locked	boolean	Locked status, locked users can not access the system	
eid	String	Enterprise ID (4 characters long)	Needed if environmentShortName is not present
environmentShortName	String	Enterprise short name	Needed if eid is not present
nonModifiable	boolean	Can the user's properties be modified	
passwordExpires	boolean	Shows whether the password will expire or not	
needChangePassword	boolean	Shows whether user Must Change Password at Next Logon	
observerUserId	Integer	Observer User ID for 'four eyes login'	
observerGroupId	Integer	Observer Group ID for 'four eyes login'	
userType	String	Type of the user: <ul style="list-style-type: none">Standard user - standard Verba system users with all the functionalities. (Value is: 'user_type_verba')Publishing Server user - Verba Publishing Server users only with very limited functionality. (Value is: 'user_type_shared_items')	
recorderLinePIN	String	Recorder Line PIN	

agentId	String	<p>Contact Center Agent ID or Cisco Owner User ID. It's visible on the Verba Web Interface under the User's properties only when the following registry is present:</p> <div style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <pre>HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Verba\Web\ShowUserAgentID (DWORD) = 1</pre> </div>	
apiAccessOnly	boolean	API Access Only	
customDateFormat	String	Optional custom date format for the user	
customTimeFormat	String	Optional custom time format for the user	
externalId	String	External ID for integration with other systems	
extensions	List< Extension >	List of extensions associated with the user, a user has access to calls on extensions associated with it	
groupMemberships	List< GroupMembership >		
roles	List<String>		

UserFilter (v2)

Overview

Used to filter users.

Members

Member variables of the entity:

Member	Type	Description	Requirements
userId	Integer		
justCount	boolean	If true the call only counts the users	
environmentFilter	EnvironmentFilter	Filter the tenants we are searching in	
loginName	String	LoginName we are searching for	
loginNameExact	boolean	If true the loginName parameter represents a complete loginName, not a filter	
extension	String	Phone number to search for	
extensionExact	boolean	If true the extension parameter represents a complete phone number, not a filter	
externalId	String		
externalIdExact	boolean		
group	String		
groupExact	boolean		
role	String		
roleExact	boolean		
skipExtensions	boolean	If true extensions are not returned	
skipGroups	boolean		
skipRoles	boolean		
inactive	boolean	If true we are searching inactive users	

Import API

AVAILABLE IN 9.3 AND ABOVE

Overview

The Import API allows ingesting 3rd party or Verba data into the system.

- [Overview](#)
- [Prerequisites](#)
- [General guidelines](#)
 - [HTTP GET, POST](#)
 - [URL encoding](#)
 - [Response type](#)
 - [Security](#)
- [Authentication](#)
 - [Request](#)
 - [Response](#)
- [Import request](#)
 - [Request](#)
 - [Response](#)
- [XML description](#)
 - [Call example XML](#)
 - [SMS example XML](#)
 - [File share example XML](#)
 - [Instant message example XML](#)
 - [Instant message example im file](#)
 - [Conference example XML](#)
 - [Trader voice example XML](#)
 - [CDR record](#)
 - [Media record](#)
 - [Custom metadata example XML](#)
- [Load Balancing](#)

The primary goal of the interface is to enable ingesting records to the system using JSON or XML formatted metadata and the corresponding media file(s). The interface provides access to the Verba Import Service through a REST API. This API supports both the standard and the advanced (trader voice specific) database schemas: [Data models](#).

The API can be reached at `http(s)://media-repository-address:port/restapi/v093/import/<action>`

Prerequisites

In order to utilize the API, the following configuration is needed in the Web Application: [Prerequisite configuration for Import API](#)

General guidelines

HTTP GET, POST

The functions of the API are available as simple HTTP GET and POST requests. For implementations, where HTTP POST is not available, you can use the HTTP GET method. The maximum length of the HTTP GET request is usually maximized either by the client or the server. The client should assume that the maximum length of a GET request is 4000 characters, although, some implementations may support longer URLs too.

URL encoding

All HTTP requests have to be URL encoded and all spaces and special characters have to be escaped and substituted with its URL encoded equivalent. For further information, see http://www.w3schools.com/TAGS/ref_urlencode.asp.

Response type

The API provides json formatted responses.

Security

The API provides the following mechanism to ensure that the communications between the external application and the recording system are secure:

- Authentication
- Token based sessions
- Option to limit the access to the API from preset network addresses
- Option to use SSL/HTTPS

Authentication

The Import API requires a valid session token to process import requests. The authentication expects an HTTP GET request to the auth action. The token generated after a successful authentication is valid for one hour after the last use.

If the authentication fails, the system will return a 500 HTTP Status Response, and a description of the problem encountered during the authentication

Request

Authentication request

```
GET /restapi/v093/import/auth
Host: hostname:port
apikey: D53B03F9-3A7D-4645-97E9-618FD38819A4
password: D87869A979DB0078521D5872944E966E
username: user
cache-control: no-cache
```

Request headers

Field	Description
apikey	The generated, unique GUID for the API key
username	The username of the Verba user used to authenticate. This user must have the Conversation Import role. (optional)
password	The password for the Verba user (optional) (Before 9.6 use the MD5 hash of the password here.)

Response

Authentication response

```
HTTP/1.1 200 OK
Date: Thu, 09 Jan 2019 10:42:57 GMT
Content-Type: application/json
Content-Length: 70
```

Response codes

Response Code	Description
200	Successful authentication
500	Error during authentication

Response headers

Field	Description
Date	The date and time of the request in EEE, DD MMM YYYY HH:MM:SS format Type: String
Content-Type	The type of the HTTP content: application/json Type: String
Content-Length	The length of the HTTP content Type: Number

Response body

```
{
  "status" : "ok",
  "token" : "94557faa725211e980f300155d01545a"
}
{
  "status" : "error",
  "error_message" : "Internal Server Error. An unexpected error has occurred while generating to
}
```

Field	Description
status	The result of the authentication, possible values are ok, error Type: String
token	The token for the authenticated session Only sent if status is ok Type: String
error_message	Description of the error encountered Only sent if status is error Type: String

Import request

Request

The type of the request should be multipart, the boundary, media and the CDR file are mandatory unless noted otherwise. After a successful request, the following reply will be sent:

Authentication request

```
POST /restapi/v093/import/conversation HTTP/1.1
Host: 10.110.78.29:12345
apikey: D29AC60E-5CC3-48AE-9787-29E60EC1892A
token: 9471f4019e5611e980f800155d001c23
```

```
cache-control: no-cache
Content-Type: multipart/form-data; boundary=----WebKitFormBoundary7MA4YWxkTrZu0gW

Content-Disposition: form-data; name=""; filename="C:\GenericImport\CDR.xml
Content-Disposition: form-data; name=""; filename="C:\GenericImport\teszt.wav

-----WebKitFormBoundary7MA4YWxkTrZu0gW--
```

Request headers

Field	Description
apikey	The generated, unique GUID for the API key
token	The token received in the authentication request body

Response

Authentication response

```
HTTP/1.1 200 OK
Date: Thu, 09 Jan 2019 10:42:57 GMT
Content-Type: application/json
Content-Length: 47
```

Response codes

Response Code	Description
200	Successful import
500	Error during import

HTTP/1.1 201 OK

```
JavaScript Object Notation: application/json
Object
  Member Key: status
    String value: ok
  Key: status
  Member Key: reason
    String value: imported
  Key: token
```

Response headers

Field	Description
Date	The date and time of the request in EEE, DD MMM YYYY HH:MM:SS format Type: String
Content-Type	The type of the HTTP content: application/json Type: String
Content-Length	The length of the HTTP content Type: Number

Response body

```

{
  "status" : "ok",
  "reason": "imported"
}
{
  "status": "error",
  "error_message": " Bad request. Failed to process CDR: String to parse is too short: , curren
}

```

Field	Description
status	The result of the authentication, possible values are ok, error Type: String
reason	Verification if the import is successful. Only sent if status is ok. Type: String
error_message	Description of the error encountered Only sent if status is error Type: String

XML description

The description of the Verba XML file can be found at [Metadata XML fields](#). The id of the call is optional, if no ID is provided, the system will generate one.

Call example XML

```

<?xml version="1.0" encoding="utf-8"?>
<verbacdr state="1">  <!-- Finished Call State -->
<id>ff83f076-9e4e-11e9-80f8-00155d001c23</id>
<recorded_cid>testuser@verbalabs.com</recorded_cid>
<start_time>2019.06.21 14:40:15.618</start_time>
<end_time>2019.06.21 14:40:57.768</end_time>
<destination_caller_id>kakas@verbalabs.com</destination_caller_id>
<source_caller_id>6010</source_caller_id>
</verbacdr>

```

SMS example XML

```

<?xml version="1.0" encoding="utf-8"?>
<verbacdr>
<source_caller_id>15198274350</source_caller_id>
<destination_caller_id>12038894142</destination_caller_id>
<start_time>2019.07.15 14:40:15.618</start_time>
<end_time>2019.07.15 14:40:15.618</end_time>
<modality_id>sms</modality_id>
<sms>test message</sms>
</verbacdr>

```

File share example XML

```

<?xml version="1.0" encoding="utf-8"?>
<verbacdr>
  <source_caller_id>user1@verbatest.local</source_caller_id>
  <destination_caller_id>user2@verbatest.local</destination_caller_id>
  <start_time>2019.10.22 10:10:32.673</start_time>
  <end_time>2019.10.22 10:15:32.673</end_time>
  <modality_id>file_share</modality_id>
  <recorded_party>0</recorded_party>
</verbacdr>

```

Instant message example XML

```
<?xml version="1.0" encoding="utf-8"?>
<verbacdr state="1">
  <source_caller_id>user1@verbatest.local</source_caller_id>
  <source_name />
  <destination_caller_id>user2@verbatest.local</destination_caller_id>
  <recorded_cid>user2@verbatest.local</recorded_cid>
  <start_time>2018.11.08 14:03:54.566</start_time>
  <end_time>2018.11.08 14:05:43.806</end_time>
  <direction_id>4</direction_id>
  <modality_id>im</modality_id>
  <recorded_party>1</recorded_party>
</verbacdr>
```

Instant message example im file

```
<?xml version="1.0" encoding="utf-8"?>
<im>
<messages>
  <message id="1">
    <timestamp>2018-11-08T14:03:54.5662219Z</timestamp>
    <source>user1@verbatest.local</source>
    <destination>user2@verbatest.local</destination>
    <plain_message>Test message</plain_message>
    <subject />
  </message>
  <message id="2">
    <timestamp>2018-11-08T14:03:54.5662219Z</timestamp>
    <source>user2@verbatest.local</source>
    <destination>user1@verbatest.local</destination>
    <plain_message>Reply message</plain_message>
    <subject />
  </message>
</messages>
</im>
```

Conference example XML

The conference call direction is supported with all modalities except SMS. Verba creates the conference with the destination_caller_id as conference and the destination_name as Conference (platform_call_id), but this is not mandatory.

```
<?xml version="1.0" encoding="utf-8"?>
<verbacdr state="1">  <!-- Finished Call State -->
  <id>77251f8c-501c-11e6-80c5-00155d001c32</id>
  <platform_call_id>K6LNPTM1</platform_call_id>
  <source_caller_id>user1@verbalabs.com</source_caller_id>
  <source_name>User1</source_name>
  <destination_caller_id>conference</destination_caller_id>
  <destination_name>Conference (K6LNPTM1)</destination_name>
  <recorded_cid>user1@verbalabs.com</recorded_cid>
  <start_time>2019.07.22 14:56:28.833</start_time>
  <end_time>2019.07.22 14:57:45.800</end_time>
  <modality_id>voice</modality_id>
<!--Conference information -->
  <direction_id>14</direction_id>  <!-- Conference -->
  <recorded_party>0</recorded_party>  <!-- Source caller -->
  <conference>true</conference>
  <participants>
    <participant>
      <callerid>user1@verbalabs.com</callerid>
      <name>User1</name>
    <role>conferee</role>
    <start_time>2019.07.22 14:54:50.310</start_time>
    <end_time>2019.07.22 14:57:45.800</end_time>
    <end_cause>1</end_cause>
  </participant>
  <participant>
    <callerid>user2@verbalabs.com</callerid>
    <name>User2</name>
  <role>host</role>
```



```

        <start_time>2019.07.22 14:55:15.177</start_time>
        <end_time>2019.07.22 14:57:45.800</end_time>
        <end_cause>1</end_cause>
    </participant>
</participants>
</verbacdr>

```

i With the instant message IM file, the communication is between the conference participants and the conference bridge, the source is the user sending the message, and the destination is the conference bridge.

Trader voice example XML

The Turret data model does not require a one-to-one relationship between metadata and media, it is allowed to have multiple CDR for one media file, or multiple media files for one CDR. The link between the media and CDR is the `media_record_ids` field. The media is found based on the CDR record by searching for the matching media record IDs, then limiting the search for media end time before CDR start time, and media start time after CDR end time.

CDR record

```

<?xml version="1.0" encoding="utf-8"?>
<verbacdr state="1"> <!-- Finished Call State -->
<type>1</type> <!-- CDR only -->
<source_caller_id>6001</source_caller_id>
<destination_caller_id>588</destination_caller_id>
<start_time>2019.03.06 11:42:05.552</start_time>
<call_start_time>2019.03.06 11:42:05.552</call_start_time>
<end_time>2019.03.06 11:42:37.868</end_time>
<modality_id>voice</modality_id>
<media_record_ids>
<id>BT_IPSI-6-1-3</id>
</media_record_ids>
</verbacdr>

```

Media record

```

<?xml version="1.0" encoding="utf-8"?>
<verbacdr state="1"> <!-- Finished Call State -->
<type>2</type> <!-- Media only -->
<native_id>BT_IPSI-6-1-3</native_id>
<source_caller_id>6001</source_caller_id>
<destination_caller_id>6001</destination_caller_id>
<recorded_cid>6001</recorded_cid>
<start_time>2019.03.06 11:42:17.131</start_time>
<call_start_time>2019.03.06 11:42:11.191</call_start_time>
<media_start_time>2019.03.06 11:42:17.131</media_start_time>
<end_time>2019.03.06 11:42:42.131</end_time>
<modality_id>voice</modality_id>
<media_record_ids>
<id>BT_IPSI-6-1-3</id>
</media_record_ids>
</verbacdr>

```

Custom metadata example XML

In order to import custom metadata, a Metadata template has to be created in Verba prior to the import process. For the process of creating a metadata template, please refer to [Metadata designer](#). The metadata fields are referred by the **Field Identifier** property defined in the Web UI.

```

<?xml version="1.0" encoding="utf-8"?>
<verbacdr state="1"> <!-- Finished Call State -->

```

```
<recorded_cid>testuser@verbalabs.com</recorded_cid>
<start_time>2019.06.21 14:40:15.618</start_time>
<end_time>2019.06.21 14:40:57.768</end_time>
<destination_caller_id>kakas@verbalabs.com</destination_caller_id>
<source_caller_id>6010</source_caller_id>
  <metadata>
    <metadata_template type="standard" name="Custom metadata">
      <field1>00478811846</field1>
    </metadata_template>
  </metadata>
</verbacdr>
```

Load Balancing

The Import API for import service is a single server solution with no built-in load balancing capabilities. If multiple servers are required for the volume of the calls imported, client-side load balancing can be set up, as each separate server needs a session token unique to the server.

Prerequisite configuration for Import API

Configuring the Import source

Step 1 - Open the Verba Web interface then select **Data > Import Sources** from the top menu


Step 2 - Click on the **Add New Import Source** link on the top right

Step 3 - Set a name for the Import source

Step 4 - Set the Type to Verba Rest API

Step 5 - Complete the configuration according to the requirements in the following table

Configuration item	Example
HTTP Port	8800
HTTPS Port	4430
TLS Certificate File / Thumbprint	f7 3e 4c 15 61 c6 8b f3 a6 2e 60 2a 94 b4 48 95 8f 12 e3 8a
TLS Key File	C:\Certs\API.key
TLS Key Password	M6e5w6NrUnpSTYHj
TLS Trust List	own_ca, 2f7ec6305ea2e717f669ea97dbdf8b9537f6cc71

 The ports are specific for the import service, make sure that there are no port conflicts


Configuring the Data management policy

Step 1 - Follow the generic policy creation steps described on the following page: [Data management policies](#)

Step 2 - Select **Data Import** as the action.

Step 3 - Select the **Import Source Type** Verba Rest API.

Step 4 - Add the previously created import source to the selected import sources.

 The Enable Recording Rules should not be checked for not real time imports, and the scheduling should be set to No Scheduling for continuous operation.

Starting the import service

Step 1 - On the Verba Web Interface go to **System / Servers**. Select the server where you want to enable the Import API. It could a Media Repository or Media Repository & Recording Server.

Step 2 - Click on the **Service Activation** tab.

Step 3 - Activate the **Verba Import Service** by clicking on the



icon.

Step 4 - Click on the **Service Control** tab.

Step 5 - Start the **Verba Import Service** by clicking on the



icon.

API key administration

Step 1 - On the Verba Web Interface go to **System / API Keys**.

Step 2 - Select the **Add New API Key** link on the top right corner of the page. Each application should have its own API key so that they can be configured separately.

Step 3 - Complete the configuration according to the requirements in the table below:

Field	Description	Requirements
API Key	Random generated, unique GUID.	-
Name	Name of the API key.	Required field Minimum length: 3 Maximum length: 128
Network Restrictions	For each API key, the system can restrict access to the API for a certain set of network addresses. This optional parameter contains a list of IP addresses and/or hostnames.	-
Requires Authentication	If this flag is enabled, the external application has to provide user credentials before accessing the functions of the API. The provided user has to have System Administrator and System Supervisor roles.	-

XML vaule references

[] [[Audio Codec](#)] [[Video Codec](#)] [[Direction](#)] [[End cause](#)]

Audio Codec

audio_codec_id	
1	Nonstandard
2	G.711 A-law 64k
3	G.711 A-law 56k
4	G.711 u-law 64k
5	G.711 u-law 56k
6	G.722 64k
7	G.722 56k
8	G.722 48k
9	G.723.1
10	G.728
11	G.729
12	G.729A
13	IS11172AudioCap
14	IS13818AudioCap
15	G.729B
16	G.729AwB
18	GSM FR
19	GSM HR
20	GSM EFR
25	Wideband 256k
32	Data 64k
33	Data 56k
80	GSM
81	ActiveVoice
82	G.726 32k
83	G.726 24k

84	G.726 16k
90	iLBC 20ms
91	iLBC 30ms
92	iSAC
93	G.722.1(c)
94	AAC - Low Complexity
95	Microsoft RTAudio
96	MPEG4-Generic
97	MP4A-LATM
98	Siren
99	Speex
100	L8
101	G.726 40k
102	Silk
103	Celt
104	DVI4
105	VOX
106	OPUS
200	H.261
201	H.263
202	H.263+
203	H.263++
204	H.264 AVC
205	H.264 RCDO
206	H.264 SVC
207	Microsoft RT Video
208	Microsoft RDP
299	No Video
299	NO_VIDEO

Video Codec

video_codec_id	
300	TechSmith

301	Windows Media 8 768 Kbps
302	Windows Media 8 1024 Kbps
303	Windows Media 8 1512 Kbps
304	Windows Media 8 2048 Kbps
305	Windows Media 9 768 Kbps
306	Windows Media 9 1024 Kbps
307	Windows Media 9 1512 Kbps
308	Windows Media 9 2048 Kbps
309	Windows Media Screen 768 Kbps
310	Windows Media Screen 1024 Kbps
311	Windows Media Screen 1512 Kbps
312	Windows Media Screen 2048 Kb
313	Verba Screen Codec Lossless
314	Verba Screen Codec HQ
315	Verba Screen Codec LQ
316	Verba Screen Codec LQ - Monochrome
400	No Screen

Direction

direction_id	
0	internal
1	incoming
2	outgoing
3	inter-tenant
4	undefined
6	external
10	federated-in
11	federated-out
12	contact-center-in
13	contact-center-out
14	conference

End cause

cause_id	
0	Normal
1	From Terminated
2	To Terminated
3	Hold
4	Transfer
5	Caller gave up
6	Busy
7	Unobtainable
8	Error
13	Conference
14	Call park
15	Join
28	Direct Transfer
60	Line change
80	Timeout
81	Forced termination
82	Manual termination
83	Program termination
84	Video escalation
85	Voice Inactivity
86	Media Segmentation
90	Blocked
500	Unknown

Branding and customization

The Verba Web Application is designed to allow changes to the look and behavior. This provides service providers flexibility in **modifying web interface functionality** and **branding**.

The following types of customization functions are supported:

- [Overriding static resources](#) — Allows easy customization of images, stylesheets and other static content.
- [Overriding content includes](#) — Allows customization HTML content in places where the web interface supports it.
- [Menu item visibility](#) — All menu items can be turned on and off on the web interface.
- [Call detail field visibility](#) — All fields of the call detail records can be turned on and off on the web interface.
- [Product feature visibility](#) — Many functions of the service provider product can be removed from the user interface to customize the end-user experience.
- [Web logout redirect](#) — The user can be redirected to a specified page upon logout.
- [Restricting administrative access in multi-tenant deployments](#)
- [Configure disclaimer prior to login](#) — The web application can be configured to display a disclaimer before the user can login to the system.

All these customizations are preserved even after upgrades of your Verba Recording System.

Overriding static resources

Overview

Allows easy customization of images, stylesheets and other static content.

All files that belong to the Verba Web Application are stored in the following folder:

```
<VERBA_APP_PATH>\tomcat\webapps\verba
```


When the Verba Web Application Service starts all files and folders in the following location are copied into the above web application path:

```
<VERBA_APP_PATH>\resources\webapp\copy
```

This startup procedure means that any customizations added to the **resources\webapp\copy** folder are becoming part of the web application at start time. This will work for both files that are part of the standard web application (overwrites) and also for new files.

Mainly the following folders contain stylesheets and images in the web application:

```
<VERBA_APP_PATH>\tomcat\webapps\verba\styles  
<VERBA_APP_PATH>\tomcat\webapps\verba\images
```

 It is highly recommended to make a full backup of the entire web application folder, before applying any change to the system, because files will be overwritten. It is not recommended to add or override .jsp files, since it might lead to incompatibilities after an upgrade.

Changing the favicon

You can also customize the **favicon.ico** file of the web application if you place your favicon file like this:

```
<VERBA_APP_PATH>\resources\webapp\copy-ROOT\favicon.ico
```


Overriding content includes

Overview

Allows customization HTML content in places where the web interface supports it.

Currently there are two override hooks in the web application that allow customization of HTML content:

Overridable file	Description	Included by
main\login_info.jsp	Presented on the login page below the login form	main/login.jsp
main\main_info.jsp	Presented in the middle of the main screen of the application	main/main.jsp

It is not recommended to override the .jsp files in the "Included by" column.

In case your HTML requires further resources like styles or images or additional new content, we recommend to put those into a folder called **custom**.

```
<VERBA_APP_PATH>\resources\webapp\copy\custom
```

Using multiple languages

For each supported language you can add language specific files by adding a language code before the .jsp extension. Examples:

```
main\login_info_fi.jsp  
main\login_info_sv.jsp
```

If the language of the user is not present as a language specific file, the main file is used without the language code.

Menu item visibility

All menu items can be turned on and off on the web interface.

In the Verba registry there are two parameters that allow configuration of the visibility of menu items:

Registry value	Description
Verba / Web / HideMenus	List of menu items to hide from all users (valid for environment 0000 in a multi-tenant system)
Verba / Web / HideMenusForNonAdmin	List of menu items to hide from non admin users (valid for environment 0000 in a multi-tenant system)
Verba / Web / HideMenusForTenant	List of menu items to hide from all users in a multi-tenant system (not valid for environment 0000)
Verba / Web / HideMenusForTenantNonAdmin	List of menu items to hide from non administrator users in a multi-tenant system (not valid for environment 0000)

Parameter format example: *[chpass] [downloads]*

where chpass and downloads are examples of two menu item names.

The following table describes the internal names of the menu items to be used in the above two fields:

Internal name	Menu item
system	System
logout	Logout
chpass	Change Password
database	Database
dbsumm	Database Summary
dbstat	Database Status
dbpurg	Database Purging
server	Server
sessmon	Session Monitor
evlog	Event Log
calls	Calls
mycalls	My Calls
mycalls_today	My Calls / Today
mycalls_thisweek	My Calls / This week
mycalls_thismonth	My Calls / This month
mycalls_last1000	My Calls / Last 1000 Calls
impcalls	Important Calls

privcalls	Private Calls
oncalls	Ongoing Calls
ondemandcalls	Ondemand Calls Buffer
empcalls	Users' Calls
empcalls_today	Users' Calls / Today
empcalls_thisweek	Users' Calls / This week
empcalls_thismonth	Users' Calls / This month
empcalls_last1000	Users' Calls / Last 1000 Calls
callbyloc	Calls by Recording Server
callbyloc_today	Users' Calls / Today
callbyloc_thisweek	Users' Calls / This week
callbyloc_thismonth	Users' Calls / This month
callbyloc_last1000	Users' Calls / Last 1000 Calls
searchlist	Saved Queries
searchtemp	Personalize Call List Layout
search	Search
admin	Administration
users	Users
groups	Groups
extensions	Extensions
extensionRules	Phone Number Translation Rules
commtemp	Metadata Templates
defaultsearchtemp	Default Call List Layout
apikey	API Keys
importUsers	Bulk User Import
environments	Environments
myenvironment	My Environment
centralconfig	Central Configuration
locations	Verba Servers
configuration_profiles	Configuration Profiles
storage_policy	Data Retention Policies
storage_policy_folder	Storage Target Folders
manageShares	Manage Shared Items

call_import	Call Import
call_export	Call Export
viewSharedItems	View Shared Items
publishStream	Live Stream Setup
report	Reporting
help	Help
manual	Manual
downloads	Downloads
chkUpdates	Check for Updates
supsite	On-line Support
about	About
userInfo	User information link shown in or above the menu

Call detail field visibility

All fields of the call detail records can be turned on and off on the web interface. In the Verba registry there are two parameters that allow configuration of the visibility of field items:

Registry value	Description
Verba / Web / HideCDRFields	List of CDR fields to hide from all users (valid for environment 0000 in a multi-tenant system)
Verba / Web / HideCDRFieldsForNonAdmin	List of CDR fields to hide from non admin users (valid for environment 0000 in a multi-tenant system)
Verba / Web / HideCDRFieldsForTenant	List of CDR fields to hide from all users in a multi-tenant system (not valid for environment 0000)
Verba / Web / HideCDRFieldsForTenantNonAdmin	List of CDR fields to hide from non administrator users in a multi-tenant system (not valid for environment 0000)

Parameter format example: `[quick_search][phone_number]` where quick_search and phone_number are examples of two field names.

See the following table for possible field names and their effect on the various pages in the web application:

Field name	On the search page	On the call list page	On the call details page
quick_search	The whole Quick Search tab		
timezone	Basic Search / Timezone		
environment	Basic Search / Environment		
duration	Basic Search / Duration interval	Duration	Duration
phone_number	Basic Search / Phone number		
advanced_search	The whole Advanced Search tab		
source_caller_id	Advanced Search / Caller Party Phone Number	Caller Phone Number	Caller Party Phone Number
destination_caller_id	Advanced Search / Called Party Phone Number	Called Phone Number	Called Party Phone Number
source_name	Advanced Search / System Caller Party Name	Caller Name (System)	System Caller Party Name
destination_name	Advanced Search / System Called Party Name	Called Name (System)	System Called Party Name
source_user_name	Advanced Search / Verba Caller Party Name	Caller Name (Verba)	Verba Caller Party Name
destination_user_name	Advanced Search / Verba Called Party Name	Called Name (Verba)	Verba Called Party Name
user	Advanced Search / User		
group	Advanced Search / Group		
direction	Advanced Search / Call Direction	Direction	Call Direction
location	Advanced Search / Recording Server	Location	Recording Server
ccdr_id	Advanced Search / Call Identifier		Call Identifier
source_ip	Advanced Search / Caller Party IP Address		Caller Party IP Address
destination_ip	Advanced Search / Called Party IP Address		Called Party IP Address

call_type	Advanced Search / Call Type		
archive_status	Advanced Search / Display archived calls too	Archive Status	Archived
comment_fields	The whole Comment Fields tab	All of the comment fields	List of existing comments and Add new comments sections are invisible
cause		End	End
start_date_time		Start DateTime, Start Date, Start Time	Call Start
end_date_time		End DateTime, End Date, End Time	Call End
fileformat_id		File Format	File format
audio_codec		Audio Codec	Audio codec
video_codec		Video Codec	Video Codec
videothumbnail		Video Thumbnail	
native_id			Technical Call Identifier
platform_call_id	Advanced Search / Platform Call ID	Platform Call ID	Platform Call ID
data_retention_events			Data Retention Events
call_participants			Call Participants

Product feature visibility

Many functions of the service provider product can be removed from the user interface to customize the end-user experience. In the Verba registry there are two parameters that allow configuration of the visibility of product features:

Registry value	Description
Verba / Web / HideFeatures	List of features to hide from all users (valid for environment 0000 in a multi-tenant system)
Verba / Web / HideFeaturesForNonAdmin	List of features to hide from non admin users (valid for environment 0000 in a multi-tenant system)
Verba / Web / HideFeaturesForTenant	List of features to hide from all users in a multi-tenant system (not valid for environment 0000)
Verba / Web / HideFeaturesForTenantNonAdmin	List of features to hide from non administrator users in a multi-tenant system (not valid for environment 0000)

Parameter format example: *[chpass] [downloads]*

where chpass and downloads are examples of two feature names.

The following table describes the internal names of the features to be used in the above two fields:

Internal name	Feature
CallListLayoutConfiguration	Call list layout configuration
CallExportOptionDownloadAll	Download all calls link
UserAddNew	User add new link
UserDelete	User delete button
UserFieldType	User type field
UserFieldPassword	Right to use
UserRecorderLinePIN	Recorder Line PIN setting
UserRightSilentMonitor	Right to use silent monitoring
UserRightComment	Right to use commenting
UserRightReporting	Right to use reporting
UserRightUseIVR	Right to use dial-in recorder
GroupLogo	Group logo
GroupMetadata	Group associated meta data templates
GroupQueries	Group Queries feature/link
GroupRightAdministrator	all references to Group Administrator function
GroupDefault	Default group
ExtensionDetail	Extension detail page

DataRetentionDetail	Retention detail page
OngoingRefresh	Automated refresh function on the ongoing calls screen

Web logout redirect

The user can be redirected to a specified page upon logout.

The web logout redirect allows changing the logout page of the recording. The user will see this page after logout.

Registry value	Description
Verba / Web / LogoutRedirectURL	redirects the user's browser to this address after logout (returns to standard Verba login page if empty)


To redirect to a Verba specific page, the URL should start with /, for example: */closeSelf.jsp*

To redirect to an external web page use a complete http URL form such as: *http://www.verba.com*

Restricting administrative access in multi-tenant deployments

Overview

The multi-tenant edition of the Verba Recording System support restricting of access to the administrative environment of the recording system based on the HTTP(S) port the system is accessed through. Using this feature, end-users can be directed to a port that does not support system administration, while administrators and use a dedicated port.

 This will only increase your platform security if you properly configure corresponding **firewall rules** that prevent regular users from accessing the administrative port.

Configuration steps

Here are the steps to configure the port restricted administrative access to your Verba Web Application (the steps below assume that you have installed the product in the default folder):

Step 1 - Create a backup of C:\Program Files\Verba\tomcat\conf\server.xml


Step 2 - Duplicate either the HTTP or the HTTPS Connector description (see example) in your server.xml file and change the port attribute to configure a new port (e.g. port 81 or 444 for HTTPS)

For HTTP duplicate this part:

```
<Connector port="80" maxHttpHeaderSize="8192"
maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
enableLookups="false" redirectPort="8443" acceptCount="100"
connectionTimeout="20000" disableUploadTimeout="true" URIEncoding="UTF-8" compression="on"
compressionMinSize="2048" noCompressionUserAgents="gozilla, traviata"
compressableMimeType="text/html,text/xml"/>
```

For HTTPS duplicate this part:

```
<Connector port="443" maxHttpHeaderSize="8192"
maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
enableLookups="false" disableUploadTimeout="true"
acceptCount="100" scheme="https" secure="true"
clientAuth="false" URIEncoding="UTF-8" protocol="org.apache.coyote.http11.Http11AprProtocol" SSLEnabled="true"
sslProtocol="TLS"
SSLPassword="your_password_here"
SSLCertificateFile="c:\Verba.crt"
SSLCertificateKeyFile="c:\Verba.key"
compression="on" compressionMinSize="2048" noCompressionUserAgents="gozilla, traviata"
compressableMimeType="text/html,text/xml"/>
```

 You can only use one of the above. Restricted access is **not supported for both HTTP and HTTPS at the same time**. If your system is behind an HTTPS accelerator use HTTP, if not use HTTPS for best security.

Step 3 - Create the following parameters in registry (the values are under HKEY_LOCAL_MACHINE\Software\Verba\Verba on 32 bit Windows systems)

Registry Value	Type	Value	Description
HKEY_LOCAL_MACHINE\Software\WOW6432Node\Verba\Web\PortsForReferenceTenant	String	e.g. "444"	port of the administrative tenant (reference environment)
HKEY_LOCAL_MACHINE\Software\WOW6432Node\Verba\Web\PortsForOtherTenants	String	e.g. "443"	port of regular end-users

Step 4 - Restart the Verba Web Application service in the Windows service manager

Configure disclaimer prior to login

AVAILABLE IN VERSION 9.6.10 OR LATER

The web application can be configured to display a disclaimer before the user can login to the system.

The web application's branding feature can be used to configure the disclaimer notification.

The Verba\resources\webapp\branding-samples\disclaimer\login_branding_begin.jsp file should be reviewed and modified according to the requirements, then should be copied to the Verba\resources\webapp\copy\main\ folder (create the copy and main folder if they do not exist), then a restart of the Verba Web Application is needed-

The file will be copied to the application installation folder after the service restarted: Verba\tomcat\webapps\verba\main\.

If the disclaimer is no longer needed then it should be deleted from the Verba\resources\webapp\copy\main\ folder and the Verba\tomcat\webapps\verba\main\login_branding_begin.jsp should contain only this line:


```
<%@ page contentType="text/html; charset=UTF-8" %>
```

If the contents should be modified, then either both files should be modified, or modify only the Verba\resources\webapp\copy\main\login_branding_begin.jsp and restart the Verba Web Application Service.

Direct Database Access to CDRs

Call detail records (CDRs) can be accessed directly in the SQL Server database.

- [Accessing Call Detail Records](#)
- [Call detail record fields reference](#)

 For security, auditing and system stability reasons, we recommend read-only access to the SQL database.

Accessing Call Detail Records

You can access the Microsoft SQL Server database via e.g. ODBC or JDBC. From an application development point of view, the Verba database is a standard datastore and can be accessed with any standard method supported by the Microsoft SQL Server platform.

When you are accessing the database directly you should always reference fields by name (and not using *) to ensure that future upgrades do not break your applications.

It is recommended to create a specific user for this access and configure it with read-only rights on the "section" table.

[Call detail record fields reference](#) contains the definition of the fields in the "section" table of the solution, that stores CDR information.

Call detail record fields reference

The following table defines all fields in the Section table. Additional business data can be added to the CDR, see [Metadata columns on conversation lists](#) and [Metadata designer](#).

Field name	Format	Description and Values
CCDR_ID	Char (36)	Unique identifier of the call. In certain cases, complex calls appears as single call records in the database, but detailed information is available about the different call legs in a separated database table, called section_participant . This table is only used by certain recording engines.
Location	Varchar (40)	Hostname of the Recording Server, which inserted/recorded the call.
Cause_ID	Integer (4)	Reflects the reason for the clearance of the call. The following valid values descriptions apply: <ul style="list-style-type: none">• 0 Normal• 1 Source Disconnected• 2 Destination Disconnected• 3 Hold• 4 Transfer• 5 Cancelled• 6 Busy• 7 Not Found• 8 Error• 13 Conference• 14 Call park• 15 Join• 28 Direct Transfer• 60 Line change• 80 Timeout• 81 Forced termination• 82 Manual termination• 83 Program termination• 84 Video escalation• 500 Undefined

Audio_Codec_ID	Integer (4)	<p>Identifies the codec type that used to transmit media. The following valid values descriptions apply:</p> <ul style="list-style-type: none"> • 1 Non standard Codec • 2 G.711 A-Law 64K • 3 G.711 A-Law 56K • 4 G.711 -Law 64K • 5 G.711 -Law 56K • 6 G.722 64K • 7 G.722 56K • 8 G.722 48K • 9 G.723.1 • 10 G.728 • 11 G.729 • 12 G.729AnnexA • 13 Is11172AudioCap • 14 Is13818AudioCap • 15 G.729AnnexB • 16 G.729 Annex AwAnnexB • 18 GSM Full Rate • 19 GSM Half Rate • 20 GSM Enhanced Full Rate • 25 Wideband 256K • 32 Data 64k • 33 Data 56k • 80 GSM • 81 ActiveVoice • 82 G726_32K • 83 G726_24K • 84 G726_16K • 90 iLBC 20ms • 91 iLBC 30ms
Video_Codec_Id	Integer (4)	<p>Identifies the codec type that used to transmit media. The following valid values descriptions apply:</p> <ul style="list-style-type: none"> ■ 200 H.261 ■ 201 H.263 ■ 202 H.263+ ■ 203 H.263++ ■ 204 H.264 AVC ■ 205 H.264 DCDO ■ 206 H.264 SVC ■ 300 TechSmith ■ 301 Windows Media 8 768 Kbps ■ 302 Windows Media 8 1024 Kbps ■ 303 Windows Media 8 1512 Kbps ■ 304 Windows Media 8 2048 Kbps ■ 305 Windows Media 9 768 Kbps ■ 306 Windows Media 9 1024 Kbps ■ 307 Windows Media 9 1512 Kbps ■ 308 Windows Media 9 2048 Kbps ■ 309 Windows Media Screen 768 Kbps ■ 310 Windows Media Screen 1024 Kbps ■ 311 Windows Media Screen 1512 Kbps ■ 312 Windows Media Screen 2048 Kb ■ 313 Verba Screen Codec Lossless ■ 314 Verba Screen Codec High Quality ■ 315 Verba Screen Codec Low Quality ■ 316 Verba Screen Codec Black and White

Direction_ID	Integer (4)	Identifies the direction of the call (calls going through a gateway are treated as incoming or outgoing). The following valid values descriptions apply: <ul style="list-style-type: none"> ■ 0 internal ■ 1 incoming ■ 2 outgoing ■ 3 inter tenant ■ 4 undefined ■ 5 dictation ■ 6 external
FileFormat_ID	Integer (4)	Identifies the current file format.
Source_IP	Varchar (16)	Identifies the IP address of the caller party. For IP Phones, this field specifies the address of the IP Phone. For PSTN calls, this field specifies the address of the gateway.
Source_Caller_ID	Varchar (64)	For calls originating at an IP Phone, this field shows the extension number of the line that is used. For incoming calls this field specifies the value received in the Calling Party Number field in the SETUP message. This field reflects the translations applied to the Calling Party Number before it arrives at the IP PBX (such as translations at the gateway).
Source_Name	Varchar (64)	This field shows the name of the caller party if it is available in the signaling messages.
Destination_IP	Varchar (16)	Identifies the IP address of the called party. For IP Phones, this field specifies the address of the IP Phone. For PSTN calls, this field specifies the address of the gateway.
Destination_Caller_ID	Varchar (64)	This field specifies the number to which the call was placed. If translation rules are configured on the IP PBX, this number reflects the called number after the translations have been applied.
Destination_Name	Varchar (64)	This field shows the name of the called party if it is available in the signaling messages.
Start_Time	Datetime (8)	Start date and time of the call in UTC timezone.
End_Time	Datetime (8)	Termination date and time of the call in UTC timezone..
Url	Char (256)	Media file path.
Archive_status	Bit(1)	This field identifies whether a call is archived or not. <ul style="list-style-type: none"> • In the section table this value will always be 0 or NULL. • In the section_archived table this value will always be 1.
Keep	Bit (1)	If on-demand recording is set to an extension, users can decide to record a call or not. The following valid values descriptions apply: <ul style="list-style-type: none"> ■ 0 the call has to be dropped ■ 1 the call has to be kept
Conference	Bit (1)	This field identifies if a call was a conference. The following valid values descriptions apply: <ul style="list-style-type: none"> ■ 0 not conference call ■ 1 conference call

Transmitted	Bit (1)	This field identifies if a call was a transferred to the Media Repository from a Recording Server. The following valid values descriptions apply: <ul style="list-style-type: none"> ■ 0 not transferred call ■ 1 transferred call
Source_User_ID	Integer (4)	Unique identifier of the user, which was linked to the calling party phone number through phone number mapping. By linking the user table to this field you can display the Verba user properties along with call information.
Destination_User_ID	Integer (4)	Unique identifier of the user, which was linked to the called party phone number through phone number mapping. By linking the user table to this field you can display the Verba user properties along with call information.
ondemand	Bit(1)	This field identifies if a call was an Ondemand recording. The following valid values descriptions apply: <ul style="list-style-type: none"> • 0 not Ondemand recorded call • 1 Ondemand recorded call
Native_ID	Varchar (256)	Call identifier generated by the recording service.
Owner_EID	Char (4)	Identifies which tenant the call belongs to. This field is only used in multi-tenant systems.
inserted_by_trigger	Bit(1)	Means that the record was moved from the ongoing table to this section table by a trigger. The following valid values descriptions apply: <ul style="list-style-type: none"> • 0 the record wasn't moved to this table by a trigger • 1 the record was moved to this table by a trigger
Recorder_Service_ID	Integer (4)	Identifies the recording service, which recorded the call. The following valid values descriptions apply: <ul style="list-style-type: none"> ■ 1 Verba Passive Recorder Service ■ 2 Verba Central Cisco Recorder Service ■ 3 Verba Dial-in Recorder Service ■ 4 Verba IP Trade Recorder Service ■ 6 Verba Avaya Recorder Service ■ 7 Verba Lync Recorder Service ■ 8 Verba Central Cisco Silent Monitoring Service
Signaling_ID	Integer (4)	Identifies the signalling/technology used for the call. The following valid values descriptions apply: <ul style="list-style-type: none"> ■ 1 Cisco Skinny ■ 2 SIP ■ 3 H.323 ■ 4 JTAPI ■ 5 UniStim ■ 6 Analog ■ 7 ISDN Trunk ■ 8 Generic ISDN/Digital Extension
agent_id	NVarchar (64)	The contact center Agent ID of the recorded agent.
location_eid	Char(4)	To which tenant the recorder server belongs to (this is very rarely used).
platform_call_id	NVarchar (127)	Call id provided by the hosting PBX.

silence_percent	Decimal (3,0)	The rate of the silence in the recording (percent).
talkover_percent	Decimal (3,0)	The rate of the talkover periods in the recording (percent).
longest_silence_length	Decimal (10,0)	How long is the longest silence period.
meeting_id	Varchar (64)	Lync / Skype for Business Meeting ID.
recording_id	Varchar (64)	Identifier of the recorded call leg.
manual	Integer (4)	In case of controlled recording, this field differentiates the technical records (what the user can use to start/stop recording) <ul style="list-style-type: none"> • 0 (or NULL): not a controlled recording • 1: a recording that was created using the controlled method • 9: a technical record that the user can use to start/stop the real recording
media_delete_date	Datetime (8)	When the media file has been deleted.
exists_related_call	Bit(1)	Identifies whether the call has any related call. The following valid values descriptions apply: <ul style="list-style-type: none"> • 0 related call doesn't exist • 1 related call exists
Source_Audio_RTP_Count	Integer (4)	Number of audio RTP packets recorded for the calling party. This information is only inserted by certain recording services.
Destination_Audio_RTP_Count	Integer (4)	Number of audio RTP packets recorded for the called party. This information is only inserted by certain recording services.
Encryption_ID	Integer (4)	Identifies the encryption key used to encrypt the media.
Signature_ID	Integer (4)	Identifies the signature key used to sign the media.
do_not_delete	Numeric (1,0)	Stores the protected flag <ul style="list-style-type: none"> • 0 (or NULL): not protected • 1: protected • -1: this recording should be deleted
secondary	Bit(1)	Identifies whether the call is a secondary recording. The following valid values descriptions apply: <ul style="list-style-type: none"> • 0 related call doesn't exist • 1 related call exists
source_device_id	NVarchar (100)	MAC address or other physical identifier of the caller party.
destination_device_id	NVarchar (100)	MAC address or other physical of the called party.

recorded_party	Bit(1)	Identifies wheter the caller or the called party was the recorded. The following valid values descriptions apply: <ul style="list-style-type: none"> • 0 the caller was the recorded party • 1 the called was the recorded party • NULL unknown
notified	Bit(1)	Identifies wheter Verba has sent a notification e-mail about the recorded call. The following valid values descriptions apply: <ul style="list-style-type: none"> • 0 notification e-mail hasn't been sent out • 1 notification e-mail has been sent out
storage_folder_id	Integer (4)	If data retention has moved the file to a storage target then the Storage Target id is set here. Otherwise this value is NULL.
retention_start	Datetime (8)	Means when was the file moved to it's current place.
retention_until	Datetime (8)	Means until what datetime we don't allow the deletion of this file.
retention_auto_delete	Bit(1)	Means wheteher we will auto delete the file when the retention_until datetime arrives. The following valid values descriptions apply: <ul style="list-style-type: none"> • 0 we won't delete the file when retention_until datetime arrives • 1 we will delete the file when retention_until datetime arrives
record_failed	Bit(1)	If this is set to 1 then it means that the Lync CDR Reconsiliation created this record. It happens when we didn't record a call that we should have record indicating a recorder outage/error. Otherwise it's 0 (or NULL).
media_error	Integer (4)	Identifies the media error. The following valid values descriptions apply: <ul style="list-style-type: none"> • 1 there was no media • 2 length mismatch • 4 packet loss • 8 packet duplicated • 16 srtp error • 32 decoding error • 64 mixing error
media_length	Integer (4)	Stores the length of the call in seconds.

The Verba system maintains an archived section table for archived calls to reduce searching time. It means that when you access the **section** table directly, you can access only those calls that are not archived yet. The archived calls are stored in the **section_archived** table, which is almost identical the original **section** table. The Verba database also contains a view for accessing both tables from a single query. The name of this view is: **v_section**.

The system originally stores the call in the **section_ongoing** table, while the call is being recorded. After the call is finished, the record is moved to the **section** table. The ongoing calls are stored in the **section_ongoing** table, which has exactly the same structure as the original **section** table has.

Low-level XML Recorder API

Overview

The Verba Recording System provides a low level XML API directly to the recording engines.

Not all recorder services supports this API, for further information, please consult Verba Technologies.

The recorder service listens on the configured TCP port. For the default API port numbers, see [Firewall configuration, port usage](#). The API protocol is based on XML and transmitted over TCP directly. No HTTP or other layers are present in the messages.

All of API requests are formed in XML documents, which are UTF-8 encoded. 3rd party applications, which implement the API, have listen on the TCP socket for incoming API connections. Connections sometimes are immediately closed after the response, and may be kept open for later use (sending notifications). To handle asynchronous requests, all requests should contain an ID, which is sent back in the response messages.

The API provides the following functionalities:

- [Muting audio during recording](#)
- [Retrieving service statistics](#)
- [Retrieving events and CDR about recorded calls](#)

Request sample

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Request type="GetManagementSummary" id="N"/>
</VerbaApi>
```

Response for successful request sample

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">
<Request type="GetManagementSummary" id="N"/>
</Response>
</VerbaApi>
```

Response for failed request sample

```
<?xml version="1.0" encoding="UTF-8"?>  
<VerbaApi>  
<Response code="2" type="GetManagementSummary" id="N"/>  
<ErrorMessage description="Processing Error">Escaped detailed error message (e.g. the full text of an exception)</ErrorMessage>  
</Response>  
</VerbaApi>
```

Muting audio during recording

This API allows to mute the audio for a given time for a specified call. External applications can subscribe for call events and while the call is being recorded, the application can initiate muting the audio. The system will start dropping the corresponding audio data until a new API request arrives instructing the recorder to stop muting or until the end of the call. In most recording services, muting can be invoked separately on each channel (caller or called party).

This API function can be used to comply with the Payment Card Industry Data Security Standard (PCI DSS) and prevent recording sensitive information.

Request

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Request type="MuteChannel" id="1">
<Call id="1651d3c9-7bce-11e0-a220-005056c00008">
<State callerMuted="true" calleeMuted="false"/>
</Request>
</VerbaApi>
```

Use the **State** tag to control the muting. If you want to start the muting, set the corresponding side to **true**. If you want to stop the muting, set it to **false**.

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">
<Request type="MuteChannel" id="1"/>
</Response>
</VerbaApi>
```

Get the state of a call

It is also possible to get the state of a given call. In the response, the `<State callerMuted=true>` field means the call's audio is muted, `<State callerMuted=false>` means the audio is in normal state.

Request

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
  <Request type="GetMuteState" id="1">
    <Call id="b6a4a866-138f-11e6-9bec-001cc092f276"/>
  </Request>
</VerbaApi>
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
  <Response code="0">
    <Request type="MuteState" id="1"/>
    <State callerMuted="false" calleeMuted="false"/>
  </Response>
</VerbaApi>
```

Retrieving events and CDR about recorded calls

The API supports two types of approaches to retrieve information about calls being recorded:

- Application can subscribe on **call start/stop events** and can get notified by the API about the ongoing calls under recording
- Application can request a **list of currently recorded calls** and get detailed **Call Detail Record** information

If the application wants to continuously retrieve information about the ongoing calls, we strongly recommend to use the first approach by subscribing to call events, instead of periodically or occasionally requesting the list of ongoing calls.

In a multi-site deployment, where more than one Recording Server is deployed, the application has to establish connection with all recording services individually.

- [Subscribe to call events](#)
 - [Subscribe request](#)
 - [Subscribe response](#)
 - [Call start notification](#)
 - [Call end notification](#)
- [Requesting information about ongoing calls](#)
 - [List request](#)
 - [List response](#)
 - [Call detail request](#)
 - [Call detail response](#)

✔ The XML used in the **Call Detail Response** (below) is in the same format as the Call Detail Recorder XML file stored next to the media files.

Subscribe to call events

In order to obtain detailed data about currently recorded calls the application has to subscribe to events.

You can specify to trigger notifications for all calls, or in a selective way by specifying phone numbers. The connection has to be kept open to receive the notifications. If the remote side closes the connection, the socket has to be destroyed on the application side as well.

Subscribe request

Use the **Extension** attribute to subscribe to call events only for the specified phone numbers. The phone number can appear as called or calling party number.

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Request type="SubscribeOnCallEvent" id="1">
<Extension number="1000"/>
</Request>
</VerbaApi>
```

Subscribe response

For successful subscribe request, the system responds with the following message:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">
<Request type="SubscribeOnCallEvent" id="1"/>
<Keepalive time="10"/>
</Response>
</VerbaApi>
```

To monitor the connection between the application and the recording service, and keep it alive, the application can use an optional keep alive mechanism. In this case the API server sends an empty response with the next keep alive interval. If the server cannot send the keep alive message or the application does not receive the next keep alive message within the time set by the previous request * 1.5, then session should be interpreted as ended/closed/disconnected.

Call start notification

Example for call start event notification:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">
<Request type="SubscribeOnCallEvent" id="1"/>
<CallEvent event="Start"/>
<verbacdr state="0"> <!-- Ongoing Call State -->
<id>1651d3c9-7bce-11e0-a220-005056c00008</id>
<native_id>b9eda00-dca1876d-56f-d201a8c0@192.168.1.210</native_id>
<location>PETER-LAPTOP</location>
<source_caller_id>2000</source_caller_id>
<destination_caller_id>9970</destination_caller_id>
<start_time>2011.05.11 12:56:33.603</start_time>
<audio_codec_id>6</audio_codec_id> <!-- G.722 64 kbps -->
<direction_id>1</direction_id> <!-- Incoming -->
<signaling_id>2</signaling_id> <!-- SIP -->
<recorder_service_id>5</recorder_service_id> <!-- Dial-in Recorder -->
<ondemand>>false</ondemand>
<conference>>false</conference>
<files>
<file expected_url="2011\05\11\1651d3c9-7bce-11e0-a220-005056c00008_(20110511145633604).wav" ></file>
</files>
<media>
```

```
<mediasegment id="0" start_time="2011.05.11 12:56:33.605">
<mediadescriptor>
<destination ip="192.168.1.75" port="16384" bitrate="64000" tipsupported="false" />
<content type="main"/>
<codecs>
<codec name="G722" pt="9" clk="8000" />
</codecs>
</mediadescriptor>
</mediasegment>
</media>
</verbacdr>
</Response>
</VerbaApi>
```

Call end notification

Example for call end notification message:

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">
<Request type="SubscribeOnCallEvent" id="1"/>
<CallEvent event="Stop"/>
<verbacdr state="1"> <!-- Finished Call State -->
<id>1651d3c9-7bce-11e0-a220-005056c00008</id>
<native_id>b9eda00-dca1876d-56f-d201a8c0@192.168.1.210</native_id>
<location>PETER-LAPTOP</location>
<source_caller_id>2000</source_caller_id>
<destination_caller_id>9970</destination_caller_id>
<start_time>2011.05.11 12:56:33.603</start_time>
<end_time>2011.05.11 12:56:50.012</end_time>
<audio_codec_id>6</audio_codec_id> <!-- G.722 64 kbps -->
<direction_id>1</direction_id> <!-- Incoming -->
<cause_id>0</cause_id> <!-- Normal -->
<signaling_id>2</signaling_id> <!-- SIP -->
<recorder_service_id>5</recorder_service_id> <!-- Dial-in Recorder -->
<ondemand>>false</ondemand>
<conference>>false</conference>
<files>
<file expected_url="2011\05\11\1651d3c9-7bce-11e0-a220-005056c00008_(201105111145633604).wav" >2011\05\11\1651d3c9-7bce-11e0-a220-005056c00008_(201105111145633604).wav</file>
</files>
```

```

<media>
<mediasegment id="0" start_time="2011.05.11 12:56:33.605" end_time="2011.05.11 12:56:37.743">
<mediadescriptor>
<destination ip="192.168.1.75" port="16384" bitrate="64000" tipsupported="false" />
<content type="main"/>
<codecs>
<codec name="G722" pt="9" clk="8000" />
</codecs>
<statistics>
<start_time>2011.05.11 12:56:33.616</start_time>
<rtp total="121" lost="0" duplicated="0" outoforder="0" outofbuffer="0" streamchange="1"/>
<decoding ok="232" error="0" skipped="0" outofbuffer="0" resync="1"/>
<mixing normalwrite="232" solowrite="0" silencewrite="0" latemedia="0" resync="0"/>
</statistics>
</mediadescriptor>
</mediasegment>
<mediasegment id="1" start_time="2011.05.11 12:56:37.743" end_time="2011.05.11 12:56:50.012"></mediasegment>
</media>
</verbacdr>
</Response>
</VerbaApi>

```

Requesting information about ongoing calls

External applications can request a list about the currently recorded calls. With this list, the application can also request additional, detailed information about each call.

List request

```

<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Request type="GetCallList" id="1"/>
</VerbaApi>

```

List response

```

<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">

```



```
<Request type="GetCallList" id="1"/>
<CallList>
<Call id="bd0b8ae0-7704-11e0-a230-005056c00008">
<Call id="c00d562f-7704-11e0-a230-005056c00008">
</CallList>
</Response>
</VerbaApi>
```

Call detail request

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Request type="GetCallDetail" id="1">
<Call id="c00d562f-7704-11e0-a230-005056c00008">
</Request>
</VerbaApi>
```

Call detail response

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">
<Request type="GetCallDetail" id="1"/>
<verbacdr state="1"> <!-- Finished Call State -->
<id>1651d3c9-7bce-11e0-a220-005056c00008</id>
<native_id>b9eda00-dca1876d-56f-d201a8c0@192.168.1.210</native_id>
<location>PETER-LAPTOP</location>
<source_caller_id>2000</source_caller_id>
<destination_caller_id>9970</destination_caller_id>
<start_time>2011.05.11 12:56:33.603</start_time>
<end_time>2011.05.11 12:56:50.012</end_time>
<audio_codec_id>6</audio_codec_id> <!-- G.722 64 kbps -->
<direction_id>1</direction_id> <!-- Incoming -->
<cause_id>0</cause_id> <!-- Normal -->
<signaling_id>2</signaling_id> <!-- SIP -->
<recorder_service_id>5</recorder_service_id> <!-- Dial-in Recorder -->
<ondemand>>false</ondemand>
<conference>>false</conference>
```

```
<files>
<file expected_url="2011\05\11\1651d3c9-7bce-11e0-a220-005056c00008_(20110511145633604).wav" >2011\05\11\1651d3c9-7bce-11e0-a220-005056c00008_(20110511145633604).wav</file>
</files>
<media>
<mediasegment id="0" start_time="2011.05.11 12:56:33.605" end_time="2011.05.11 12:56:37.743">
<mediadescriptor>
<destination ip="192.168.1.75" port="16384" bitrate="64000" tipsupported="false" />
<content type="main"/>
<codecs>
<codec name="G722" pt="9" clk="8000" />
</codecs>
<statistics>
<start_time>2011.05.11 12:56:33.616</start_time>
<rtp total="121" lost="0" duplicated="0" outoforder="0" outofbuffer="0" streamchange="1"/>
<decoding ok="232" error="0" skipped="0" outofbuffer="0" resync="1"/>
<mixing normalwrite="232" solowrite="0" silencewrite="0" latemedia="0" resync="0"/>
</statistics>
</mediadescriptor>
</mediasegment>
<mediasegment id="1" start_time="2011.05.11 12:56:37.743" end_time="2011.05.11 12:56:50.012"></mediasegment>
</media>
</verbacdr>
</Response>
</VerbaApi>
```

Retrieving service statistics

This request will retrieve service internal statistics.

Request

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Request type="GetManagementSummary" id="1"/>
</VerbaApi>
```

Response

```
<?xml version="1.0" encoding="UTF-8"?>
<VerbaApi>
<Response code="0">
<Request type="GetManagementSummary" id="1"/>
<ManagementSummary>
<argument name="name">value</argument>
<argument name="name">value</argument>
</ManagementSummary>
</Response>
</VerbaApi>
```


HTTP Single Sign-On API

This API lets you integrate the Verba app into your user portals/intranets/extranets.

SSO enables that users who are already authenticated by your infrastructure can access the Verba web interface without further authentication.

The SSO method described in this topic is different from the Windows Domain SSO functionality supported by the Verba system. This type of SSO feature provides SSO functionality for environments where Windows Domain SSO is not available or cannot be used. For more information, see [Single sign on settings](#).

Security systems of the Verba customer are able to send authentication credentials of these already authenticated users through HTTP or HTTPS protocol to the Verba Media Repository and receive a security token that will identify the authenticated user for a session in the Verba web interface.

There are two HTTP/HTTPS requests that support this functionality:

1. SSO Registration used by intranet security systems to request access on behalf of the users
2. SSO Login provided to users by the intranet security systems as a login URL to Verba

You can get more details in the following topics:

- [Sample single sign-on process](#)
- [Single sign-on request reference](#)
- [SSO registry reference](#)

Sample single sign-on process

This example explains a whole SSO process on the intranet of an imaginary **COMPANY** with an imaginary **USER**.

Process overview

1. USER signs in to the COMPANY intranet
2. USER tries to visit Verba web interface
3. COMPANY intranet generates an **SSO Registration** request with a Security Token
4. COMPANY intranet sends the request to Verba Media Repository
5. Verba Media Repository verifies the request, registers Security Token and responds
6. COMPANY intranet uses the Security Token to provide the USER with an **SSO Login URL**
7. The user is logged in without repeated authentication

The same process described with more details

1. USER signs in to the COMPANY intranet with their regular process (e.g. password, Windows authentication, biometrics, etc.)
2. In the COMPANY intranet USER clicks on a link or tab that leads USER to the Verba web interface
3. COMPANY intranet generates an **SSO Registration**HTTP request with required parameters:
 - a. Verba Environment ID (applicable only to multi-tenant Verba systems)
 - b. Verba User Name
 - c. Globally Unique Security Token (GUID)
 - d. Requested Expiration Date of the Security Token
 - e. Current IP address of the USER
4. COMPANY intranet sends the HTTP request to the Verba Media Repository
5. Verba Media Repository verifies that the HTTP request comes from the COMPANY intranet based on IP address and registers the Security Token with expiration date and USER IP address, and replies to the COMPANY intranet with a status
6. On successful status response the COMPANY intranet uses the Security Token to provide the USER with an **SSO Login URL** that allows login to the Verba web interface without further authentication
7. The user is logged in without repeated authentication

Single sign-on request reference

This topic describes the Single Sign On related HTTP requests in Verba.

SSO registration request

Use this request to register a security token for a new user session/login. After this call an SSO Login Request will allow the user into the Verba web interface without authentication.

URL

```
http://<Verba-Media-Repository-address>/verba/extsso.do
```

URL parameters

URL parameter	Description	Type	Examples/Format
eid	Verba Environment ID , identifies the tenant in a multi-tenant Verba system	CHAR 4	0000, TCNC, TCC1
uname	Verba Login ID , user s login for the Verba system	CHAR 32	user1, 2013424695
token	Security Token , a globally unique identifier (GUID) that will identify a particular user s web session (generated by the customer s security system)	CHAR 36	3F2504E0-4F89-11D3-9A0C-0305E82C3301 (suggested)
expire	Expiration date/time of token , defines when the token is no longer valid (in UTC)	Date/Time	YYYY-MM-DD_HH:MM:SS.Mss 1900-12-31_00:00:00.000
usrip	User s IP Address , IP address of the computer that the user is using to log into the system(s)	CHAR 15	xxx.xxx.xxx.xxx 192.168.221.113

URL example

```
http://10.1.1.123/verba/extsso.do?eid=0001&uname=2013424695&token=3F2504E0-4F89-11D3-9A0C-0305E82C3301&expire=1900-12-31_00:00:00.000&usrip=192.168.221.113
```

SSO login request

Use this request to submit an already registered security token to allow login without manual authentication. This call should follow a successful SSO Registration Request.

URL

```
http://<Verba-Media-Repository-address>/verba/extssologin.do
```

URL parameters

URL parameter	Description	Type	Examples/Format
token	<i>Security Token</i> , a globally unique identifier (GUID) that identifies a particular user's web session (generated by the customer's security system, submitted to Verba MR before this login call)	CHAR 36	3F2504E0-4F89-11D3-9A0C-0305E82C3301 (suggested)

URL example

```
http://10.1.1.123/verba/extssologin.do?token=3F2504E0-4F89-11D3-9A0C-0305E82C3301
```


SSO registry reference

The following registry variables allow you to control the behavior of the Single Sign-On solution:

HKLM/SOFTWARE/Verba/Web/SSOLoginAllowedIP (the type is String)	IP address of the host that is allowed to send SSO login information You can add multiple ip addresses separated by , (comma) or ; (semicolon) character. (for testing locally this should include 127.0.0.1)
HKLM/SOFTWARE/Verba/Web/SSOCheckUserIP	if set to 1, Verba will validate user's IP address on login (default value is 0)

Highest security can be achieved when both parameters are used /enabled.

Direct URL Access

Overview

Direct URL Access provides allows external web apps to directly include features of the Verba Web Application.

In this way, users do not have manually navigate to the given function or manually search for a given call. External applications can also use these direct URLs to provide the enhanced features of the system to its users without implementing them. For example, a CRM application can list all recorded call for a given date range for a given customer using its phone number and open a pop up browser window with the feature-rich search and list screen of the web application.

By using the single sign on (SSO) capabilities of the system - either the [Windows Domain authentication](#), either the [SSO API](#) - users can access the direct URLs in a seamless way without the need to authenticate themselves repeatedly. Without SSO, users are forced to login first and than the system automatically redirects them to the original direct URL.

General guidelines

HTTP GET

The functions of the API are available as simple HTTP GET requests. The maximum length of the HTTP GET request is usually maximised either by the client or the server. The client should assume that the maximum length of a GET request is 4000 characters, although, some implementations may support longer URLs too.

URL encoding

All HTTP request has to be URL encoded and all special characters has to be escaped and substituted with its URL encoded equivalent. For further information, see http://www.w3schools.com/TAGS/ref_urlencode.asp.

Security

The API provides the following mechanism to ensure that the communications between the external application and the recording system is secure:

- Authentication
- Option to use SSL/HTTPS

Direct URL functions

List of available functions:

Function	Description
Call detail URL	Opens the call detail screen for the call defined in the URL.
Search and List URL	Opens the search and list page and automatically executes the query defined in the parameters in the URL.

Call detail URL

This function allows to directly invoke the call detail page in the web application for a given call. The call has to be explicitly defined with its unique call identifier.

The function is available as a HTTP GET request.

Request

Call detail URL HTTP GET sample:

```
http://192.168.1.104/verba/gwtCallDetail.do?ccdrId=74c8eea0-50c6-40b2-9f3e-252ed501c3c8
```

If the [external single sign on \(SSO\)](#) function is used to authenticate the users, the URL has to contain reference to the session token, which was registered previously:

```
http://192.168.1.104/verba/extssologin.do?token=12345&ssotarget=gwtCallDetail.do?ccdrId=74c8eea0-50c6-40b2-9f3e-252ed501c3c8
```

Detailed description of the API request elements:

API request element	Description	Requirements
http://192.168.1.104/verba/gwtCallDetail.do	Verba direct HTTP URL.	Mandatory
ccdrId=74c8eea0-50c6-40b2-9f3e-252ed501c3c8	Defines the unique call identifier.	Mandatory

Response

The system opens the web application at the call detail page for the call defined in the request.

Search and list URL

This function allows to directly invoke the search and list interface of the web application with search parameters. The system automatically executes the query based on the provided filter parameters in the URL.

The function is available as a HTTP GET request.

Request

Search and list URL HTTP GET sample:

```
http://192.168.1.104/verba/gwtCallSearch.do?reset=1&p_date_from=2011-07-10 23:59:59&p_date_to=2011-07-11 21:00:00&p_phone_number=1002&p_phone_number_operator=INCLUDES
```

If the external single sign on (SSO) function is used to authenticate the users, the URL has to contain reference to the session token, which was registered previously:

```
http://192.168.1.104/verba/extssologin.do?token=12345&ssotarget=gwtCallSearch.do&reset=1&p_date_from=2011-07-10 23:59:59&p_date_to=2011-07-11 21:00:00&p_phone_number=1002&p_phone_number_operator=INCLUDES
```

Detailed description of the API request elements:

API request element	Description	Requirements
http://192.168.1.104/verba/gwtCallSearch.do	Verba direct HTTP URL.	Mandatory
reset=1	The system will delete the user's current ("default") search parameters from the database, and create a new one according to the additional parameters, described below. Basically, this parameter flags that the system should act differently than in case of a normal call search.	Optional
autoplay=1	If there is only 1 call in the results, the system will automatically start playing the call back.	Optional
p_date_from=2011-07-10 23:59:59	Start date and time for the query. Date format is: yyyy-mm-dd hh24:mi:ss. The time part can be omitted, so 2011-07-10 is a valid format too, in this case time will be set to 00:00:00	If the parameter is missing it will default to today at 00:00:00.
p_date_to=2011-07-11 21:00:00	End date and time for the query. Date format is: yyyy-mm-dd hh24:mi:ss If the time part omitted, it will default to 23:59:59.	If the parameter is missing it will default to today at 23:59:59.

p_date=2011-07-11 21:00:00	<p>This is an alternative date search option. If this is used, p_date_from and p_date_to is ignored.</p> <p>Date format is: yyyy-mm-dd hh24:mi:ss</p>	If the parameter is missing it will default to 10 minutes.
p_date_window=10	<p>The resulting search will show a time interval from (p_date - p_date_window) to (p_date + p_date_window).</p> <p>Time is given in minutes.</p>	
p_date_last_days=30	If defined the search results will show calls from the last X days	If defined, no other date related information is required.
p_phone_number=1002	Phone Number (Caller or Called Party) filter.	Optional
p_phone_number_operator=INCLUDES	<p>Operator to be used when filtering for Phone Number.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> ■ = ■ != ■ IN ■ NOT_IN ■ EXISTS ■ DOES_NOT_EXIST ■ STARTS_WITH ■ ENDS_WITH ■ INCLUDES ■ LIKE ■ BETWEEN <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_direction=incoming,outgoing	<p>Call direction filter.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> ■ internal ■ incoming ■ outgoing ■ inter-tenant ■ undefined 	Optional

p_direction_operator=IN	<p>Operator to be used when filtering for Call Direction.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> ■ = ■ != ■ IN ■ NOT_IN ■ EXISTS ■ DOES_NOT_EXIST ■ STARTS_WITH ■ ENDS_WITH ■ INCLUDES ■ LIKE ■ BETWEEN <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_caller=1005	Caller Party Phone Number filter	Optional
p_caller_operator=LIKE	Operator to be used when filtering for Caller Party Phone Number	Optional
p_called=236783	Called Party Phone Number filter	Optional
p_called_operator=LIKE	<p>Operator to be used when filtering for Called Party Phone Number.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> ■ = ■ != ■ IN ■ NOT_IN ■ EXISTS ■ DOES_NOT_EXIST ■ STARTS_WITH ■ ENDS_WITH ■ INCLUDES ■ LIKE ■ BETWEEN <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_caller_name=James Woods	Caller Party Name filter	Optional

p_caller_name_operator=LIKE	<p>Operator to be used when filtering for Caller Party Name.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> ■ = ■ != ■ IN ■ NOT_IN ■ EXISTS ■ DOES_NOT_EXIST ■ STARTS_WITH ■ ENDS_WITH ■ INCLUDES ■ LIKE ■ BETWEEN <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_called_name=Richard Dreyfus	Called Party Name filter	Optional
p_called_name_operator=LIKE	<p>Operator to be used when filtering for Called Party Name.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> ■ = ■ != ■ IN ■ NOT_IN ■ EXISTS ■ DOES_NOT_EXIST ■ STARTS_WITH ■ ENDS_WITH ■ INCLUDES ■ LIKE ■ BETWEEN <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional
p_server=NYREC-SERVER	Recording Server filter.This field corresponds to the hostname of the recording server.	Optional
p_server_operator=LIKE	<p>Operator to be used when filtering for Recording Server.</p> <p>The following valid values apply:</p> <ul style="list-style-type: none"> ■ = ■ != ■ IN ■ NOT_IN ■ EXISTS ■ DOES_NOT_EXIST ■ STARTS_WITH ■ ENDS_WITH ■ INCLUDES ■ LIKE ■ BETWEEN <p>The default operation is "equals" (=).If the operator is IN or NOT_IN, the values should be separated by commas.</p>	Optional

p_duration=120-150	Duration filter in seconds.	Optional
p_duration_operator=BETWEEN	Operator to be used when filtering for Duration. The following valid values apply: <ul style="list-style-type: none">■ BETWEEN	Optional
p_normalize=1	If this is set to 1, the p_local_prefix and p_country_prefix parameters will be used to add additional phone number search variants. Normalization is not happening on SIP addresses.	Optional
p_local_prefix=0	If a phone number starts with this p_local_prefix, normalization will add a search variant, where this part is removed and p_default_country is added Example: if p_local_prefix=0 and p_default_country=44, then 012345678 will be normalized to +4412345678	Optional
p_country_prefix=+46 (deprecated - see p_default_country)	If a phone number starts with this p_local_prefix, normalization will add a search variant, where this is removed and p_country_prefix is added	Deprecated
p_default_country=44	This country code will be added when numbers are found in non-international formats (non-E.164 formatss) See p_local_prefix, p_external_prefix and p_international_prefix.	Optional
p_external_prefix=9	If a phone number starts with this p_external_prefix, normalization will add a search variant, where this part is removed and the number is normalized based on p_local_prefix and p_international_prefix Example: if p_external_prefix=0, p_local_prefix=0 and p_default_country=44, then 9012345678 will be normalized to +4412345678	Optional
p_international_prefix=00	If a phone number starts with this p_international_prefix, normalization will replace that with a + Example: if p_international_prefix=00 then 004612345678 will be normalized to +4612345678	Optional

Phone number normalization rules

If the p_normalize parameter is set to "1", the API call will search for additional, normalized variants of the numbers given in p_caller, p_called or p_phone_number.

The normalization is defined based on p_default_country, p_external_prefix and p_international_prefix (see more details in the table above).

Examples for normalizations

Based on p_default_country=44, p_external_prefix=9 and p_international_prefix=00:

Type	Source number	Normalized	Rule
E.164 numbers	+<intl_number>	+<intl_number>	start with + -> no change
local numbers	0<local_number>	+44<local_number>	leading 0 replaced with +44
numbers with international dialing prefix	00<intl_number>	+<intl_number>	leading 00 replaced with +
external dialing of local number	90<local_number>	+44<local_number>	leading 9 and 0 replaced with +
external dialing of international number	900<intl_number>	+<intl_number>	leading 9 and 00 replaced with +
various numbers with extension numbers	e.g. 0<local_number> (ext 12)	+44<local_number>	extension number is removed
SIP URI	user@domain.com	user@domain.com	No normalization will run on SIP URIs.

Response

The system opens the web application at the search and list interface displaying the results according to the filters defined in the request.

Desktop Agent HTTP API

Overview

This API allows applications to integrate with the Verba Desktop Recorder to control screen capturing, add time markers and more.

The HTTP API has two API modes:

- **Operational Mode** - all API commands URLs are situated in the '/' url location (root)
- **Developer Mode** - all API commands URLs are situated in the '/dev/' url location

All API calls are exactly the same in both Operation and Developer modes.

There are two differences in Developer Mode compared to Operational Mode:

- URLs are under the /dev/ folder
- /dev/ URL and all other URLs present the user with a complete user friendly web page with command links and status

Operation and Developer Modes can be used at the same time, but the Developer Mode can be disabled.

- [API calls](#)
- [Accessing the Developer Mode](#)
- [Enabling and disabling the developer mode](#)

Accessing the Developer Mode

After Enabling the HTTP API Developer Mode use your web browser to visit the Developer Mode page

```
http://<host>:<apiport>/dev/
```

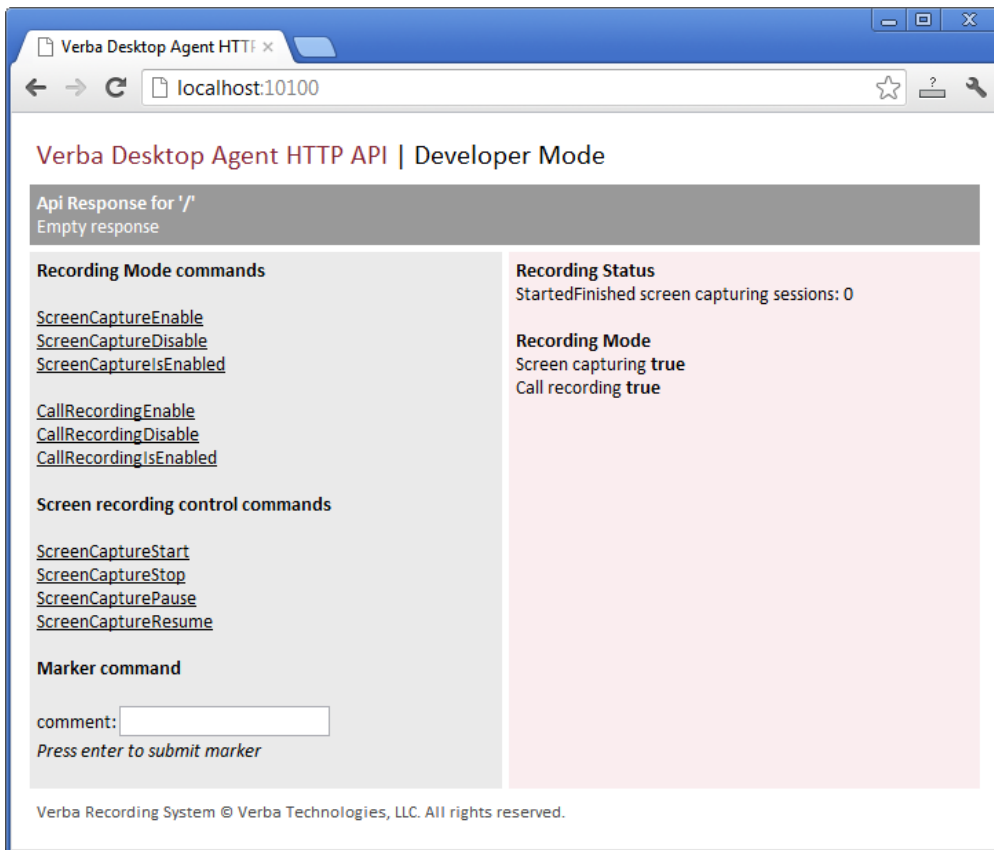
Where

- <host> is the address of the PC where Verba Desktop is installed
- <apiport> is the TCP port of the HTTP API (default HTTP API port: 10100, can be changed using the HttpApiPort parameter)

The following page opens:

API calls

- [ScreenCaptureEnable](#)
- [ScreenCaptureDisable](#)
- [ScreenCaptureIsEnabled](#)
- [ScreenCaptureStart](#)
- [ScreenCaptureStop](#)
- [ScreenCapturePause](#)
- [ScreenCaptureResume](#)
- [MarkerAdd](#)
- [MetadataAdd](#)
- [DictaphoneStart](#)
- [DictaphoneStop](#)



The screen has three parts:

- **API response block** - on the top it shows the last API call and its output
- **Command block** - on the left it shows the available API call as links or HTTP GET forms
- **Status block** - on the right it provides status information

The Command block shows all the available HTTP API calls in the following groups:

- Recording mode
- Screen recording control
- Markers

For further information about the commands, please refer to the respective API call topics.

API calls can be executed from this screen:

- All API calls that have no extra parameters are directly clickable web links.
- All API calls with parameters have a 'Send' button that you can click after filling in the parameter fields

All execution results in an HTTP GET similar to the HTTP GET expected by the main HTTP API.

⚠ There is a difference between Main HTTP API and Developer Mode HTTP API URLs.
The URLs of the Main HTTP API are available even if Developer Mode is enabled.
You can derive the Main HTTP API URLs by removing the '/dev/' from the URLs you see when using the Developer Mode webpage.

Enabling and disabling the developer mode

To turn on the HTTP API do the followings:

Step 1 - Open the Registry Editor (regedit)

Step 2 - Set [HKEY_LOCAL_MACHINE\SOFTWARE\Verba\ScreenCap\HttpAPIDeveloperMode]

Values: to enable set to 1, to disable set to 0

Step 3 - Open the Windows Services console

Step 4 - Restart the **Verba Screen Capturing Service**

ScreenCaptureEnable

Description	<p>Enables screen capturing in the upcoming recordings. Both call audio and screen video will be stored in the call.</p> <p>Recording will automatically start when the next phone call starts.</p> <p>Screen capturing will not start immediately, only when the next recorded phone call starts.</p> <p>This has effect only on the next recorded phone call, it has no effect on the ongoing recorded call.</p> <p>To start screen capturing immediately/adhoc without a phone call use ScreenCaptureStart call.</p>
Syntax	<code>http://<host>:<apiport>/ScreenCaptureEnable</code>
Parameters	<code>pass = API passcode (optional)</code>
Example	<code>http://localhost:10100/ScreenCaptureEnable</code>
Return value	<p>Positive result:</p> <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned• OK is returned even if screen capturing was already enabled <p>Failure result:</p> <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error <p>Defined error codes:</p> <ul style="list-style-type: none">• 'AUTH' - request authentication error

ScreenCaptureDisable

Description	<p>Disables screen capturing in the upcoming recordings. Only call audio will be stored in the call.</p> <p>Ongoing screen capturing will not stop immediately.</p> <p>This has effect only on the next recorded phone call, it has no effect on the ongoing recorded call.</p>
Syntax	<code>http://<host>:<apiport>/ScreenCaptureDisable</code>
Parameters	<code>pass</code> = API passcode (optional)
Example	<code>http://localhost:10100/ScreenCaptureDisable</code>
Return value	<p>Positive result:</p> <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned• OK is returned even if screen capturing was already disabled <p>Failure result:</p> <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error <p>Defined error codes:</p> <ul style="list-style-type: none">• 'AUTH' - request authentication error

ScreenCaptureIsEnabled

Description	Tells if capturing is enabled or not for upcoming recordings. Does not have any effect on the screen capturing mode.
Syntax	http://<host>:<apiport>/ScreenCaptureIsEnabled
Parameters	pass = API passcode (optional)
Example	http://localhost:2222/ScreenCaptureIsEnabled
Return value	Positive results: <ul style="list-style-type: none">• 'YES' - if screen capturing is enabled<ul style="list-style-type: none">• only three letters are returned• 'NO' - if screen capturing is disabled<ul style="list-style-type: none">• only two letters are returned Failure result: <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error Defined error codes: <ul style="list-style-type: none">• 'AUTH' - request authentication error

ScreenCaptureStart

Description	Starts screen capturing immediately. This allows adhoc screen capturing even outside of phone calls. The files will be created only locally, it won't create a new record in the database.
Syntax	http://<host>:<apiport>/ScreenCaptureStart
Parameters	pass = API passcode (optional)
Example	http://localhost:10100/ScreenCaptureStart
Return value	<p>Positive result:</p> <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned• OK is returned even if screen capturing was already enabled <p>Failure result:</p> <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error <p>Defined error codes:</p> <ul style="list-style-type: none">• 'AUTH' - request authentication error• 'WRST' - wrong state, capturing has been started already

ScreenCaptureStop

Description	Stops screen capturing immediately. This allows adhoc stop screen capturing even during phone calls.
Syntax	http://<host>:<apiport>/ScreenCaptureStop
Parameters	pass = API passcode (optional)
Example	http://localhost:10100/ScreenCaptureStop
Return value	<p>Positive result:</p> <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned• OK is returned even if screen capturing was already enabled <p>Failure result:</p> <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error <p>Defined error codes:</p> <ul style="list-style-type: none">• 'AUTH' - request authentication error• 'WRST' - wrong state, capturing has been stopped already

ScreenCapturePause

Description	<p>Pauses a running screen capturing session immediately.</p> <p>During pause, the recorded screen is blank. This is useful for e.g. making sure that credit card numbers are not stored on screen recordings.</p>
Syntax	<code>http://<host>:<apiport>/ScreenCapturePause</code>
Parameters	<code>pass</code> = API passcode (optional)
Example	<code>http://localhost:10100/ScreenCapturePause</code>
Return value	<p>Positive result:</p> <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned• OK is returned even if screen capturing was already enabled <p>Failure result:</p> <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error <p>Defined error codes:</p> <ul style="list-style-type: none">• 'NOON' - no ongoing call found• 'AUTH' - request authentication error• 'WRST' - capturing has been paused already

ScreenCaptureResume

Description	Resumes screen capturing from paused state immediately.
Syntax	http://<host>:<apiport>/ScreenCaptureResume
Parameters	pass = API passcode (optional)
Example	http://localhost:10100/ScreenCaptureResume
Return value	<p>Positive result:</p> <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned• OK is returned even if screen capturing was already enabled <p>Failure result:</p> <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error <p>Defined error codes:</p> <ul style="list-style-type: none">• 'NOON' - no ongoing call found• 'AUTH' - request authentication error• 'WRST' - capturing is not in paused state

MarkerAdd

Description	Adds a marker to the ongoing call at current time in call. The marker is immediately added to the call with 1 sec length.
Syntax	http://<host>:<apiport>/MarkerAdd
Parameters	pass = API passcode (optional) comment = marker comment visible on the user interface
Example	http://localhost:10100/dev/MarkerAdd?comment=Introduction (above call will open a marker at the current time position in the call)
Return value	Positive result: <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned Failure result: <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error Defined error codes: <ul style="list-style-type: none">• 'NOON' - no ongoing call found• 'LONG' - parameter too long• 'AUTH' - request authentication error

MetadataAdd

Description	Adds metadata to the ongoing call at current time in call.
Syntax	<code>http://<host>:<apiport>/MetadataAdd</code>
Parameters	pass = API passcode (optional) field = field of custom metadata template value = value of the field
Example	http://localhost:10100/dev/MetadataAdd?field=customerId&value=894562 (above call will insert metadata "customerId" with value "894562" to the current recording session)
Return value	Positive result: <ul style="list-style-type: none">'OK'<ul style="list-style-type: none">only two letters are returned Failure result: <ul style="list-style-type: none">'ERROR:<code>:<description>'<ul style="list-style-type: none">the first 5 characters of the response are 'ERROR'followed by a ':' (colon)<code> is a 4 character error codefollowed by a ':' (colon)<description> textual description of the error Defined error codes: <ul style="list-style-type: none">'NOON' - no ongoing call found'LONG' - parameter too long'AUTH' - request authentication error

DictaphoneStart

Description	Starts recording in dictaphone mode
Syntax	http://<host>:<apiport>/DictaphoneStart
Parameters	pass = API passcode (optional) captureScreen = 1 or 0 enables/disables screen capturing with the audio
Example	http://localhost:10100/dev/DictaphoneStart?captureScreen=1 (above call will start dictaphone recording with screen content)
Return value	Positive result: <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned Failure result: <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error Defined error codes: <ul style="list-style-type: none">• 'AUTH' - request authentication error• 'WRST' - wrong state, capturing has been started already

DictaphoneStop

Description	Stops recording in dictaphone mode
Syntax	http://<host>:<apiport>/DictaphoneStop
Parameters	pass = API passcode (optional) sessionInfo=... Session info written into "called" CDR field
Example	http://localhost:10100/dev/DictaphoneStop?sessionInfo=abcdefg (above call will stop dictaphone recording with session info "abcdefg")
Return value	Positive result: <ul style="list-style-type: none">• 'OK'<ul style="list-style-type: none">• only two letters are returned Failure result: <ul style="list-style-type: none">• 'ERROR:<code>:<description>'<ul style="list-style-type: none">• the first 5 characters of the response are 'ERROR'• followed by a ':' (colon)• <code> is a 4 character error code• followed by a ':' (colon)• <description> textual description of the error Defined error codes: <ul style="list-style-type: none">• 'AUTH' - request authentication error• 'WRST' - wrong state, capturing has been stopped already

Metadata XML fields

The system creates a metadata XML files for each recording. The XML file is stored on the disk next to the media or IM transcript file. The metadata XML file is always processed together with the corresponding media/transcript file. If the a data retention policy is applied for the call, the system moves, copies or deletes the metadata XML together with the media /transcript file.

The XML files are UTF-8 encoded.

The following table provides a description for the available fields. Not all fields are presented in all cases, only fields marked as mandatory. Some XML file contains additional

Field	Sample value	Description	Mandatory
id	4a9d5ec0-7a40-11e4-8271-001cc092f276	Unique conversation identifier in the Verba system	Yes
modality_id	voice	The modality of the record. Possible values are: <ul style="list-style-type: none"> • video → Video • voice → Voice • screen → Desktop Screen • share → Screen & Application Share • im → Instant Messaging • file_share → File Share • poll → Poll / Q&A • whiteboard → Whiteboard • sms → SMS 	Yes
native_id	d53f17c6a3b86ba0b7c134b1c32c42c8 1-1	Platform specific conversation identifier which can identify a unique Verba record. It usually incorporates the <i>native_call_id</i> field and other parameters.	Yes
native_call_id	d53f17c6a3b86ba0b7c134b1c32c42c8	Platform specific conversation identifier	Yes
owner_eid	12	Environment identifier of the recorded user in a multi-tenant systems	
location_eid	12	Environment identifier of the recording server in a multi-tenant systems	
cisco_guid		Cisco specific conversation identifier	
ms_conversation_id	Ac+ACpslct73h+iEU6e5k2aNcIriA==	Microsoft Lync specific conversation ID	
location	NY-RECORDER	Host name of the Verba Recording Server recorded the call	Yes
source_device	CPE/4.0.7577.4420 OCPhone/4.0.7577.4420 (Microsoft Lync Phone Edition)	Device identifier of the calling party	
source_eth		Ethernet address of the calling party	
source_ip	192.168.1.151	IP address of the calling party	
source_caller_id	norbi@verbalabs.com	Number/address of the calling party	Yes
source_name	Norber Kakas	Name of the calling party. This field can also contain information about conversation transfer and forwarding.	
destination_device	RTCC/5.0.0.0 Response_Group_Service	Device identifier of the called party	
destination_eth		Ethernet address of the called party	
destination_ip	192.168.1.151	IP address of the called party	
destination_caller_id	jsikorsky@verbalabs.com	Number/address of the called party	Yes

destination_name	John Sikorsky	Name of the called party. This field can also contain information about conversation transfer and forwarding.	
referred_by		If the conversation was transferred or forwarded, this field indicates the original calling party.	
refer_to		If the conversation was transferred or forwarded, this field indicates the final called party.	
recorded_cid		Number/address of the recording party	
recorded_uid		Internal identifier of the recorded user configured in Verba	
start_time	2014.06.04 15:33:38.371	Start date and time of the call in UTC timezone in the following format: YYYY.MM.DD HH:mm:ss.SSS	Yes
end_time	2014.06.04 15:34:49.487	End date and time of the call in UTC timezone in the following format: YYYY.MM.DD HH:mm:ss.SSS	Yes
audio_codec_id	95	Internal identifier of the audio codec uses in the recorded streams.	
video_codec_id	299	Internal identifier of the video codec uses in the recorded streams. For codec reference see the list below.	
direction_id	0	Internal identifier of the direction of the conversation. For directions reference see the list below.	
cause_id	4	Internal identifier of the conversation ending reason. For cause reference see the list below.	
signaling_id	2	Internal identifier of the signaling protocol used in the conversation. For signaling protocol reference see the list below.	
recorder_service_id	1	Internal identifier of the recorder service recorded the conversation. For recorder service reference see the list below.	
recorded_party	0	Identifies the recorded party in the conversation. The following valid values apply: 0 - calling party 1 - called party	
ondemand	false	Indicates if the conversation is an on-demand conversation (recorded using an extension configured for on-demand recording) . The following valid values apply: true - the conversation is an on-demand conversation false - the conversation is not an on-demand conversation	
conference	false	Indicates if the conversation is a conference conversation. The following valid values apply: true - the conversation is a conference conversation false - the conversation is not a conference conversation	
keep	false	Indicates if the call is an on-demand conversation and has been already kept or not. The following valid values apply: true - the conversation is an on-demand conversation and has been kept false - the conversation is an on-demand conversation, but it has not yet been kept	

controlled	false	Indicates if the conversation is a controlled conversation (recorded using an extension configured for controlled recording). The following valid values apply: true - the conversation is a controlled conversation false - the conversation is not a controlled conversation	
voice_mail	false	Indicates if the conversation is a voice mail conversation (Verba is able to recognize certain voice mail calls). The following valid values apply: true - the conversation is a voice mail conversation false - the conversation is not a voice mail conversation	
platform_call_id	Ac+ACpslcet73h+iEU6e5k2aNClriA==	Platform specific conversation identifier used to relate corresponding recordings	
meeting_id		Microsoft Lync specific field indicating the meeting identifier	
meeting_uri		Microsoft Lync specific field indicating the meeting URI	
source_user_id	124	Internal identifier of the user configured in Verba associated with the calling party number/address	
destination_user_id	3456	Internal identifier of the user configured in Verba associated with the called party number/address	
agent_id	jsikorsky	Platform specific identifier of the recorded agent	
encryption_id		Internal identifier of the encryption key used to encrypt the media file	
signature_id		Internal identifier of the signature used to sign the media file	
enterprise_id		SIPREC specific multi-tenant identifier	
cisco_id_nearend		Cisco network based recording specific attribute, indicating the recorded party	
cisco_id_farend		Cisco network based recording specific attribute, indicating the other party	
silence_percent	5	Percent ratio indicating silence in the conversation	
crosstalk_percent	2	Percent ratio indicating cross talk in the conversation	
longest_silence_length	11	Longest, continuous silence period in the conversation [sec]	
sms		When the modality_id is 'sms' the text of the sms is stored here.	

Codecs

codec_id	Name
1	Non standard
2	G.711 A-law 64k
3	G.711 A-law 56k
4	G.711 u-law 64k
5	G.711 u-law 56k
6	G.722 64k
7	G.722 56k

8	G.722 48k
9	G.723.1
10	G.728
11	G.729
12	G.729A
13	IS11172AudioCap
14	IS13818AudioCap
15	G.729B
16	G.729AwB
18	GSM FR
19	GSM HR
20	GSM EFR
25	Wideband 256k
32	Data 64k
33	Data 56k
80	GSM
81	ActiveVoice
82	G.726 32k
83	G.726 24k
84	G.726 16k
90	iLBC 20ms
91	iLBC 30ms
92	iSAC
93	G.722.1(c)
94	AAC - Low Complexity
95	Microsoft RTAudio
96	MPEG4-Generic
97	MP4A-LATM
98	Siren
99	Speex
100	L8
101	G.726 40k
102	Silk

103	Celt
104	DVI4
105	VOX
106	OPUS
200	H.261
201	H.263
202	H.263+
203	H.263++
204	H.264 AVC
205	H.264 RCDO
206	H.264 SVC
207	Microsoft RT Video
208	Microsoft RDP
299	No Video
300	TechSmith
301	Windows Media 8 768 Kbps
302	Windows Media 8 1024 Kbps
303	Windows Media 8 1512 Kbps
304	Windows Media 8 2048 Kbps
305	Windows Media 9 768 Kbps
306	Windows Media 9 1024 Kbps
307	Windows Media 9 1512 Kbps
308	Windows Media 9 2048 Kbps
309	Windows Media Screen 768 Kbps
310	Windows Media Screen 1024 Kbps
311	Windows Media Screen 1512 Kbps
312	Windows Media Screen 2048 Kb
313	Verba Screen Codec Lossless
314	Verba Screen Codec HQ
315	Verba Screen Codec LQ
316	Verba Screen Codec LQ - Monochrome
400	No Screen
500	Undefined

Directions

direction_id	Value
0	Internal
1	Incoming
2	Outgoing
3	Inter-Tenant
4	Undefined
5	Dictation
6	External
10	Federated In
11	Federated Out
12	Contact Center In
13	Contact Center Out
14	Conference

Cause Identifiers

Cause_ID	Name
0	Normal
1	From Terminated
2	To Terminated
3	Hold
4	Transfer
5	Caller gave up
6	Busy
7	Unobtainable
8	Error
13	Conference
14	Call park
15	Join
28	Direct Transfer
60	Line change
80	Timeout

81	Forced termination
82	Manual termination
83	Program termination
84	Video escalation
85	Voice Activity
86	Media Segmentation
87	Never Recorded Joined
500	Unknown

Signaling protocols

signaling_id	Name
1	Cisco Skinny
2	SIP
3	H.323
4	JTAPI
5	Centile
6	Not applicable
7	XMPP

Recorder services

recorder_service_id	Name
1	VerbaPassiveRec
2	VerbaCiscoNativeRec
3	VerbalVRRec
4	VerbalPTradeRec
5	VerbaActiveRec
6	VerbaAvayaActiveRec
8	VerbaCiscoCentralSM
9	VerbaCentileConnector
10	VerbaCiscoNativeRecDBService
11	VerbaNotesAndroid
12	VerbaNotesIPhone
13	VerbaNotesWindowsPhone

14	VerbaMediaSenseConnector
15	VerbaCiscoGwRec
17	VerbaLyncIMRecorder
18	VerbaAvayaActiveRecDMCC
20	VerbaCiscoIMRecorder
21	VerbaRecorderProxy
22	VerbaWebApp

Microsoft Teams Application

AVAILABLE IN 9.7.7 AND LATER

The Verint Capture for Microsoft Teams - Recording Controls Application, is a native Microsoft Teams Application that allows privileged Microsoft Teams users to control compliance recording, by starting and or stopping the VFC Compliance Recorder.


The standard Microsoft Teams recording integration enables VFC to record all user participation in Microsoft Teams calls and meetings, for additional information please refer to [Microsoft Teams](#). However, some organizations have a policy or regulatory need to allow certain users should to control recording. In these environments, a Recorded Microsoft Teams user may be required to ask for permission to record, or alternatively a Recorded Microsoft Teams user may be required to stop recording during a conversation. In both instances the recording must be archived within the Compliance Recorder.

Verint have developed a native Microsoft Teams Application to control VFC Compliance Recording, the VFC Record Teams Application can be made available to privileged users within the organization's Microsoft Teams Application Catalogue, the VFC Record Teams Application can be used on Desktop and Mobile Devices.

Supported Features

The VFC Record Teams Application supports the following use cases:

Feature	Functionality	Use Case
Recording Controls	Display ongoing Conversations	Displays the active Microsoft Teams conversations that the user is participating in. The user can select which conversation to control
Recording Controls	Start Recording	User has the ability to first gain recording consent from participants before initiating Compliance Recording
Recording Controls	Stop Recording	User has the ability to stop Compliance Recording. This may be required if consent is withdrawn.
Recording Controls	Pause and Resume Recording	User has the ability to Pause and Resume Compliance Recording. This may be required if the conversation topic includes PII or other scenario that should not be recorded for a period of time. Please note, Pause / Resume requires always on recording and will create One Recording. Start / Stop will create multiple recording files.
View Recordings	Playback Conversations	User has the ability to view their recordings, and playback. Please note this may require additional User Configuration to allow Replay.

 Verba user [permissions](#) are applied for the users. The conversation access scope is applied for the search result. The logged in user will be able to see only the assigned conversations. If the user is a group supervisor the same access rules are applied as on the Verba Web Application.

For playback, the user's role has to have 'Play Conversation' permission.

For ongoing list, the user's role has to have 'List Ongoing Conversation' permission

Additional Information

- [Installing and Configuring the VFC Recording Controls Application](#)
- [Using the VFC Recording Controls Application](#)

Installing and Configuring the VFC Recording Controls Application

The VFC Record Application must be deployed and configured on the VFC Application server and also on the Organization's Microsoft Teams Tenant, this second step is required to make the Application available within the tenant's Microsoft Teams App Market.

Prerequisites

For the general overview of the Microsoft Teams recording refer to the [Microsoft Teams](#) article. To install and configure VFC Teams Recording please refer to the [Installing and Configuring the VFC Recording Controls Application](#) article.

Configuration Steps

Configuring and deploying the VFC Record Teams Application on the Organization's Microsoft Teams Tenant. This consists of the following steps:

- [Deploying the VFC Record Teams Application on the Organization's MS Teams Tenant](#)
- [Deploy the VFC Recording Controls Application](#)

Deploying the VFC Record Teams Application on the Organization's MS Teams Tenant

In order to complete the steps below, you must have the appropriate privileges within the Organization's Microsoft Teams Tenant to create and publish a Teams Application.

Deploying the VFC Record Teams Application on the Organization's MS Teams Tenant consists of the following steps:

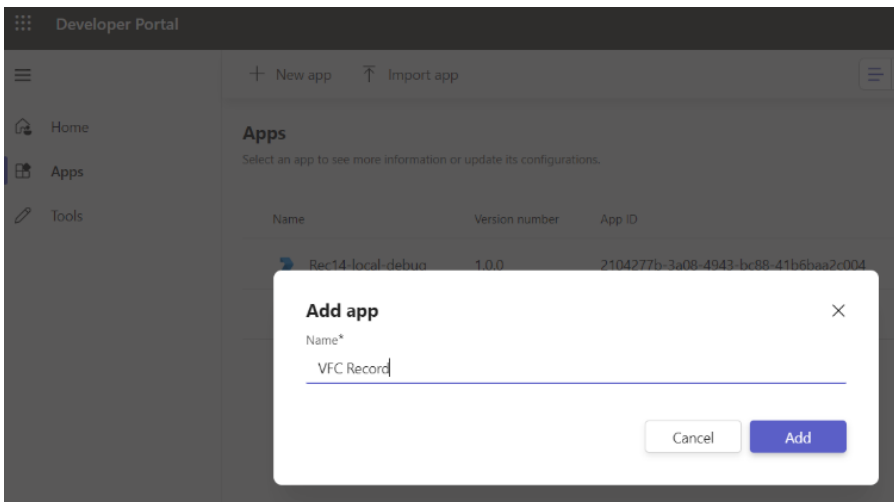
- [Adding the VFC Record Teams App](#)
- [Configure the Azure AD Application](#)
- [Configuring Permissions.](#)

Adding the VFC Record Teams App

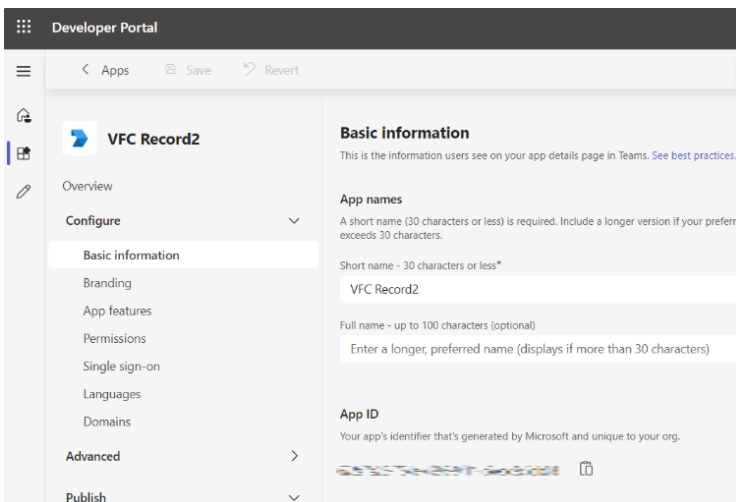
Step 1 - Logon in to MS Teams Developer Portal <https://dev.teams.microsoft.com/home>

Step 2 - Navigate to “Apps”, and click on “New app“

Step 3 - Give the application a name "VFC Record" and click on “Add”.

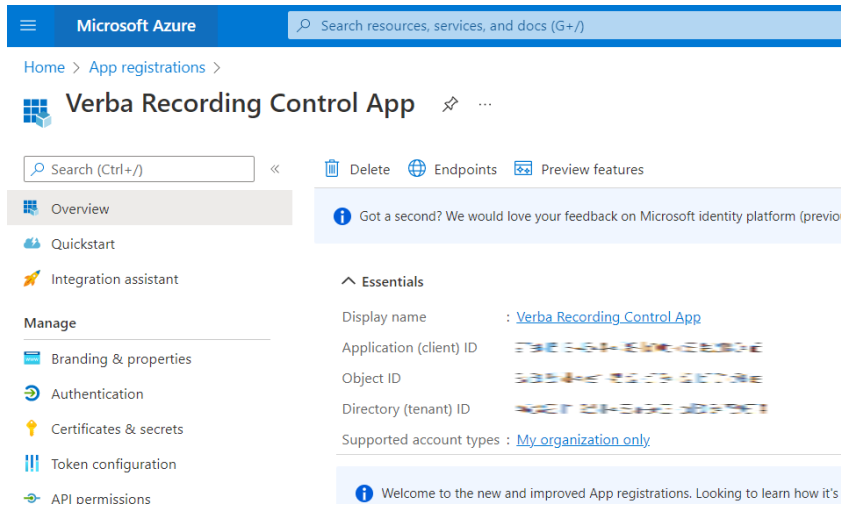


Step 4 - Make a note of the App's generated App ID.



Step 5 - Register an Azure AD Application for the Teams App. Logon to Microsoft Azure <https://portal.azure.com/> with an admin account of the tenant's, navigate to "App registrations" area and register a new app

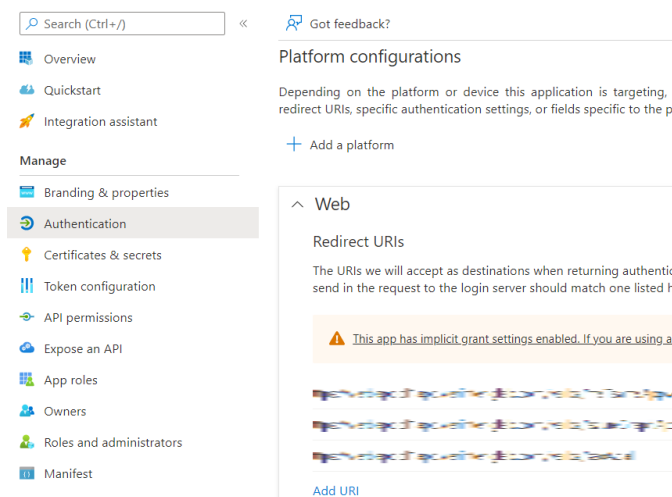
- Give it a name: Example "VFCRecording Control App"
- Choose "Accounts in this organizational directory only (* only - Single tenant)" in "Supported Account types"
- Leave "Redirect URI" empty.
- Make a note of the app's generated "Application (client) ID" and "Directory (tenant) ID"



Configure the Azure AD Application

Step 6 - The application focus should be under the newly registered app, go to Authentication page. Replace [VERBA-BASE-URI] in the following URIs with the base URI of Verba Web Application server and them to a new Web platform:

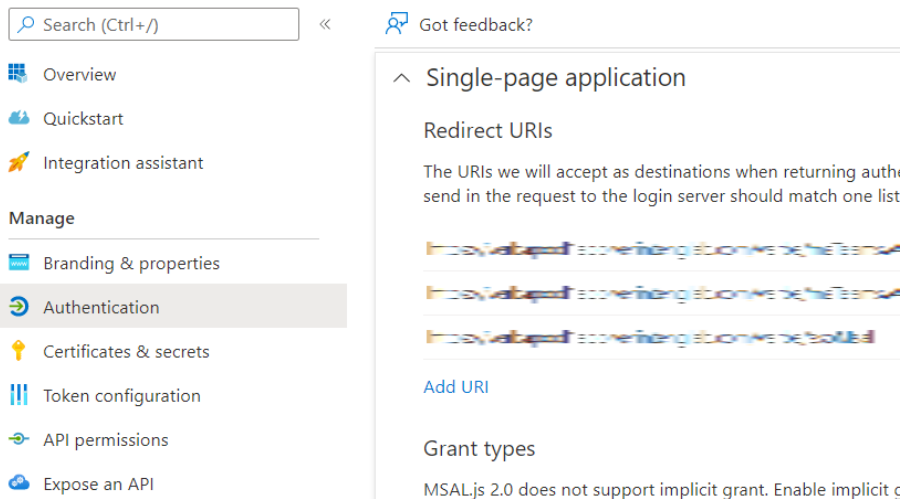
- [VERBA-BASE-URI]/[azureGraphApiAuthenticator.do](#)
- [VERBA-BASE-URI]/msTeamsApp/spa/auth-end.html
- [VERBA-BASE-URI]/ssoAdal



Step 7 - Replace [VERBA-BASE-URI] in the following URIs with the base URI of Verba Web Application server, [AZURE-APP-ID] with the Azure app id you noted above, and add them to a new SPA platform:

- [VERBA-BASE-URI]/ssoMsal
- [VERBA-BASE-URI]/msTeamsApp/spa/auth-end.html?clientId=[AZURE-APP-ID]

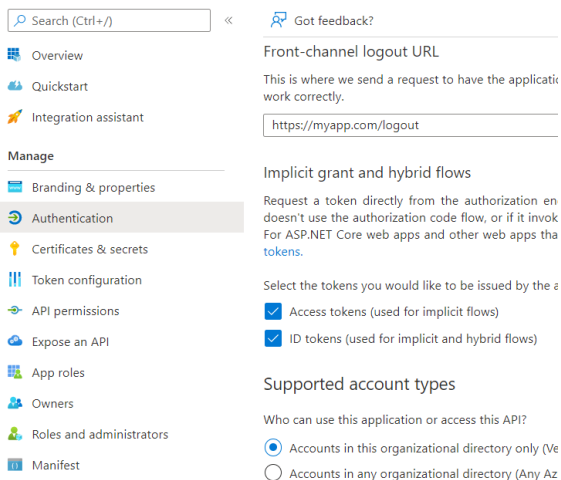
- [VERBA-BASE-URI]/msTeamsApp/spa/blank-auth-end.html



Step 8 - Enter a dummy URL for “Front-channel logout URL”. Example <https://myapp.com/logout>. It’s not used in the VFC Record Teams application.

Check off these 2 options:

- Access tokens (used for implicit flows)
- ID tokens (used for implicit and hybrid flows)



Step 9 - Save all the changes

Configuring Permissions.

Step 10 - Create a new client secret. Take note of the ID and Value.

Search (Ctrl+/) << Got feedback?

Overview
Quickstart
Integration assistant

Manage

Branding & properties
Authentication
Certificates & secrets
Token configuration
API permissions
Expose an API
App roles

Credentials enable confidential applications to identify themselves (scheme). For a higher level of assurance, we recommend using a c

Application registration certificates, secrets and federated crede

Certificates (0) **Client secrets (1)** Federated credential

A secret string that the application uses to prove its identity when

+ New client secret

Description	Expires
myclientsecret	7/21/2024

Step 11 - Under "API permissions", add these permissions:

Microsoft Graph (8): these are part of Microsoft Graph.

- Directory.Read.All : this and the next 2 are "Applicaiton" permissions. Used for user sync with Verba server.
- Group.Read.All
- User.Read.All
- User.Read (this is already there by default)
- email: this and the next 3 are "delegated permissions", of "OpenId permissions"
- offline_access
- openid
- profile

Search (Ctrl+/) Refresh Got feedback?

Overview
Quickstart
Integration assistant

Manage

Branding & properties
Authentication
Certificates & secrets
Token configuration
API permissions
Expose an API
App roles
Owners
Roles and administrators
Manifest
Support + Troubleshooting
Troubleshooting

The "Admin consent required" column shows the default value for an o in organizations where this app will be used. [Learn more](#)

Configured permissions

Applications are authorized to call APIs when they are granted permission all the permissions the application needs. [Learn more about permissions](#)

+ Add a permission ✓ Grant admin consent for Verint

API / Permissions name	Type	Description
Microsoft Graph (8)		
Directory.Read.All	Application	Read directory data
email	Delegated	View users' email ad
Group.Read.All	Application	Read all groups
offline_access	Delegated	Maintain access to c
openid	Delegated	Sign users in
profile	Delegated	View users' basic pr
User.Read	Delegated	Sign in and read use
User.Read.All	Application	Read all users' full p

Step 12 - Under "Expose an API", set "Application ID URI" to "api://[VERBA-SERVER-DOMAIN-NAME]/[AZURE-APP-ID]"

Example "api://verbapool1app.demolab.com/3eddffff-0b0b-5d9b-41d4-2b2a292c529e"

Step 13 - Add a new scope, for example "access-as-user", and enable the scope. Configure "Admins and users" for "Who can consent?" property

Enter the following consent message for admins:

- Read user files

- Allows the app to read the signed-in user's files

Enter the following consent message for users:

- Read your files
- Allows the app to read your files

Under "Authorized client applications" section, add these 2 client ids (for desktop/mobile MS Teams and webbase MS Teams), These are to allow MS Teams to request permission for access

- **5e3ce6c0-2b1f-4285-8d4b-75ee78787346**
- **1fec8e78-bce4-4aaf-ab1b-5451cc387264**

Search (Ctrl+/) < Got feedback?

Application ID URI

Scopes defined by this API

Define custom scopes to restrict access to data and functionality protected by the API. An application that API can request that a user or admin consent to one or more of these.

Adding a scope here creates only delegated permissions. If you are looking to create application-only scope type. [Go to App roles.](#)

+ Add a scope

Scopes	Who can consent	Admin consent
Add a scope	Admins and users	Read user files

Authorized client applications

Authorizing a client application indicates that this API trusts the application and users should not be asked this API.

+ Add a client application

Client Id	Scopes
Add a client application	1
Add a client application	1

Under Manifest, update "accessTokenAcceptedVersion" field to 2:

Search (Ctrl+/) < Save Discard Upload Download

The editor below allows you to update this application by c

```

1  {
2    "id": "1caf2cc4-c0cf-4510-aa6a-8ba:
3    "acceptMappedClaims": null,
4    "accessTokenAcceptedVersion": 2,
5    "addIns": [],
6    "allowPublicClient": true,
7    "appId": "3ebcfff6-0b0b-4d8b-91d4-:
8    "appRoles": [],
9    "oauth2AllowUrlPathMatching": false,
10   "createdDateTime": "2022-07-21T19:4
11   "description": null,
12   "certification": null,
13   "disabledByMicrosoftStatus": null,
14   "groupMembershipClaims": null,
15   "identifierUris": [
16     "api://verbapool1app.verinteng:
17   ],
18   "informationalUris": {
19     "termsOfService": null,
20     "support": null,
21     "privacy": null,
--

```

Deploy the VFC Recording Controls Application

- [Prepare the VFC Recording Controls Application Bundle](#)
- [Upload the VFC Recording Controls Application Bundle](#)
- [Configure the Verba Server for the VFC Recording Controls Application](#)
- [Link Users on the Verba Server](#)

Prepare the VFC Recording Controls Application Bundle

Please refer to [vmr-shell-1.0.0.38.zip](#), where you will find the partially completed manifest.json file to modify, save, recompress and upload to Teams environment.

This bundle vmr-shell<build-number>.zip file, contains manifest.json file and two icon files. Edit the manifest.json file of this bundle as following:

Step 1 - Replace {{teams-app-id}} with the App ID of the Teams app created above.

Step 2- Replace all instances of {{verba-base-url}} with the Verba server's base URL

Example:

App ID example

```
{
  "$schema": "https://developer.microsoft.com/en-us/json-schemas/teams/v1.14/MicrosoftTeams.schema",
  "version": "1.0.0",
  "manifestVersion": "1.14",
  "id": "150a0b12-9475-4b4f-8928-aef33d7d401e",
  "packageName": "com.package.name",
  "name": {
    ...
  "staticTabs": [
    {
      "entityId": "index",
      "name": "Recording Tab",
      "contentUrl": "https://verbapollapp.demolab.com/verba/msTeamsApp",
      "websiteUrl": "https://verbapollapp.demolab.com/verba/msTeamsApp",
      "scopes": [
        "personal"
      ]
    }
  ],
}
```

Step 3 - Replace {{verba-server-domain}} with the Verba server's domain name

Example:

Domain Name Example

```
"validDomains": [
  "verbapollapp.demolab.com"
]
```

Step 4 - Replace all instances of {{azure-app-id}} with "Application (client) ID" of the Azure AD Application created above.

Example:

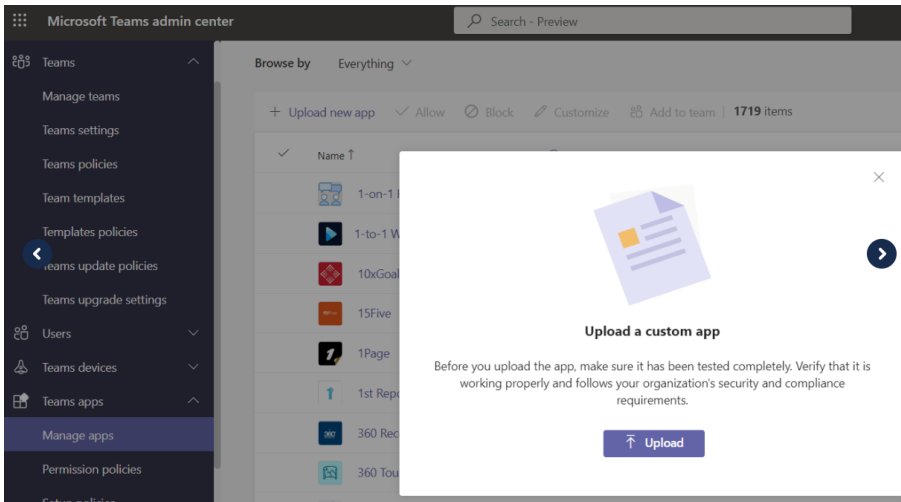
Azure App ID Example


```
"webApplicationInfo": {
  "id": "3ebcfff6-0b0b-4d8b-91d4-9b2a292c529e",
  "resource": "api://verbapoolapp.demolab.com/3ebcfff6-0b0b-4d8b-91d4-9b2a292c529e"
}
```

Upload the VFC Recording Controls Application Bundle

Step 1 - Login to MS Teams Admin Portal <https://admin.teams.microsoft.com/>

Step 2 - Go to Teams / Manage app and choose “Upload new app”, and upload the app bundle prepared above.



Configure the Verba Server for the VFC Recording Controls Application

Step 1 - The app only works over HTTPS protocol (with a public CA certificate), so make sure that is enabled in the Tomcat configuration. Instructions for this can be found here: [Installing an SSL certificate for HTTPS access](#)

Step 2 - The app application must use the following cookie settings: SameSite: none.

To achieve that open this file

[VERBA-APP-INSTALL-FOLDER]\Verba\tomcat\webapps\verba\META-INF\context.xml

Change the "CookieProcessor" tag "sameSiteCookies" attribute value from "lax" to "none".

```
<CookieProcessor sameSiteCookies="none" />
```

Step 3 - Restart the web application service.

Link Users on the Verba Server

Step 1 - Import users into with "Azure AD sync" [Active Directory synchronization](#)

Step 2 - Setup an "Identity Provider" with the same Azure AD application as it was created above [Identity providers](#)

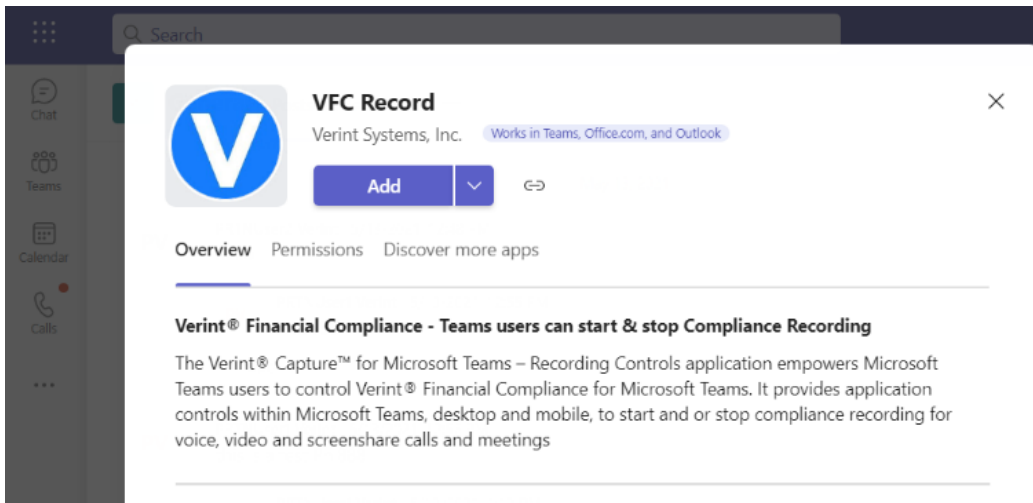
Step 3 - Associate the newly created "Identity Provider" with Verba users. The quickest way is to associate the "Identity Provider" with “Standard User” role in Verba

Using the VFC Recording Controls Application

Adding the VFC Recording Controls Application

Each Microsoft Teams user that is required to use the VFC Recording Controls Application, must add this to their Microsoft Teams Client.

Login into MS Teams, go to Apps (using the Apps button on left side toolbar), search for VFR Record app and choose "Add".



Using the VFC Recording Controls Application

The VFC Recording Controls Application for Microsoft Teams is separated into two main sections:

- Active Conversations
- View Recordings

Active Conversations

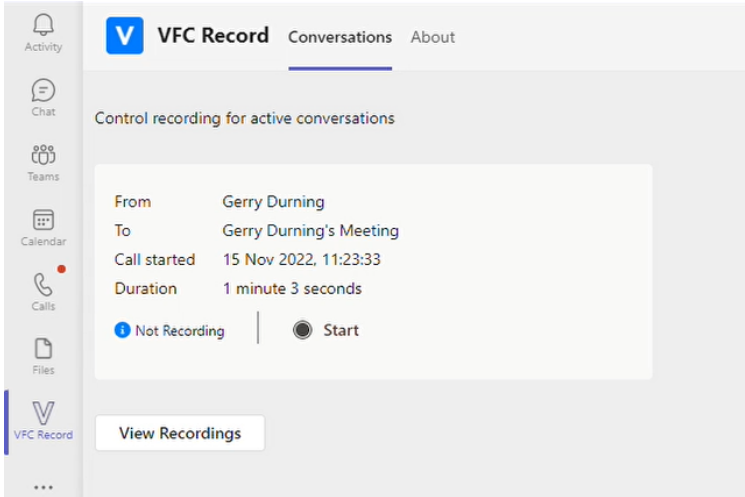
User's role has to contain the 'List Ongoing Conversation' permission.

The Active conversation area provides the following recording functionality. Access to Start, Stop, Pause, Resume and View Recordings functionality is configurable.

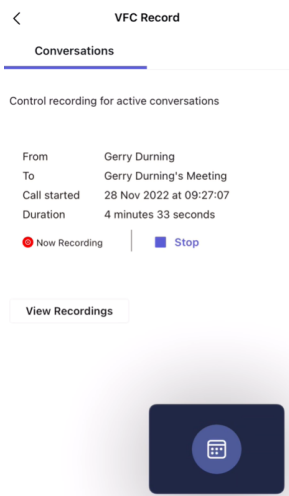
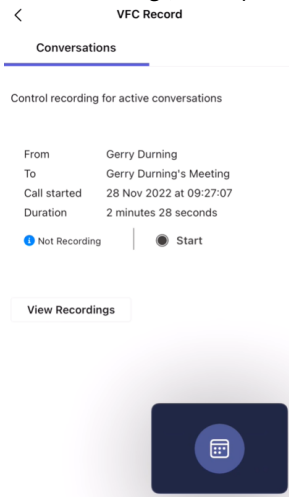
Functionality	Description
Conversation Metadata	The system will display conversation metadata relating to the active Microsoft Teams Conversations. This includes the following values; From, To, Call Start Date and Time, and Call Duration
Recording Status	The system will display if the system is recording the conversation or not
Start Control	UI Control / Button to Initiate Recording
Stop Control	UI Control / Button to Stop Recording

Pause and Resume Controls

User has the ability to Pause and Resume Compliance Recording. This may be required if the conversation topic includes PII or other scenario that should not be recorded for a period of time. Please note, Pause / Resume requires always on recording and will create One Recording. Start / Stop will create multiple recording files.



Start Recording (desktop example)



Start and Stop Recording (mobile examples)

View Recordings

The View Recording's button will launch the VFC application (embedded and iframed within the Microsoft Teams Client).

Please refer to [User Guide](#) for more details.

Verba Gadget for Cisco Finesse


Supported features

Search and Retrieval

- Search and retrieve conversations
 - Playback voice calls
 - View Instant Message conversations
- Display ongoing conversations

Recording Controls

- Mute call recording
- On-demand call recording
- Start/Stop manual call recording

 Verba user [permissions](#) are applied for the users. The conversation access scope is applied for the search result. The logged in user will be able to see only the assigned conversations. If the user is a group supervisor the same access rules are applied as on the Verba Web Application.

For playback, the user's role has to have 'Play Conversation' permission.

For ongoing list, the user's role has to have 'List Ongoing Conversation' permission

- [Configuring the Verba Gadget](#)
- [Login to the Gadget](#)
- [Using the Gadget](#)

Configuring the Verba Gadget

The Verba Gadget has to be uploaded to the Finesse web server as a 3rd party gadget.

Before uploading the gadget, the configuration file has to be modified.

Modifying the configuration file

All the possible configuration are stored in the verba-config.js file. The configuration fields are stored in a JavaScript object.


Configuration fields

Name	Type	Example Value	Description
protocol	String	"http"	The protocol which will be used for the API connection.
redundant	Integer	1	Defines if the Verba deployment contains multiple Media Repositories
mrs	Array of Strings	["10.20.30.40", "10.20.30.41"]	List of Media Repositories. The value can be IP address, NetBIOS name or FQDN.

Verba Configuration Example

```
var verbaConfig = {  
  protocol: "http",  
  redundant: 0,  
  mrs: [  
    "10.20.30.40"  
  ]  
};
```

Upload and add the Verba Gadget

 For Contact Center 10.6 and below please use the **WebService.js** and **WebService.xml** from the uccx-10.6 folder.

Please follow the instruction of the following Cisco configuration guide:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cust_contact/contact_center/finesse/finesse_1001/user/guide/CFIN_BK_CF7BB5C7_00_cisco-finesse-administration-1001/CFIN_BK_CF7BB5C7_00_cisco-finesse-administration-1001_chapter_01110.html



Downloading The Gadget

The Verba Gadget for Cisco Finesse is accessible on Verba's [Software Downloads](#) page

Login to the Gadget

The Verba Gadget is using already defined Verba users for logging in. The user roles are not applied on the users but during the conversation search the conversation access scope is applied for the user.

Login automatically

The gadget supports automatic login. The automatic login requires that the user's password in Verba has to be the same as in Cisco Finesse.

Login Manually

The gadget can be used by any Verba user with API access. After the gadget loaded on the bottom of the gadget there is a **Use Different User** button.

Enter a valid Verba user and click on the Login button.



The image shows a dialog box titled "Verba Login" with a close button (X) in the top right corner. Inside the dialog, there are two input fields: "Verba Login ID:" and "Verba Password:". Below these fields is a "Login" button. The dialog box has a light gray border and a small icon in the bottom right corner.

Successful Login

In the case of successful login and connection, the Verba Status should display 'Connected to Verba Database' in green.

Using the Gadget

The Verba Gadget for Cisco Finesse is separated into two main section, Ongoing, and Search.

The Ongoing section lists the currently accessible conversations.

The Search page lists the already recorded conversations.

Ongoing Conversations

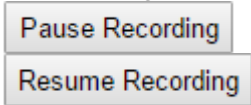
! User's role has to contain the 'List Ongoing Conversation' permission.

The ongoing list shows the currently recorded conversations assigned to the logged in user. In the case of supervisors, the user will see the accessible conversations on the list.

The ongoing page provides recording functionalities.

Supported recording controls:

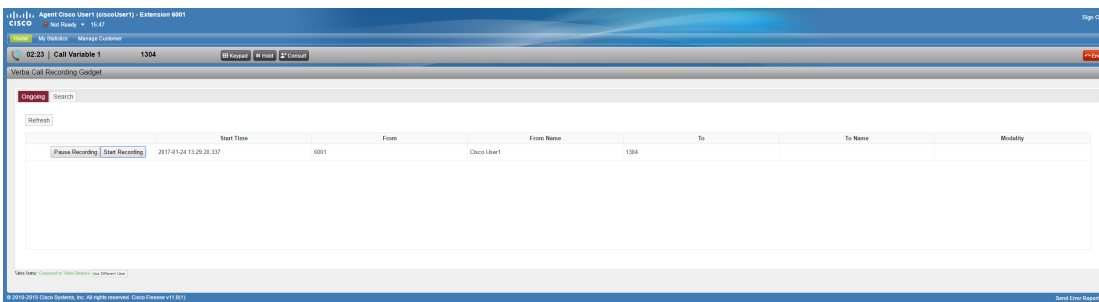
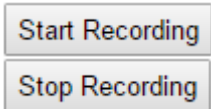
- Mute recording



- On-demand call control



- Start/Stop manual call recording



Search and Retrieve

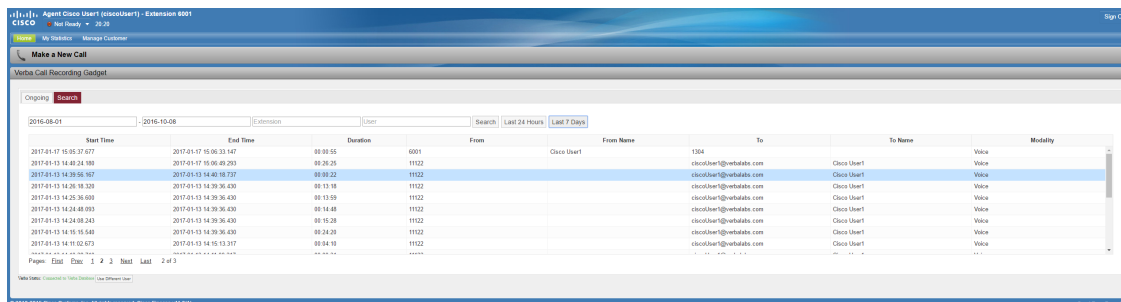
! The user's conversation access scope will be applied on the search result. If the user has not permission to see a conversation the conversation won't be listed in the result.

The voice call's playback required 'Conversation Play' permission

Search Criteria Bar

2016-12-01 - 2017-01-24 6001 User Search Last 24 Hours Last 7 Days

Name	Value	Description
From Date	2016-12-01	The start date of the search interval. The field only accepts yyyy-MM-dd format.
To Date	2017-01-24	The end date of the search interval. The field only accepts yyyy-MM-dd format.
Extension	1234	The recorded extension
User	User Name	The recorded user's name. It has to be a Verba User.
Last 24 Hours		Executes a search query for the last 24 hours without any other criteria. The end date of the interval is the current date and time.
Last 7 Days		Executes a search query for the last 7 days without any other criteria. The end date of the interval is the current date and time.



View Conversations

The voice and IM conversation can be viewed in the gadget's Conversation Details popup. The popup can be opened by clicking on the search result's row.

Instant Message view:

Start Time	End Time	Duration	From	To
2016-09-19 14:37:26.983	2016-09-19 14:37:44.197	00:00:17	ciscouser1@verbalabs.com	Conference


Timestamp	Sender	Recipient	Message
2016-09-19 14:37:26.983	ciscouser1@verbalabs.com	Conference	test message
2016-09-19 14:37:27.450	ciscouser1@verbalabs.com	Conference	test message
2016-09-19 14:37:27.697	ciscouser1@verbalabs.com	Conference	test message
2016-09-19 14:37:27.937	ciscouser1@verbalabs.com	Conference	test message
2016-09-19 14:37:28.237	ciscouser1@verbalabs.com	Conference	test message
2016-09-19 14:37:29.750	ciscouser1@verbalabs.com	Conference	test message

Voice call playback:

Conversation Details

Start Time	End Time	Duration	From	To
2017-01-19 15:52:52.883	2017-01-19 15:53:18.777	00:00:25	6001	1304

0:03 / 0:25



The voice calls are loaded into an HTML5 player. All browser are supported where the HTML audio tag is supported with mp3 format.

IM conversation fields

The system by default stores all chat conversations in the database. However, we have a file format that can be stored on the disk. This file format is used for exporting into file-based storage targets, and there is an option on each recorder service to generate them.

Cisco Jabber IM:

Cisco Compliance Service → IM Recording → Create Transcript and Metadata XML Files

▲ Cisco Compliance Service		
▶ General		
▲ IM Recording		
Enable Recorder:	No	▼
Internal Domain, Numbers Pattern:		
Enable Notification Message Inside Domains:	No	▼
Notification Subject Inside Domains:	Verba System Message	
Notification Message Inside Domains:	Conversation is recorded.	
Enable Notification Message Between Domains:	No	▼
Notification Subject Between Domains:	Verba System Message	
Notification Message Between Domains:	Conversation is recorded.	
Duplicate Recording If Both Parties Are Recorded:	Yes	▼
Call Timeout (seconds):	300	
Persistent Chat Segment Length (minutes):	1440	
Create Transcript and Metadata XML Files:	No	▼

SfB/Lync IM:

SfB/Lync IM Recorder → General → Create Transcript and Metadata XML Files

▲ SfB/Lync IM Recorder		
▲ General		
Internal Domain, Numbers Pattern:		
Duplicate Recording If Both Parties Are Recorded:	Yes	▼
Create Transcript and Metadata XML Files:	No	▼

Import Service:

Import → General → Create IM Transcript Files

▲ Import

▲ General

Wait Time Between Query Cycles [sec]:	600
Internal Domain, Numbers Pattern:	
Create IM Transcript Files:	No

The .IM file is generally a zipped XML file. However, the storage service can skip the zipping step when exporting based on configuration.

Storage Management → Export → Compress IM conversations

▲ Storage Management

▶ General

▶ On-demand Recording

▶ Legal hold

▶ Data Retention

▲ Export

Threads Count:	4
Compress IM conversations:	Yes
Processing Batch Size:	1000

The XML files are UTF-8 encoded.

The following table provides a description of the available fields. Not all fields are presented in all cases, only fields marked as mandatory.

Field	Sample value	Description	Mandatory
cdr_id	4a9d5ec0-7a40-11e4-8271-001cc092f276	Unique conversation identifier in the Verba system. It is possible that some recorders write this field with name 'cdr'.	No
messages		The array of 'message' elements.	Yes

The following table provides a description of the message attributes.

Field	Sample value	Description	Mandatory
id	18 ab5d60f8:acb7:4140:9c51:31a04beb73ce 41271025-c517-4b91-a873-252acb6b67f8	Unique message identifier. Some platforms give us these ids. In other cases, we fill it with auto-incremented numeric values.	Yes
conference_id	394WJ6JR	Platform-specific conversation conference identifier.	No

The following table provides a description of the message fields.

Field	Sample value	Description	Mandatory
timestamp	2021.11.04 11:36:48.771	Date and time of the message in UTC timezone in the following format: YYYY.MM.DD HH:mm:ss.SSS	Yes
source	norbi@verbalabs.com	The number/address of the sender of the message.	Yes
source_name	Norber Kakas	The name of the sender of the message.	No
destination	jsikorsky@verbalabs.com	The number/address of the receiver of the message. Can be filled only for peer 2 peer conversation.	No
plain_message	Hello World!	The plain text formatted content of the message.	No
raw_message	Hello World!	The raw message that was received from the platform.	No
message_header	INVITE sip:toth@verbalabs.com;maddr=fepool.verbalabs.com SIP /2.0	Platform-specific message header.	No
subject		Platform-specific message subject.	No
message_id		Platform-specific message identifier. Deprecated. Use the message id attribute.	No
thread_id	48b173dd-ea2b-11eb-9bde-84fdd16620a5	For advanced IM data model, this id connects /links messages to a conversation. (correlation id)	No
ts_original	2021.11.04 11:36:48.771	For advanced IM data model, this is the original message timestamp.	No
update_delete	0	For advanced IM data model, this means the message action. The following values are possible: <ul style="list-style-type: none"> • 0 = created (a new message) • 1 = updated (an already existing message) • 2 = deleted (an already existing message) 	No
is_reply	0	For advanced IM data model, this means if the message is a reply to another message. The following values are possible: <ul style="list-style-type: none"> • 0 = not a reply • 1 = is a reply 	No

Example XML formatted chat records:

```
<?xml version="1.0"?>
<im>
  <cdr_id>4a9d5ec0-7a40-11e4-8271-001cc092f276</cdr_id>
  <messages>
    <message id="28" conference_id="">
      <timestamp>2016.01.19 14:04:30.793</timestamp>
      <source>balazs@verbalabs.com</source>
      <destination>toth@verbalabs.com</destination>
      <message_header>INVITE sip:toth@verbalabs.com;maddr=fepool.verbalabs.com SIP/2.0
content-length: 244
via: SIP/2.0/TLS 192.168.1.25:52878;ms-received-port=52878;ms-received-cid=2B7A00
```

ms-application-via: ms-icr-to;state=ToPrimary;ms-pool=sfbpool.verbalabs.com;ms-application=http%3
ms-application-via: SIP;ms-urc-target;ms-urc-rs-from;routed-to-role=registrar;target-hash=0FB1EE9
from: "Balázs Oláh"<sip:balazs@verbalabs.com>;tag=6107b9355b;epid=88509262b4
ms-application-via: ms-udc.cdr%3D5aece7785e9fc5365e0e83e03ef634%3A1;ms-pool=sfbpool.verbalabs.c
max-forwards: 70
to: <sip:toth@verbalabs.com>
call-id: 4a8a761f58a14a3c9c4a048d2d936095
cseq: 1 INVITE
contact: <sip:balazs@verbalabs.com;opaque=user:epid:sNs914A1x1Gehv02bvFmGgAA;gruu>
user-agent: UCCAPI/15.0.4779.1000 OC/15.0.4779.1001 (Skype for Business)
supported: ms-dialog-route-set-update
ms-text-format: text/plain; charset=UTF-8; ms-body=VGvzenQNCg==
ms-im-format: text/html; charset=UTF-8; ms-body=PFNQQU4gc3R5bGU9Imlhcmdbpilib3R0b206MHB0OyBsaW5lL
ms-im-format: text/rtf; charset=UTF-8; ms-body=elxydGYxXGZiaWRpclxhbnNpXGFuc2ljcGcxMjUwXGRlZmYwXG
supported: ms-embedded-first-message
supported: ms-delayed-accept
supported: ms-renders-isf
supported: ms-renders-gif
supported: ms-renders-mime-alternative
Ms-Conversation</message_header>
<plain_message>Teszt</plain_message>
<raw_message><SPAN style="margin-bottom:0pt; line-height:normal; font-size:10pt; font-
</message>
<message id="29" conference_id="">
<timestamp>2016.01.19 14:04:55.967</timestamp>
<source>balazs@verbalabs.com</source>
<destination>toth@verbalabs.com</destination>
<message_header>MESSAGE sip:toth@verbalabs.com;opaque=user:epid:1cTFqkG_-V26ZHP5x_TS9gAA;gruu
via: SIP/2.0/TLS 192.168.1.25:52878;ms-received-port=52878;ms-received-cid=2B7A00
content-length: 295
max-forwards: 70
from: <sip:balazs@verbalabs.com>;tag=6107b9355b;epid=88509262b4
to: <sip:toth@verbalabs.com>;epid=747d7f1c7a;tag=62be4425f9
call-id: 4a8a761f58a14a3c9c4a048d2d936095
cseq: 2 MESSAGE
route: <sip:fepool.verbalabs.com:5061;transport=tls;ms-fe=FE2.VERBALABS.COM;opaque=state:T;lr&
user-agent: UCCAPI/15.0.4779.1000 OC/15.0.4779.1001 (Skype for Business)
supported: ms-dialog-route-set-update
supported: timer
content-type: text/rtf
ms-application-via: ms-udc.cdr%3D5aece7785e9fc5365e0e83e03ef634%3A1;ms-pool=sfbpool.verbalabs.c
ms-routing-phase: from-uri-routing-done
</message_header>
<plain_message>IM test.</plain_message>
<raw_message>{\rtf1\fbidis\ansi\ansicpg1250\deff0\nouicompat\deflang1038{\fonttbl{\f0\fnil\fch
{\colortbl ;\red0\green0\blue0;}
{*\generator Riched20 15.0.4737}{*\mmathPr\mwrapIndent1440 }\viewkind4\uc1
\pard\cf1\fs20 IM test.\f1\par
{*\lyncflags<rtf=1>}}
</raw_message>
</message>
</messages>
</im>

<?xml version="1.0" encoding="utf-8"?>
<im>
<cdr>ea643f69-9750-4d69-b914-ce18107bb0cb</cdr>
<messages>
<message id="41271025-c517-4b91-a873-252acb6b67f8">
<timestamp>2021-07-22T15:38:19.8252288Z</timestamp>
<source>kakas@verbalabs.com</source>
<destination>columbo@verbalabs.com</destination>
<plain_message>4864</plain_message>
<raw_message>4864</raw_message>
<message_header>INVITE sip:columbo@verbalabs.com SIP/2.0
content-length: 242
via: SIP/2.0/TLS 10.110.77.11:52952;branch=z9hG4bKDAC5B8C4.DE48301CFE2FF8FB;branched=FALSE;ms-rec
via: SIP/2.0/TLS 10.95.71.38:1078;ms-received-port=1078;ms-received-cid=4B6800
ms-application-via: ms-udc.cdr%3D9013333e5089eac0bebdf56c591306b%3A3%3Barch%3D9013333e5089eac0be

record-route: < sip:devsfbpool.verbalabs.com:5061;transport=tls;ms-fe=DEVFE1SFB.VERBALABS.COM;o
max-forwards: 69
ms-application-via: SIP;ms-urc-target;ms-urc-rs-from;target-hash=5113A4A8;ms-server=DEVFE1SFB.VER
from: "Norbert Kakas"< sip:kakas@verbalabs.com>;tag=7a7bf9ca6b;epid=a0586a87b7;verbasession=
ms-application-via: ms-udc.cdr%3D9013333e5089eac0bebfdf56c591306b%3A1%3Barch%3D9013333e5089eac0be
to: < sip:columbo@verbalabs.com>;
call-id: 6fbab6557277490d9b0de0822d2bd5a9
cseq: 1 INVITE
contact: < sip:kakas@verbalabs.com;opaque=user:epid:2CUGOjm8rlquPhxd21p37AAA;gruu>;
user-agent: UCCAPI/16.0.14131.20010 OC/16.0.14131.20320 (Skype for Business)
supported: ms-dialog-route-set-update
ms-text-format: text/plain; charset=UTF-8; ms-body=NDg2NA==
ms-im-format: text/html; charset=UTF-8; ms-body=PFNQQU4gc3R5bGU9J2ZvbnQtY2l6ZToxMHB0OyB3b3JkLXdyY
ms-im-format: text/rtf; charset=UTF-8; ms-body=elxydGYxXGZiaWRpclxhbnNpXGFuc2lhcGcxMjUyXGRlZmYwXG
supported: ms-embedded-first-message
supported: ms-delayed-accept
supported: ms-renders-isf
supported: ms-renders-gif
supported: ms-renders-mime-alternative
Ms-Conversation-ID: Add/D5eRuGpd4+k4T8eoSj8NHHI0FA==
supported: timer
supported: histinfo
supported: ms-safe-transfer
supported: ms-sender
supported: ms-early-media
Roster-Manager: sip:kakas@verbalabs.com
EndPoints: < sip:kakas@verbalabs.com>;, < sip:columbo@verbalabs.com>;
supported: com.microsoft.rtc-multiparty
ms-keep-alive: UAC;hop-hop=yes
allow: INVITE, BYE, ACK, CANCEL, INFO, MESSAGE, UPDATE, REFER, NOTIFY, BENOTIFY
ms-subnet: 10.95.70.0
supported: ms-conf-invite
content-type: application/sdp
Verba-ImRecorder: dev-rs1.verbalabs.com:10220
ms-routing-phase: from-uri-routing-done
ms-user-data: ms-publiccloud=TRUE;ms-federation=TRUE
</message_header>
 <subject />
 </message>
</messages>
</im>

VFC to WFE Metadata Integrator

AVAILABLE IN 9.7.7 AND ABOVE

- [Overview](#)
- [Supported switch platforms](#)
- [Minimum software version](#)
- [Concepts and functionality](#)
 - [Architecture](#)
 - [User groups](#)
 - [Switches and data sources](#)
 - [Recorders and call metadata](#)
- [Deployment process](#)
 - [Install server certificates](#)
 - [Create a parent organization in Workforce Engagement](#)
 - [Create a parent group in Workforce Engagement](#)
 - [Create API key in Workforce Engagement for each WFE Tenant](#)
 - [Create a VFC API user account](#)
 - [Enable External Recorder data sources in Workforce Engagement](#)
 - [Create an External Server in Workforce Engagement](#)
 - [\(optional\) Enable AOS in Workforce Engagement](#)
 - [Install the Integrator](#)
 - [Configure the Integrator](#)
- [Troubleshooting](#)
- [Post-deployment tasks](#)
- [Resilience](#)
- [Limitations](#)

Overview

The purpose of the VFC to WFE Metadata Integrator tool is to import call metadata, supported by switch platform and user data, from the VFC platform to the Verint v15.2 Workforce Engagement (WFE) suite. Once imported, the data is available for use by certain applications within the WFE suite. The Integrator continuously verifies the data in both VFC and WFE and carries out a one-way synchronization periodically.

This integration offers the following features:

- Synchronization of call record metadata and their related audio quality, speech transcription, and screen recording metadata from VFC to WFE.
- Synchronization of switch platforms, and extensions from VFC to WFE.
- Synchronization of groups and users from VFC to WFE.

The data synchronized to Workforce Engagement is then available for use in certain WFE applications:

- You can configure Capture Verification Collectors to collect Call Detail Records (CDRs) from the switch platforms and verify your call recording, audio quality, audio transcription, archiving, screen recording, and sensitive data masking compliance with Automated Verification.
- You can create Automated Verification reports to summarize your recording compliance results.



Design your integration based on your VFC and WFE deployments using this document before installing and configuring the Integrator.

Supported switch platforms

The Integrator supports the synchronization of recording data for the following switch platforms:

- Avaya DMCC/MR
- Cisco Network Based
- IPC Unigy

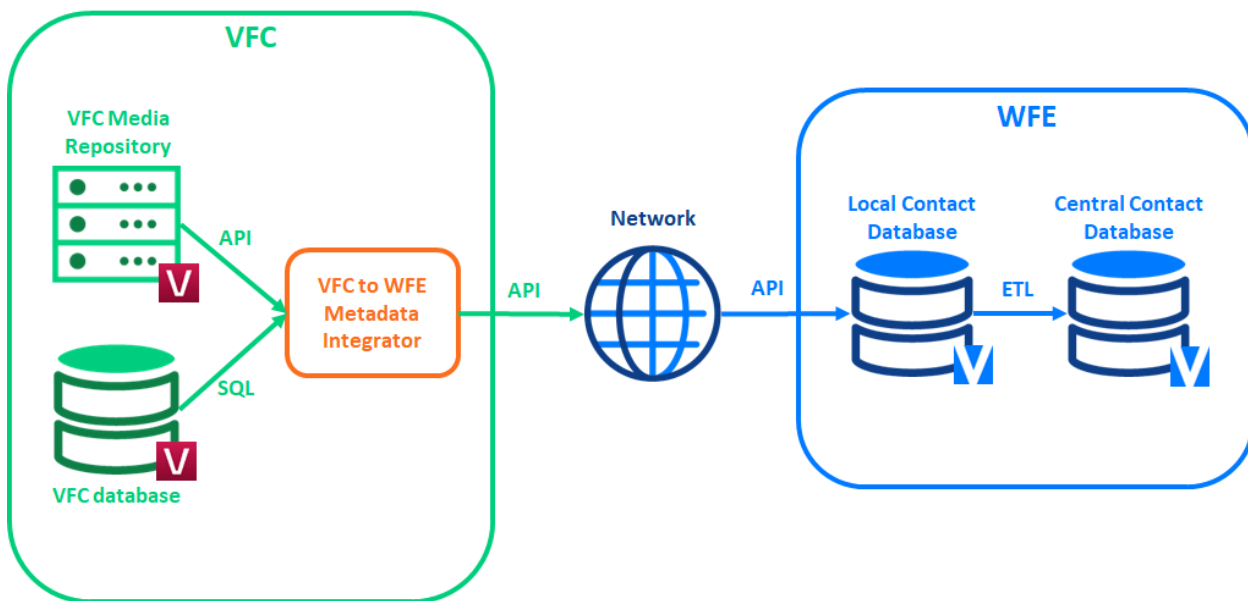
Minimum software version

- VFC Capture 9.7.7 or higher
- Workforce Engagement v15.2

Concepts and functionality

Architecture

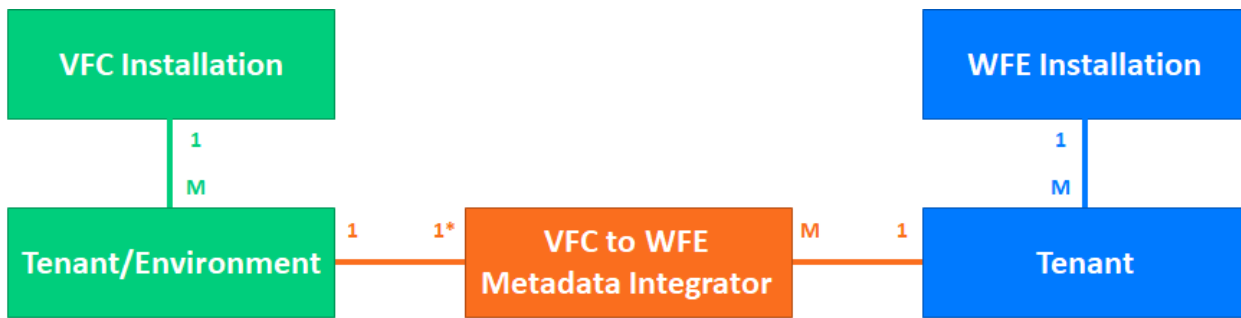
The Integrator connects to the VFC Media Repository through API calls to gather system information and sets up an SQL connection to the VFC database to read in the data to synchronize. The Integrator communicates with WFE services and sends data to the WFE database using API calls.



The Integrator supports the following deployments:

System	On premise	Single-tenant Cloud	Multi-tenant Cloud
VFC	Yes	Yes	Yes *
WFE	Yes	Yes	Yes

* Multi-tenant cloud VFC deployments are supported if each tenant has its own Integrator configured.



* Multiple Integrators can be configured for a VFC environment, but only one is active at any given time.

The Integrator must be installed on a VFC server. Only one Integrator can be installed on a single server.

When the Integrator first runs, it creates its editable configuration file, *appsettings.<environmentName>.json*. All connection details are specified in this file, along with parameters to monitor and optimize the synchronization process. The default value of *environmentName* is **Production**, otherwise, if configured, the value matches the DOTNET_ENVIRONMENT environment variable configured on the server. Any references to *appsettings.Production* apply to this file.


There can only be one Integrator running per VFC environment. There can be multiple idle Integrators configured for the same environment, which take over if the active Integrator fails. An Integrator and a VFC environment are associated by configuring the Environment ID in the *appsettings.Production* configuration file of the Integrator. If multiple VFC environments use the same VFC database, the active Integrator of each environment can connect to that database at the same time. See [Resilience](#) for more information.

An Integrator synchronizes VFC data to a single WFE tenant. The connection to the WFE installation is specified by configuring the URL of the WFE Application Server on which the **WFO_ProductionDomain_ProductionServer** runs. Multiple Integrators can synchronize data to a single WFE tenant, but there are parameters in the *appsettings.Production* file that must be unique to each connected Integrator. Refer to the [Configuration Guide](#) for more details. The tenant to which an Integrator connects is specified by creating an API token for the tenant in WFE and adding that token to the Integrator configuration.


User groups

The Integrator synchronizes all user data from the VFC database to WFE, recreating the same group structure in WFE as it exists in VFC.

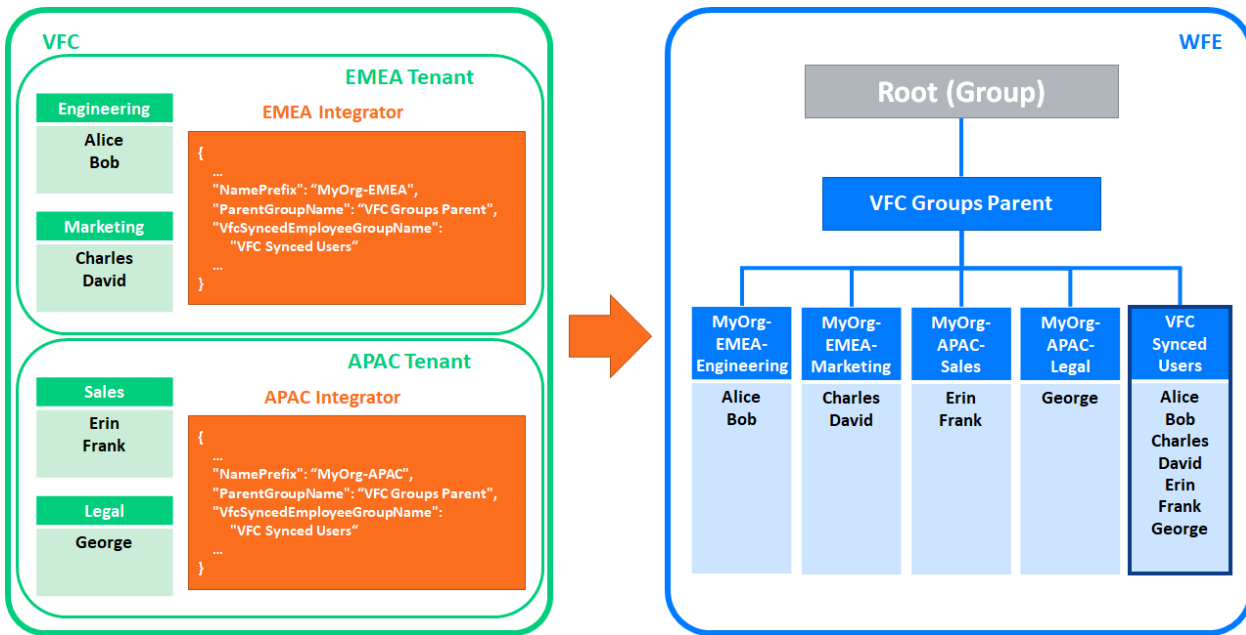
While organizations do not exist in VFC, WFE relies on organizations for enforcing user access scoping, and logically associating users and data sources. As the first step of the deployment process, the Integrator requires the creation of a parent organization in WFE. This organization can be on any level of an existing WFE organizational hierarchy. The name of the parent organization must be added to the Integrator configuration. The user groups and data sources managed by the integration are associated with the organization upon creation.

 The parent organization must not be the Root organization that is created during the WFE deployment process.


You must also manually create a parent WFE group that holds all groups of VFC synchronized employees, and the name must be added to the Integrator configuration.

 The parent group must not have employees assigned to it at any point in time and it must not be the Root group that is created during the WFE installation process.


Under the parent group, a default group holds all individual VFC synchronized employees, regardless of what VFC groups those employees belong to. On the same hierarchical level, under the parent group, the WFE groups matching the VFC groups get automatically created by the integrator. They retain their VFC names, with the configured name prefix.



Changes to users or groups that happen in VFC are applied to their WFE equivalent the next time the synchronization process runs. Changes to users or groups that happen in WFE do not apply to their VFC equivalents. If conflicting information exists in VFC and WFE, the changes in WFE are overridden the next time the synchronization process runs. However, if a non-VFC user is manually added to any of the WFE groups representing a synchronized VFC group, the user is not removed the next time the synchronization process runs.

 Do not add WFE users manually to the default VFC group that holds all synchronized users.

The integration supports the synchronization of all VFC users, including users created by an Active Directory synchronization.

 Synchronized VFC users do not have roles and privileges in WFE.

Switches and data sources

To synchronize the required recording data, the switch platforms for which the Integrator is configured must be specified in the appsettings.Production file of the Integrator.

The supported list of switch platforms is listed in the configuration file. The integration process does not run until one or more of the supported platforms is added to the list of configured platforms in the file.

Data sources in WFE do not have to be created manually, the Integrator automatically creates them to represent the switches configured in VFC. You must configure the Integrator to create the right WFE data sources for your deployment and monitoring needs by supplying switch configuration details in the appsettings.Production file.

You must specify:

- the VFC Recording Server addresses,
- the platform ID of the switch,
- the time zone of the switch,
- optionally, the extensions configured for that switch platform.

The granular configuration options in the Integrator allow for the accurate mapping of extensions to data sources in WFE.

⚠ You must add the addresses of all VFC Recording Servers that recorded calls to the data source configuration. Those Recording Servers that are not added do not have their calls synchronized to WFE.

A data source object in the appsettings.Production file can only be of one platform type and must be in a single time zone. However, it can represent multiple switches of the same platform type, in the same time zone, being recorded by one or more VFC recorders. If the extensions are configured for the data source object, the specified extension numbers are associated to the WFE data source upon creation.

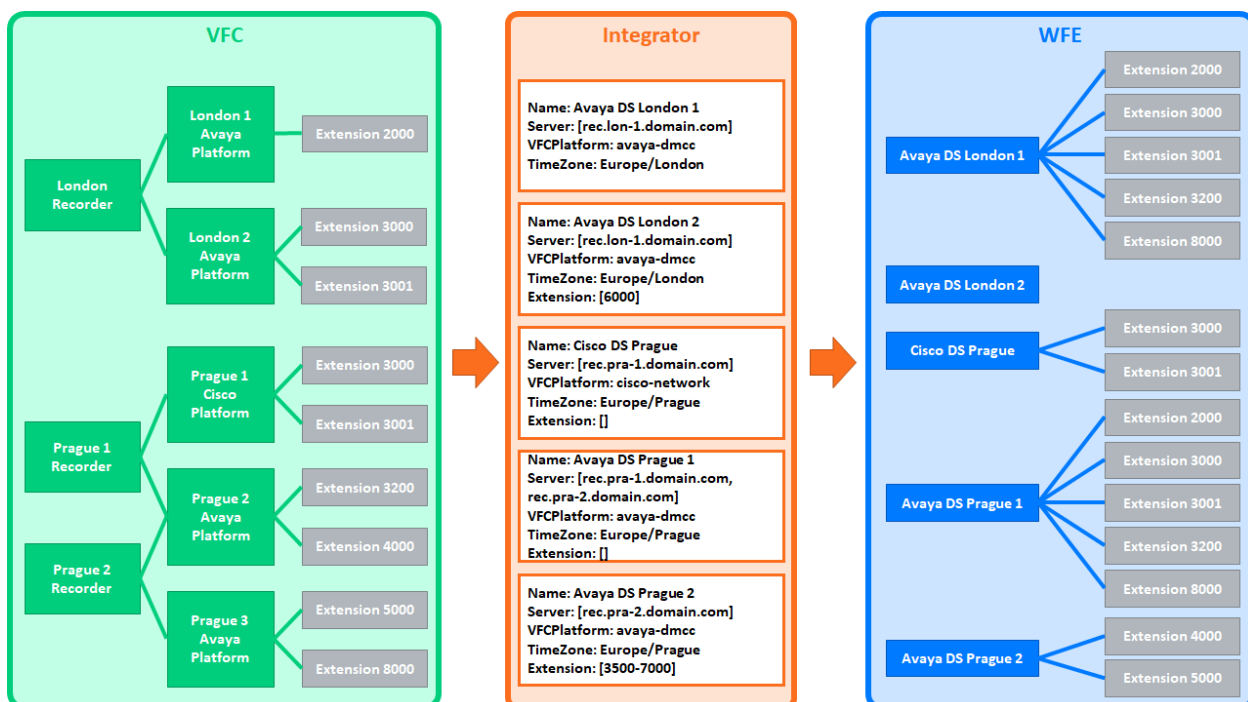
The extension parameter can be omitted or left empty for a data source object, which results in all extensions recorded by the specified recorders on the specified platform type to be associated with that data source. The extensions can be configured as an array of individual alphanumeric values or number ranges, but do not support wildcard operators.

If multiple identical data source objects exist in the appsettings.Production file without extension values specified, extensions for that platform type are associated with each WFE data source.

If multiple data source objects exist in the appsettings.Production file without extensions specified but different platform types are set for them, extensions configured to record all platform types are associated to each data source.

If multiple identical data sources exist in the appsettings.Production file and some of them have extensions specified, the described extensions are associated with the corresponding data source created in WFE. The other, unspecified extensions are associated with the first data source that has no extensions added.

⚠ At a minimum, you must have one data source object without extensions per platform type. If you have data source objects with extensions specified, it is still recommended to have a data source without extensions specified to ensure that no missed extensions get excluded from the synchronization.



If a platform type has been added to the Configured Platforms parameter, but no data source objects exist in the Data Mapping section, no corresponding WFE data source is created, and no related recording data is synchronized to WFE.

The Integrator configures both the local and UTC time zone of a switch platform to the corresponding WFE data source. The Integrator configuration requires the time zone configured in the IANA time zone format `<area>/<location>`, but in the WFE user interface the time zone shows in both IANA and UTC/GMT-offset formats, depending on the application. For example, a switch at a site in Los Angeles is seen as `America/Los_Angeles` in **Reports**, but shows as `GMT-08:00 Pacific Time (US & Canada)` on the data source settings page under **Recording Management**.

⚠ Only a subset of IANA time zones are supported in WFE. You must configure a supported time zone value for the Integrator. Refer to [Data Mapping](#) in the VFC to WFE Metadata Integrator Configuration Guide to select a supported time zone that represents your required time zone the closest.

For each configured data source in the `appsettings.Production` file, the Integrator searches WFE for an existing data source that meets the following criteria:

- It has the same name as the data source platform name configured in the `DataMapping` section of the `appsettings.Production` file.
- The **Type** is *Phone*.
- The **Switch/sub-type** is *External Recorder*.
- The **Organization** associated with the data source matches the organization ID of the parent organization created as part of the Integrator deployment process.

If the Integrator finds an existing data source with matching details, it notes the `switch_ID` of the WFE data source. If the Integrator does not find an existing data source with matching details, it creates one. The data source name and the VFC platform are automatically added to the description of the data source.

! Do not delete the automatically generated data source descriptions. If you need to specify a data source description, add it after the automatically generated text.

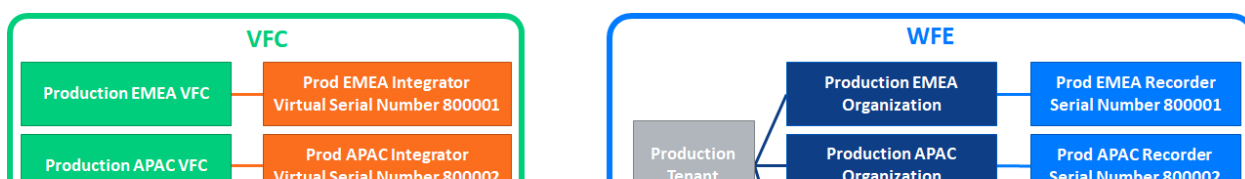
i All data sources created as part of the integration are created with the switch/sub-type *External Recorder*.

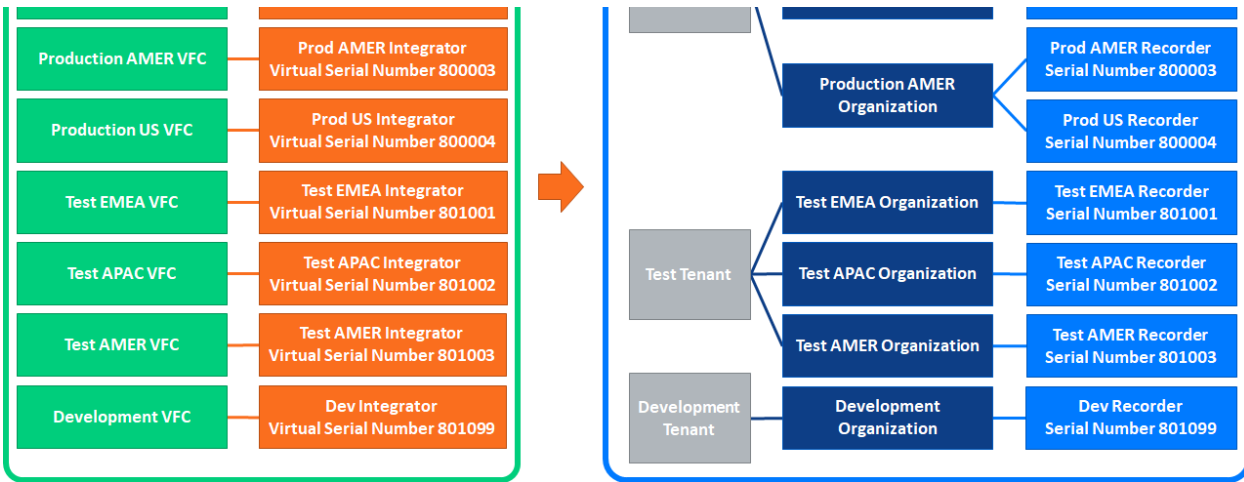
Recorders and call metadata

The Integrator synchronizes recording metadata to WFE by periodically checking the VFC database for new recording data and marking them for synchronization. Call marking is the process of reading in a call record from the database, evaluating it against the Integrator configuration, and sending it to the WFE database.

The Integrator only synchronizes recording metadata, not media files.

Each VFC installation is represented as a single recorder in WFE, and all synchronized call records get associated with this recorder, regardless of the number of distinct VFC recorders that captured the calls. Recorder servers in WFE are identified by a serial number that is automatically generated when the recorder is created. You must manually create an external recorder server in WFE for each VFC installation, and assign it a Serial Number that is unique to a VFC Media Repository. This serial number must be added to the `appsettings.Production` file of each Integrator that connects to the Media Repository described by the external recorder server. Refer to [Create an External Server in Workforce Engagement](#) for more information on adding an external server.





The way calls are recorded and stored is different in VFC and WFE. Refer to [Data models](#) for more details on the VFC call data models, and see [Contacts and Interactions](#) for information about the WFE call data models.

Due to the difference in the call record handling, the call search and replay functionality also differs in VFC and WFE. To keep the call search experience consistent across both systems for VFC users, the Integrator retains the VFC call model in WFE.

In WFE, every record in the search results under **Interactions** represents a single session from the WFE call model. In VFC, every record in the search results under **Conversations** represents a single conversation entry from the VFC call model.

Basic Search Options

Interval: 2022.03.01 00:04 - 2022.05.19 23:59

From or To Party: Enter number or URL...

User: Enter user name...

Search All Participants

Label: Enter label name...

Advanced Search Options

Display results according to timezone: GMT+05:00 - Eastern Standard Time

Conversations

565 items found, displaying 1 to 20. Page(s): 1 2 3 4 5 6 7 8 > | Results per page: 20

	Start Date	End Time	Start Time	Duration	User	From	From Info	To
▶ ...	May 19, 2022	7:23:07 AM	7:23:01 AM	00:00:06	BobbyBaton	330005	OEM UK 330005	330004
▶ ...	May 19, 2022	7:22:56 AM	7:22:43 AM	00:00:13	BobbyBaton	330005	OEM UK 330005	330004
▶ ...	May 18, 2022	11:29:47 AM	10:30:53 AM	00:58:54	FredaAddinall	330005	OEM UK 330005	330004
▶ ...	May 18, 2022	11:29:47 AM	10:30:53 AM	00:58:54	BobbyBaton	330005	OEM UK 330005	330004
▶ ...	May 18, 2022	10:30:53 AM	8:30:53 AM	02:00:00	BobbyBaton	330005	OEM UK 330005	330004
▶ ...	May 18, 2022	10:30:53 AM	8:30:53 AM	02:00:00	FredaAddinall	330005	OEM UK 330005	330004
▶ ...	May 18, 2022	8:30:37 AM	8:30:27 AM	00:00:10	BobbyBaton	330004	OEM UK 330004	330006

If more than one record was created during a conversation, related records can be shown together by selecting the ellipsis (...) button on the record and selecting **Show Related**.

	Start Date	End Time
▶ ...	May 18, 2022	11:29:47 AM
▶ ...	2022	11:29:47 AM
▶ ...	2022	11:29:47 AM
▶ ...	2022	7:22:56 AM
▶ ...	2022	7:22:36 AM
▶ ...	2022	10:30:53 AM

Context menu for the second row:

- Show Related
- Send URL
- Copy URL
- Evaluate
- Delete

During the synchronization process, each VFC conversation is mapped to a WFE session, allowing for the WFE call search experience being the same as in VFC.

2 items found, displaying all items. Results per page: 20

Start Date	End Time	Start Time	Duration	User	From
May 18, 2022	11:29:47 AM	10:30:53 AM	00:58:54	FredaAddinall	330005
May 18, 2022	11:29:47 AM	10:30:53 AM	00:58:54	BobbyBaton	330005

2 items found, displaying all items. Results per page 20

VERINT
Send Message

INTERACTIONS
ADMINISTRATION | FORM DESIGNER | REAL TIME | FOLDERS | ANALYSIS REPORTS | SEARCH | EVALUATE

SEARCH RESULTS Advanced Search

Retrieved 779 items

Start Time	Interaction D...	Analyst Emp...	Contact Fla...	Dialed From (...)	Dialed To (DN...)	Extension	Data	Media Type	Deleted	Interaction T...	Interaction T...
05/18/2022 11:29:47 AM	58:54	Addinall, Freda		1234567890	0987654321	330005	[i]	[v]			0:00
05/18/2022 11:29:47 AM	58:54	Baton, Bobby		1234567890	0987654321	330005	[i]	[v]			0:00
11/21/2021 11:57:46 AM	02:31	Walsh, Jade		2231331310	9196036729	9074	[i]	[v]	[x]		0:00
11/21/2021 11:53:23 AM	03:37	Houghton, Alice		4002200489	4228909698	9022	[i]	[v]	[x]		0:00
11/21/2021 11:52:57 AM	01:29	Baker, Niamh		4357065262	5169686687	9054	[i]	[v]			0:00
11/21/2021 11:50:58 AM	08:21	Mohammed, Br		5490024507	1650850779	9016	[i]	[v]			0:00
11/21/2021 11:48:00 AM	03:47	Gibbons, Maso		5259981208	7598374750	9029	[i]	[v]			0:00
11/21/2021 11:47:21 AM	05:00	Goings, Linda		1234854743	7846789714	9062	[i]	[v]	[x]		0:00

To maintain the Show Related functionality, sessions are related to contacts and associated records can be viewed when selecting a call record from the search results.

The call records originating from WFE remain unchanged and a single record in the Interaction search results still represents a single session.

VERINT
ADMINISTRATION | FORM DESIGNER | REAL TIME

INTERACTIONS
Search

Back to: [Search Interactions and Forms](#) > [Search Results](#)

INTERACTION REVIEW

INTERACTION
1 / 2
Date/Time: 05/18/2022 11:29:47 AM
Addinall, Freda

00:00 / 58:54
[stop] [play] [volume] X 1.0

TAGS | TRANSCRIPTION
EVALUATE

If the time interval between the start time of the first segment of a call and the start time of the last segment is longer than 12 hours, the created sessions in WFE are not associated with the same contact.

Deployment process

The VFC to WFE Metadata Integrator deployment process requires configuration in the VFC and WFE environments before the installation of the Integrator. The configuration of the synchronization details is carried out in the appsettings.Production.json file of the Integrator tool after installation.


1. [Install server certificates](#)
2. [Create a parent organization in Workforce Engagement](#)
3. [Create a parent group in Workforce Engagement](#)
4. [Create API key in Workforce Engagement for each WFE Tenant](#)
5. [Create a VFC API user account](#)
6. [Enable External Recorder data sources in Workforce Engagement](#)
7. [Create an External Server in Workforce Engagement](#)
8. [\(optional\) Enable AOS in Workforce Engagement](#)
9. [Install the Integrator](#)
10. [Configure the Integrator](#)

Install server certificates

1. Open your browser in **Administrator mode** and go to your VFC Web Interface.
2. Follow the [Server Certificates](#) topic to download the server certificate for the VFC Media Repository server from the VFC Certificate Authority.
3. Install the downloaded certificate on the server that runs the Integrator service.


Create a parent organization in Workforce Engagement

1. In an on-premise or single-tenant WFE environment, sign in as Administrator. In a multi-tenant environment, sign in as Tenant Administrator.
2. Follow the [Create an organization](#) topic in the *WFE User Management Guide* to set up an empty organization for the synchronized VFC data.
3. Note the name of the organization created. You must enter the exact name in the appsettings.Production configuration file of each Integrator during the configuration process.

 Do not change the organization name once it has been configured for an Integrator.

Create a parent group in Workforce Engagement

1. In an on-premise or single-tenant WFE environment, sign in as Administrator. In a multi-tenant environment, sign in as Tenant Administrator.
2. Follow the [Create a group](#) topic in the *WFE User Management Guide* to set up an empty group for the synchronized VFC data.

 No users must be assigned to the created parent group, or the synchronization process fails.

3. Note the name of the group created. You must enter the exact name in the appsettings.Production configuration file of each Integrator during the configuration process.

 Do not change the group name once it has been configured for an Integrator.

Create API key in Workforce Engagement for each WFE Tenant


1. In an on-premise or single-tenant WFE environment, sign in as Administrator. In a multi-tenant environment, sign in as Tenant Administrator.
2. Follow the [Generate an API Key](#) topic in the *WFE Enterprise Configuration and Administration Guide* to create an API key for each Integrator.
3. Set **Key type** to *External*.
4. When each API key is generated, note their **Key ID** and **Key Value**. You must enter the exact values in the appsettings.Production configuration file of each Integrator that synchronize data to this tenant during the configuration process.

Create a VFC API user account

1. Sign in to VFC as an Administrator user.
2. Follow the [User Configuration](#) topic to create a new user that is only used for submitting API requests to VFC.
 - a. Set **API Access Only** to enabled.
3. Note the user name and password of the created user. You must enter the exact values in the appsettings.Production configuration file of each Integrator during the configuration process.

Enable External Recorder data sources in Workforce Engagement


To enable External Recorder data sources that represent the VFC switch platforms, turn on the *Data Marking API for External Recorder* license item in WFE.

 In a multi-tenant WFE environment, the service provider must carry out these steps. The tenant administrator cannot enable licenses or configure data sources.

1. In a browser, go to `http://<wfo_app_server_address>/wfo/control/license_edit`.
2. On the **License Data** page, under **Features**, enable **2021R1 - Data Marking API for External Recorder**.
3. Click **Save**.

Create an External Server in Workforce Engagement

To allow for accurate call marking, an External Server must be created in WFE to represent a VFC installation.

 In a multi-tenant WFE environment, the service provider must carry out these steps. The tenant administrator cannot view or manage External Servers.

1. Follow the [Add an external server to the Installations tree](#) topic in the *WFE Enterprise Configuration and Administration Guide* to create an external server.
 - a. The Serial Number must be unique to both a VFC and a WFE installation. It must be a 6-digit number in the format XXXYYY, where the XXX is a 3-digit unique identifier for the VFC installation, and YYY is a 3-digit unique counter, incrementing for each Integrator.
2. Repeat for all VFC installations. Ensure that the Serial Numbers are unique.
3. Note the Serial Number of the created server or servers. You must enter the exact value in the appsettings.Production configuration file of each Integrator for a VFC installation during the configuration process.

(optional) Enable AQS in Workforce Engagement

If you have Voice Quality scoring enabled in VFC and would like the voice quality data synchronized, the WFE Audio Quality Statistics license item must be enabled.



In a multi-tenant WFE environment, the service provider must carry out these steps. The tenant administrator cannot enable licenses or configure data sources.

1. In a browser, go to *http://<wfo_app_server_address>/wfo/control/license_edit*.
2. On the **License Data** page, under **Features**, enable **2021R1 - Audio Quality Statistics**.
3. Click **Save**.

Install the Integrator

Follow the [Installation Guide](#) to install the VFC to WFE Metadata Integrator.

Configure the Integrator

Follow the [Configuration Guide](#) to configure the VFC to WFE Metadata Integrator.

Troubleshooting

Follow the [Troubleshooting Guide](#) to troubleshoot issues with the VFC to WFE Metadata Integrator.

Post-deployment tasks

Once the integration is configured and active, the following items must be completed and checked:

- Verify that the parent organization with the name specified during configuration exists in WFE.
- Verify that the parent group with the name specified during configuration exists in WFE.
- Verify that the VFC Synced group exists as a child of the parent group in WFE.
- Verify that the VFC user groups exist in WFE.
- Verify that VFC users are available in WFE, are associated with the same groups as in VFC, and have the right extensions associated to them.
- Verify that the data sources configured in the Integrator appsettings.Production file exist in WFE, and have the right name, time zone, and extensions associated with them.
- Verify that recordings are visible in the Automated Verification component of WFE.
- Verify that recordings are associated with the right users, extensions, and data sources.
- Verify that recordings are associated to the recorder with the virtual Serial Number specified in the Integrator.

Resilience

The VFC Integrator achieves a resiliency model using an active-passive design. Multiple Integrators can be running and be configured to read from the same VFC database per VFC environment, but only one Integrator is reading at once.

When an Integrator completes its initial dependency checks, it makes an internal note of all dependency statuses. If all dependencies are ready, the Integrator attempts to connect to the database to read data by sending the database a lock request. If no database locks are in place, the database grants the lock to the Integrator that requested it. The active Integrator keeps sending a heartbeat signal to the database to maintain ownership of the lock. While the ownership is allocated, the database declines any further lock requests from other Integrators.

Any Integrators that completed their dependency checks but were not granted the database lock remain in a passive state. In the passive state, Integrators periodically retries gaining ownership of the database lock. The period for reattempting to acquire the lock is 30% of the lock timeout value and is not modifiable. Before resubmitting the lock request, the passive Integrator checks its internal record of

dependency statuses, and if all statuses are logged as ready, the Integrator sends the lock request. If any dependencies are not ready, the Integrator carries out another dependency check, and updates its record of statuses.

If the active Integrator fails and no heartbeat signal reaches the database, the lock timeout period starts. After the timeout period elapses, the lock is released, and the next Integrator to submit a lock request is granted database access. The lock timeout period is configurable in the appsettings.Production file of each Integrator.

Limitations

- The only WFE module with full functionality access through this integration is Automated Verification.
- If the time interval between the start time of the first segment of a call and the start time of the last segment is longer than 12 hours, the created sessions in WFE are not associated with the same contact.
- Passive Integrators that do not have ownership of the database lock use their internal record of the dependency statuses noted during the last dependency check to determine if all services are ready, and only run new dependency checks if any dependencies were previously not ready. This means that if a dependency was ready at the last dependency check but fails before the new lock request is sent to the database, the Integrator starts up and fails when it encounters the unavailable dependency, releasing the database lock and restarting the database lock timeout period. This can cause long wait times for Integrators competing for the database lock, as multiple Integrators failing can make the database connection unavailable for multiple consequent lock timeout periods.

VFC to WFE Metadata Integrator Installation Guide

AVAILABLE IN 9.7.7 AND ABOVE

Install the VFC to WFE Metadata Integrator tool to import recording metadata from the VFC platform to the Verint v15.2 Workforce Engagement (WFE) suite.

The Integrator can be installed on any VFC server.

- [Manual installation](#)
 - [Prerequisites](#)
 - [Installation](#)
 - [Update existing installation](#)
 - [Repair existing installation](#)
 - [Remove existing installation through the Windows Control Panel](#)
 - [Remove existing installation using the installer](#)
 - [Rollback](#)
- [Unattended installation](#)
 - [Prerequisites](#)
 - [Installation](#)
 - [Update existing installation](#)
 - [Repair existing installation](#)
 - [Remove existing installation](#)

Manual installation


Prerequisites

 The default user account used by the installer is **Local System**. Ensure that this user account has write privileges to the installation folder.

Installation

Procedure

1. Open the VfcIntegrator-15.2.x.xxxxx.msi installer, where x.xxxxx represents the specific installer version.
2. On the Setup Wizard screen, click **Next** to start the installation.
3. Read the End-User License Agreement, select the **I accept the terms in the License Agreement** check box, and click **Next**.
4. Select a destination folder for the VFC to WFE Metadata Integrator. Enter the path and name of the folder, or click **Change** to select a folder in Windows Explorer.
The default folder is **C:\Program Files\VFC to WFE Metadata Integrator**.
5. Click **Install** to begin the installation.


 If the installation process fails or the process is terminated by clicking the **Cancel** button on the Progress screen, the installer removes all installed files.

6. Click **Finish** to exit the Setup Wizard.

Update existing installation

The update of the Integrator is done by removing the existing installation and installing a newer version.


If you specified a custom destination folder during the initial installation, set the same value in the update process.

 When updating an existing installation, the installer removes and updates all files but the Logs folder, the appsettings.Production.json file, and the PersistedSettings.json file.

Repair existing installation

Procedure

1. Open the VfcIntegrator-15.2.x.xxxxx.msi installer, where x.xxxxx represents the specific installer version.
2. On the Setup Wizard screen, click **Next** to start the installation.
3. On the Change, repair, or remove installation screen, select **Repair**.
4. Click **Repair** to begin the repair process.


 If the repair process fails or the process is terminated by selecting **Cancel** on the Progress screen, the installer reverts any changes and keeps the current installation.

5. Click **Finish** to exit the Setup Wizard.

Remove existing installation through the Windows Control Panel

Procedure


1. Go to **Start**. Under **Settings**, select **Control Panel**.
2. Go to **Add or Remove Programs**. Under **VFC to WFE Metadata Integrator**, choose **Uninstall**.

 When removing an existing installation, the installer removes all files but the Logs folder, the appsettings.Production.json, file and the PersistedSettings.json file.


Remove existing installation using the installer

Procedure

1. Open the VfcIntegrator-15.2.x.xxxxx.msi installer, where x.xxxxx represents the specific installer version.
2. On the Setup Wizard screen, click **Next** to start the installation.
3. On the Change, repair, or remove installation screen, select **Remove**.
4. Click **Remove** to begin the uninstallation process.

 If the uninstallation process fails or the process is terminated by selecting **Cancel** on the Progress screen, the installer reverts any changes and keeps the current installation.

5. Click **Finish** to exit the Setup Wizard.

 When removing an existing installation, the installer removes all files but the Logs folder, the appsettings.Production.json file, and the PersistedSettings.json file.

Rollback

Built-in rollback functionality is not offered. Carry out a rollback of the VFC to WFE Metadata Integrator by uninstalling the current version and installing the previous version required.

Unattended installation

The VFC to WFE Metadata Integrator installation package provides an **unattended installation feature** to support the automated, silent installation of the software. The installer is MSI-based.

Prerequisites

 The default user account used by the installer is **Local System**. Ensure that this user account has write privileges to the installation folder.

Installation

Open the Command Line as an administrator and run the following command:

```
msiexec -i C:\Temp\VfcIntegrator-15.2.x.xxxxx.msi INSTALLDIR=C:\VFCIntegrator /qn
```

Parameters:

Command Line Parameter	Description
-i	Specifies the installation action. Required.
VfcIntegrator-15.2.x.xxxxx.msi	Name of the VFC to WFE Metadata Integrator MSI package, where x.xxxxx represents the version number of the installer. Required.

INSTALLDIR	<p>The directory the VFC to WFE Metadata Integrator is installed.</p> <p>The default value is C:\Program Files\VFC to WFE Metadata Integrator\.</p> <p>Only required if specifying a custom installation directory. If omitted, the installer uses the default value.</p>
/qn	<p>Specifies that the msixec is used in quiet/unattended mode. This mode prevents the MSI from prompting for input.</p> <p>Required for silent install.</p>


On completion:

- EXIT_CODE = 0 indicates that the installation process was successful.
- EXIT_CODE = 1 indicates that the installation process failed.

Update existing installation

The update of the Integrator is done by removing the existing installation and installing a newer version.

If you specified a custom INSTALLDIR during the initial installation, specify the same values in the command used in the update process.

 When updating an existing installation, the installer removes and updates all files but the Logs folder, the appsettings.Production.json file, and the PersistedSettings.json file.

Repair existing installation

Open the Command Line and run the following command:

```
msiexec -f C:\Temp\VfcIntegrator-15.2.x.xxxxx.msi /qn
```

Parameters:

Command Line Parameter	Description
-f	Specifies the repair action. Required.
VfcIntegrator-15.2.x.xxxxx.msi	Name of the VFC to WFE Metadata Integrator MSI package, where x.xxxxx represents the version number of the installer. Required.
/qn	<p>Specifies that the msiexec is used in quiet/unattended mode. This mode prevents the MSI from prompting for input.</p> <p>Required for silent install.</p>

On completion:

- EXIT_CODE = 0 indicates that the repair process was successful.
- EXIT_CODE = 1 indicates that the repair process failed.

Remove existing installation

Open the Command Line and run the following command:


```
msiexec -x C:\Temp\VfcIntegrator-15.2.x.xxxxx.msi /qn
```

Parameters:

Command Line Parameter	Description
-x	Specifies the uninstallation action. Required.
VfcIntegrator-15.2.x.xxxxx.msi	Name of the VFC to WFE Metadata Integrator MSI package, where x.xxxxx represents the version number of the installer. Required.
/qn	Specifies that the msiexec is used in quiet/unattended mode. This mode prevents the MSI from prompting for input. Required for silent install.

On completion:

- EXIT_CODE = 0 indicates that the uninstallation process was successful.
- EXIT_CODE = 1 indicates that the uninstallation process failed.

 When removing an existing installation, the installer removes all files but the Logs folder, the appsettings.Production.json file, and the PersistedSettings.json file.

VFC to WFE Metadata Integrator Configuration Guide

AVAILABLE IN 9.7.7 AND ABOVE

- [Overview](#)
- [Prerequisites](#)
- [Compulsory appsettings parameter configuration](#)
 - [WFE](#)
 - [VFC](#)
 - [DataMapping](#)
 - [Secrets](#)
- [Non-compulsory appsettings parameter configuration](#)
 - [HighAvailability](#)
 - [Bootstrap](#)
 - [Synchronisation](#)
 - [CallMarking](#)
 - [RecordingExpectation](#)
 - [ContactIdCaching](#)
 - [Advanced - ResponseCaching](#)
 - [Advanced - ArchivedLogsCleanup](#)
 - [Serilog](#)
- [Troubleshooting](#)


Overview

The VFC to WFE Metadata Integrator must be configured to connect to both the VFC and WFE environments.


When the Integrator is installed, appsettings.json, a default configuration file is created in the Integrator installation folder (referenced as INSTALLDIR in the [Installation Guide](#)), where the Vfc.Integrator.Service.exe file is located. This file is read-only, and only serves as a reference for the default values supplied with the installation.

When the Integrator first runs, it creates its editable configuration file, appsettings.<environmentName>.json. The default value of environmentName is **Production**, otherwise, if configured, the value matches the DOTNET_ENVIRONMENT environment variable configured on the server. Any references to appsettings.Production apply to this file.

The configuration of the Integrator must take place in the appsettings.Production.json file, and missing or incorrect values can cause the Integrator service to fail.

 Not all parameters in the file must be modified. Always refer to the following modifiable columns, whether a specific parameter can be modified.

More configuration settings are stored in the PersistedSettings.json file, which must not be manually modified. When updating, repairing, or uninstalling an existing Integrator installation, the appsettings.Production and PersistedSettings files, the Logs folder and its contents remain, while all other files get removed.

 You must restart the Integrator service after making changes to the appsettings.Production file.

Prerequisites

Before you begin the configuration, the following items must be completed:

1. Ensure all steps in the [Prerequisites](#) and [Deployment process](#) sections of the VFC to WFE Metadata Overview are complete.
2. Follow the [Installation Guide](#) to install the VFC to WFE Metadata Integrator. Verify the installation returned no errors.

Compulsory appsettings parameter configuration

There are values in the appsettings.Production file that must be configured to match your deployment. Some of these values include default values, some of which need to be overwritten with correct values or the Integrator cannot run. Some of the values are optional to edit or include.

WFE

Parameters to configure that describe WFE-related settings.

Parameter	Description	Default value	Modifiable
ApplicationServerUrl	The URL of the Application Server that runs the WFO_ProductionDomain_ProductionServer service, used to send requests to the WFE APIs.	https://YourWfeApplicationServer	Yes, must be modified
NamePrefix	The prefix for the WFE user groups generated as part of the integration process. Must be unique to an Integrator deployment. Limited to 10 characters.	YourTenantName-YourOrgName-	Yes, must be modified
ParentOrganizationName	The name of the WFE parent organization to contain and manage users and associate with data sources. Must be unique to an Integrator deployment and across the WFE tenant.	Your VFC integration Organization name	Yes, must be modified
ParentGroupName	The name of the WFE parent group to contain integrated VFC groups which will be actively managed by the VFC Integrator. Must be unique to an Integrator deployment and across the WFE tenants. Note: WFE group names are limited to 50 characters, which includes the name prefix and the actual group name.	Your VFC integration Group name	Yes, must be modified
VfcSyncedEmployeeGroupName	The name of the user group in WFE which contains all employees synchronized from VFC. Must be unique to an Integrator deployment and across the WFE tenant. Note: WFE group names are limited to 50 characters, which includes the name prefix and the actual group name.	VFC Synced	Yes, can be modified

- The **ParentOrganizationName** parameter must specify the name of the parent organization created earlier in the [VFC to WFE Metadata Integrator deployment process](#).
- The **ParentGroupName** parameter must specify the name of the parent group created earlier in the [VFC to WFE Metadata Integrator deployment process](#).

Related information

[Organizations and groups \(WFE User Management Guide\)](#)

VFC

Parameters to configure that describe VFC-related settings.

Parameter	Description	Default value	Modifiable
Eid	The Environment ID of the VFC environment for which the Integrator is configured (VFC equivalent of a Tenant ID).	0000	Yes, can be modified

MediaRepositoryDbConnectionString	The connection string to access the VFC Database. The minimum required parameters are supplied as default values, separated by semicolons.	Server=...,1433;Initial Catalog=verba;UserId=...;Password=...;Connect Timeout=15;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False	Yes, must be modified
MediaRepositoryServerUrl	The FQDN or NetBIOS name of the Media Repository server to send requests to the VFC.	https://YourVfcMediaRepositoryServer	Yes, must be modified
AdSyncGroupSeparator	The Group Naming Separator used in VFC as part of the synchronization of Active Directory Organizational Units to VFC Groups.	/	Yes, can be modified
SupportedPlatforms	The switch types supported by the Integrator that can be synchronized between VFC and WFE when marking calls and creating data sources. Must not be modified.	avaya-dmcc cisco-network	No
ConfiguredPlatforms	The list of configured switch types that are synchronized between VFC and WFE when marking calls and creating data sources. The Integrator does not run until at least one of the supported switch types is added to ConfiguredPlatforms.	example-platform	Yes, must be modified

- The **Eid** must describe the VFC environment the Integrator is configured for. The default environment ID is 0000, so the parameter only needs to be modified if the environment ID of the VFC environment has been configured to be different.
- The **MediaRepositoryDbConnectionString** is a semicolon-separated string of values that are parsed as the connection details to the VFC database from which the Integrator reads data. The minimum required connection details are supplied as the default value for the MediaRepositoryDbConnectionString parameter, but you must edit this string to fit your deployment requirements.
- The **ADSyncGroupSeparator** must match the **Group Naming - Separator** parameter configured in VFC in the **Organization Units** section of **Active Directory Synchronization, under Administration**.
- The **SupportedPlatforms** parameter is an internal setting for the Integrator and must not be modified.

Related information

[Configuring database connection \(VFC Deployment Guide\)](#)

[Active Directory Synchronization Configuration Reference \(VFC Administration Guide\)](#)

DataMapping

Data source configuration parameters used to create WFE data sources that accurately represent VFC recorded switches.

Parameter	Description	Default value	Modifiable
WfeDatasource	The name of the WFE data source that is to be created. Must be unique across the WFE installation.	YourWfeDatasourceName	Yes, must be modified
VfcServers	The list of the FQDNs or NetBIOS names of VFC recorders whose recorded calls get marked to the configured WFE data source.	Your.Vfc.RecorderServer	Yes, must be modified
VfcPlatform	The VFC Platform ID of the recorded switch platform. Specifies the data source type in WFE. Must be one of the ConfiguredPlatform values.	example-platform	Yes, must be modified
Timezone	The time zone of the VFC recorded switch platform in the IANA time zone format <area> /<location>. This value is set as the time zone of the WFE data source in the GMT offset time zone format when created. Refer to the Configuration Guide for the list of supported time zones.	Europe/London	Yes, must be modified

Extensions	The list of extensions to associate to the WFE data source. Individual extensions, extension ranges, and a combination of both are supported. Individual extensions can be entered as alphanumeric values, while extension ranges must be integers in the format <startExt>-<endExt>. Optional.	Empty	Can be omitted If included, must be modified
------------	---	-------	---

- The data source name defined by **WfeDatasource** must be unique per WFE installation.
- The comma-separated list of VFC recorders defined by **VfcServers** must all be in the same time zone.
- **VfcPlatform** must be one of the values from the ConfiguredPlatforms parameter in the WFE section of the appsettings.Production file.
- There must be at least one data source object configured in this section for each platform specified in the ConfiguredPlatforms setting.
- The **Extensions** parameter can be omitted, in which case all existing extensions are associated with the data source. If included, the parameter is in the format of a comma-separated list of individual extensions or extension ranges. Individual extensions are supported in an alphanumeric format, while extension ranges are supported in the integer range format <startExtension>-<endExtension>. In extension ranges, both the startExtension and endExtension values are included as configured for the data source.
- The **Timezone** value must be specified in the IANA time zone format <area>/<location>. For example, Africa/Windhoek, or America/Los_Angeles.

Only a subset of IANA time zones is supported in WFE. Select a value to use from the following list that represents your required time zone the closest:

IANA time zone	UI value
GMT-12:00	(GMT-12:00) International Date Line West
Pacific/Honolulu	(GMT-10:00) Hawaii
America/Anchorage	(GMT-09:00) Alaska
America/Los_Angeles	(GMT-08:00) Pacific Time (US & Canada)
America/Phoenix	(GMT-07:00) Arizona
America/Denver	(GMT-07:00) Mountain Time (US & Canada)
America/Costa_Rica	(GMT-06:00) Central America
America/Chicago	(GMT-06:00) Central Time (US & Canada)
America/Monterrey	(GMT-06:00) Guadalajara, Mexico City, Monterrey
Canada/Saskatchewan	(GMT-06:00) Canada Central Standard Time
America/Bogota	(GMT-05:00) Bogota, Lima, Quito
America/New_York	(GMT-05:00) Eastern Time (US & Canada)
America/Indianapolis	(GMT-05:00) Indiana (East)
America/Asuncion	(GMT-04:00) Paraguay Standard Time
America/Caracas	(GMT-04:00) Caracas
America/Halifax	(GMT-04:00) Atlantic Time (Canada)
America/Manaus	(GMT-04:00) Manaus
America/La_Paz	(GMT-04:00) La Paz, Guadeloupe
America/Santiago	(GMT-04:00) Santiago

America/St_Johns	(GMT-03:30) Newfoundland
America/Montevideo	(GMT-03:00) Montevideo
America/Sao_Paulo	(GMT-03:00) Brasilia
America/Buenos_Aires	(GMT-03:00) Buenos Aires, Georgetown
America/Godthab	(GMT-03:00) Greenland
Atlantic/South_Georgia	(GMT-02:00) Mid-Atlantic
Atlantic/Azores	(GMT-01:00) Azores
Atlantic/Cape_Verde	(GMT-01:00) Cape Verde Is.
GMT	Greenwich Mean Time
Africa/Casablanca	(GMT) Casablanca
Europe/London	(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London
Europe/Berlin	(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
Europe/Prague	(GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
Europe/Paris	(GMT+01:00) Brussels, Copenhagen, Madrid, Paris
Europe/Sarajevo	(GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb
Africa/Bangui	(GMT+01:00) West Central Africa
Europe/Athens	(GMT+02:00) Athens
Asia/Amman	(GMT+02:00) Amman
Europe/Bucharest	(GMT+02:00) Bucharest
Africa/Cairo	(GMT+02:00) Cairo
Africa/Harare	(GMT+02:00) Harare, Pretoria
Europe/Helsinki	(GMT+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius
Asia/Jerusalem	(GMT+02:00) Jerusalem
Europe/Kaliningrad	(GMT+02:00) Kaliningrad (RTZ 1)
Europe/Istanbul	(GMT+03:00) Istanbul
Asia/Riyadh	(GMT+03:00) Kuwait; Riyadh
Africa/Nairobi	(GMT+03:00) Nairobi
Asia/Baghdad	(GMT+03:00) Baghdad
Europe/Minsk	(GMT+03:00) Minsk
Europe/Moscow	(GMT+03:00) Moscow, St. Petersburg (RTZ 2)
Europe/Volgograd	(GMT+03:00) Volgograd
Asia/Tehran	(GMT+03:30) Tehran
Asia/Yerevan	(GMT+04:00) Yerevan

Asia/Tbilisi	(GMT+04:00) Tbilisi
Asia/Muscat	(GMT+04:00) Abu Dhabi, Muscat
Asia/Baku	(GMT+04:00) Baku
Europe/Samara	(GMT+04:00) Izhevsk, Samara (RTZ 3)
Asia/Kabul	(GMT+04:30) Kabul
Asia/Yekaterinburg	(GMT+05:00) Ekaterinburg (RTZ 4)
Asia/Karachi	(GMT+05:00) Islamabad, Karachi, Tashkent
Asia/Calcutta	(GMT+05:30) Calcutta, Chennai, Mumbai, New Delhi
Asia/Colombo	(GMT+06:00) Sri Jayawardenepura
Asia/Katmandu	(GMT+05:45) Kathmandu
Asia/Omsk	(GMT+06:00) Omsk (RTZ 5)
Asia/Almaty	(GMT+06:00) Almaty, Astana
Asia/Dhaka	(GMT+06:00) Dhaka
Asia/Rangoon	(GMT+06:30) Rangoon
Asia/Tomsk	(GMT+07:00) Tomsk (RTZ 6)
Asia/Novosibirsk	(GMT+07:00) Novosibirsk (RTZ 6)
Asia/Bangkok	(GMT+07:00) Bangkok, Hanoi, Jakarta
Asia/Krasnoyarsk	(GMT+07:00) Krasnoyarsk (RTZ 6)
Asia/Irkutsk	(GMT+08:00) Irkutsk (RTZ 7)
Asia/Shanghai	(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
Asia/Ulan_Bator	(GMT+08:00) Ulaan Bataar
Asia/Singapore	(GMT+08:00) Kuala Lumpur, Singapore
Australia/Perth	(GMT+08:00) Perth
Asia/Taipei	(GMT+08:00) Taipei
Asia/Tokyo	(GMT+09:00) Osaka, Sapporo, Tokyo
Asia/Seoul	(GMT+09:00) Seoul
Asia/Yakutsk	(GMT+09:00) Yakutsk (RTZ 8)
Australia/Adelaide	(GMT+09:30) Adelaide
Australia/Darwin	(GMT+09:30) Darwin
Australia/Brisbane	(GMT+10:00) Brisbane
Australia/Sydney	(GMT+10:00) Canberra, Melbourne, Sydney
Pacific/Guam	(GMT+10:00) Guam, Port Moresby
Australia/Hobart	(GMT+10:00) Hobart

Asia/Vladivostok	(GMT+10:00) Vladivostok, Magadan (RTZ 9)
Asia/Srednekolymsk	(GMT+11:00) Chokurdakh (RTZ 10)
Pacific/Guadalcanal	(GMT+11:00) Solomon Is., New Caledonia
Asia/Anadyr	(GMT+12:00) Anadyr, Petropavlovsk-Kamchatsky (RTZ 11)
Pacific/Auckland	(GMT+12:00) Auckland, Wellington
Pacific/Fiji	(GMT+12:00) Fiji, Kamchatka, Marshall Is.
Pacific/Apia	Pacific/Apia
Pacific/Tongatapu	(GMT+13:00) Nuku'alofa

See [Switches and data sources](#) for more information about the creation of data sources in WFE.

Related information

[IANA Time Zone Database](#)

Secrets

Parameters to configure to authenticate access to the WFE and VFC APIs.

Parameter	Description	Default value	Modifiable
WfeApiKey	The External API Key generated in WFE. Requires the Key ID and Key Value configured.	...	Yes, must be modified
VfcApiUser	The VFC user details for the dedicated API User with the "API Access Only" flag set.	Empty	Yes, must be modified

- The WfeApiKey parameter must specify the Key ID and Key value of the External API Key created earlier in the [VFC to WFE Metadata Integrator deployment process](#).
- The VfcApiUser parameter must specify the user name and password of the API User created earlier in the [VFC to WFE Metadata Integrator deployment process](#).

Related information

[Generate an API key \(WFE Enterprise Configuration and Administration Guide\)](#)

[User Configuration \(VFC Administration Guide\)](#)

Non-compulsory appsettings parameter configuration

There are values in the appsettings.Production file that are internal to the Integrator and have been configured for optimal operation. Most of these values should only be changed with caution.

HighAvailability

Parameters relating to the Integrator resilience.

Parameter	Description	Default value	Modifiable
LockTimeout	The VFC database lock timeout period of this Integrator instance. The timeout starts when the database does not receive a heartbeat signal from the Integrator. When the timeout period elapses, this Integrator loses ownership and other Integrators can claim it.	00:10:00	Modify with caution

Refer to [Resilience](#) to find out more about the usage of the VFC database lock.

Bootstrap

Parameters relating to the dependency verification of the Integrator.

Parameter	Description	Default value	Modifiable
DependencyRecheckIntervalSeconds	The timeout period after all failing dependency readiness checks are retried.	30	Modify with caution

The Integrator depends on several parameters and connections being accurately set up, and runs an internal dependency check service. The status of dependencies is saved, and if a dependency failed during the last check, new verification process runs after the **DependencyRecheckIntervalSeconds** period elapses.

Synchronisation

Parameters relating to the synchronization process carried out by the Integrator.

Parameter	Description	Default value	Modifiable
ResyncStartAtTimeOfDay	The time of day when the next attempt is made to synchronize user, group, recording expectation, and extension data. Ranging from 00:00:00 to 23:59:59 in the hh:mm:ss format. The time is in the time zone of the server on which the Integrator runs.	01:00:00	Yes, can be modified
PermanentErrorRetryDelay	The time delay to retry a synchronization attempt if a persistent error happens that needs human interaction (for example, a configuration problem). Ranging from 00:00:00 to 23:59:59 in the hh:mm:ss format.	00:01:00	Modify with caution
TransientErrorRetryDelay	The time delay to retry a synchronization attempt if a temporary error happens that does not need human interaction (for example, a network outage). Ranging from 00:00:00 to 23:59:59 in the hh:mm:ss format.	00:00:05	Modify with caution

Specify **ResyncStartAtTimeOfDay** based on your system and organizational usage trends. Choose a time in the day when the least network activity takes place to avoid affecting business-critical operations.

CallMarking

Parameters relating to the process of the Integrator marking call data to the WFE environment.

Parameter	Description	Default value	Modifiable
IntervalMs	The delay between batches of calls processed to be marked to WFE in milliseconds.	5000	Modify with caution
ReadBatchSize	The number of calls to be read from the VFC database and marked to be sent to WFE at a given time.	1000	Modify with caution
PostCallDelayInMinutes	The delay between a VFC call being completed and it being considered for call marking to WFE.	1	Modify with caution
VirtualRecorderSerialNo	The Serial Number of the WFE recorder object created to represent the VFC installation from which the Integrator is synchronizing recorded call metadata. The calls marked to WFE are associated with this virtual recorder. Must be unique to a VFC installation. Refer to the Configuration Guide for the format requirements of the parameter.	Empty	Yes, must be modified

WfeApiRootPath	The path address of the WFE Data Marking API.	/api /recording /marking /v1	No
InitialHistoryDays	The earliest point in time that the Integrator marks call data. It is configured as a number of days in the past to mark as the initial watermark for marking calls, and the Integrator does not check for calls before this point in time.	0	Yes, can be modified

Call marking is the process of reading in a call record from the VFC database, evaluating it against the Integrator configuration, and sending it to the WFE database. These parameters define how often calls get marked, and how many call records are processed at a time.



Changing the default values can have significant impact on system performance. Modify these parameters with caution.

- The values of **InternalIMs** and **ReadBatchSize** can be adjusted depending on call volumes.
- The **PostCallDelayInMinutes** starts after the last update is made to the call record in the database. Any of the internal VFC services can update a record, therefore the parameter is specific to system configuration. The value can be adjusted depending on system and network connection speed. Setting the parameter to too large a value can result in calls taking excessively long to be synchronized for use by WFE applications. In cases of high call volumes, this can also cause large batches of data to be processed simultaneously, increasing network traffic. Too short a time value can result in calls being marked repeatedly as VFC internal services update the database record of the call, causing excess load on the system and the network.
- The **VirtualRecorderSerialNo** must specify the Serial Number of the External Server created earlier in the [VFC to WFE Metadata Integrator deployment process](#), and it must be unique to both a VFC and a WFE installation. It must be a 6-digit number in the format XXXYYY, where XXX is a 3-digit unique identifier for the VFC installation, and YYY is a 3-digit unique counter, incrementing for each Integrator.
- **InitialHistoryDays** specifies a number of days before the current time, and the Integrator only marks calls that were made since that point in time. This parameter is only applied on the first run of the Integrator.

See [Recorders and call metadata](#) for more information about call marking.

RecordingExpectation

Parameters relating to the synchronization of extensions.

Parameter	Description	Default value	Modifiable
WfeApiExtensionsChunkSize	The number of VFC extensions to be sent to the WFE API at a given time.	1000	Modify with caution
VfcDbExtensionsBatchSize	The number of VFC extensions to be read from the VFC database at a given time.	1000	Modify with caution

ContactIdCaching

Parameters relating to the processing of contact objects during the call metadata synchronization process.

Parameter	Description	Default value	Modifiable
MaximumCachedEntries	The maximum number of contact objects to be stored in the cache. Default: 200000.	200000	Modify with caution
MaximumSupportedContactStartTimeDifference	Absolute expiration time of the contact cache entries relative to the current time, in the format hh:mm:ss, between 00:00:00 and 12:00:00. Also defines the maximum time difference allowed between the start times of the call sessions under the same contact.	12:00:00	Modify with caution

The unit of measurement for the **MaximumCachedEntries** parameter is number of contact objects. As the concept of contacts describes related call sessions in VFC, contact objects can be different sizes depending on the number and length of related calls, but this setting has no effect on overall system performance.

See [Recorders and call metadata](#) for more information about contacts.

Advanced - ResponseCaching

Parameters relating to the caching of HTTP responses from WFE APIs.

Parameter	Description	Default value	Modifiable
DefaultSoftCacheLifeTime	The time interval after which cached responses from WFE APIs are invalidated if the cache was not used. In the format dd.HH:mm:ss.SSS (where dd and SSS are optional values).	00:10:00	Modify with caution
HardCacheLifeTime	The time interval after which a cached response from a WFE API is always invalidated, no matter what the status of the API is. In the format dd.HH:mm:ss.SSS (where dd and SSS are optional values).	12:00:00	Modify with caution
MaxCacheSize	Maximum number of responses from WFE APIs to HTTP requests to be stored at any given time.	1000	Modify with caution
SoftCacheLifeTimes	The time interval after which a cached response from a specific WFE API is invalidated if the cache was not used. Overwrites the value set in DefaultSoftCacheLifeTime for the specified API. In the format dd.HH:mm:ss.SSS (where dd and SSS are optional values).	"/wfo/api/em /recorder/v2 /datasources": "00:10:00"	Modify with caution

The Integrator caches responses from WFE APIs to some HTTP requests to minimize network communication and load on the APIs. To keep data relevant, cached responses are periodically invalidated, and new queries are sent to the APIs. Some cached responses are only invalidated if they are not queried by the Integrator in a set time period, while others are always invalidated after a time.



These parameters must only be modified with caution to avoid adverse impact on system performance.

Advanced - ArchivedLogsCleanup

Parameters relating to the archiving of log files.


Parameter	Description	Default value	Modifiable
ArchivedFolderName	The path and folder name to store the zipped archived logs. It is relative to the Serilog path parameter configured. If left empty or the parameter is omitted, the archived files are created in the Serilog log folder.	Archived	Yes, can be modified
CompressionLevel	The level of compression. The value is one of the following: NoCompression, Fastest, Optimal, SmallestSize. Default: SmallestSize.	SmallestSize	Modify with caution
KeptArchivesCount	The number of archived log files to keep. Setting to 0 means all archived log files are kept.	30	Modify with caution

- The **ArchivedFolderName** parameter describes where archived log files are saved, relative to the Serilog Logs folder.
- The **CompressionLevel** parameter sets the level of compression to apply to the archiving of a log. Setting the parameter to a low compression setting can impact system performance, so edit with caution.
- The **KeptArchivesCount** parameter specifies how many archived log files can be kept. Specifying the value as 0 keeps all archived log files. Setting the parameter to too high a number can impact system performance, so edit with caution.

Serilog

Parameters describing the Serilog logging configuration.

Parameter	Description	Default value	Modifiable
Using	The log event sinks used.	Serilog.Sinks.Console, Serilog.Sinks.File	Yes, can be modified
MinimumLevel	The minimum log level of the application.	Information	Modify with caution
WriteTo	List of output objects and their corresponding log configuration.		Yes, can be modified
Name	Output type name.		Modify with caution
path	File path and name to write logs to in "File" outputs.	Logs\\log_.log	Modify with caution
rollingInterval	The time interval when Serilog starts writing to a new log file.	Day	Modify with caution
rollOnFileSizeLimit	The file size limit when Serilog starts writing to a new log file.	true	Modify with caution
fileSizeLimitBytes	The maximum size of the active log file, in bytes.	104857600	Modify with caution
retainedFileCountLimit	The maximum number of not archived log files.	1	Modify with caution
hooks	The services which are monitored for logging.	Vfc.Integrator.Service.Logging.SerilogHooks::ArchiveHook, Vfc.Integrator.Service	No
outputTemplate	Defines the format of the log messages.	For Console: [[Timestamp:yyyy-MM-dd HH:mm:ss.fff] {Level:u3} {ThreadId:000}] {SourceContext}) {Scope:l} {Message:j}{NewLine}{Exception} For File: [[Timestamp:yyyy-MM-dd HH:mm:ss.fff] {Level:u3} {ThreadId:000}] {Scope:l} {Message:j}{NewLine}{Exception}	No

 Only increase the log level temporarily when you are doing troubleshooting. Leaving the log level on Debug/Verbose level can have an adverse effect on system performance which could lead to data loss in critical situations.

Troubleshooting

See the [VFC to WFE Metadata Integrator Troubleshooting Guide](#) for more information on investigating and preventing problems.

VFC to WFE Metadata Integrator Troubleshooting Guide

AVAILABLE IN 9.7.7 AND ABOVE

Overview

Troubleshooting information aims to provide resolutions to specific issues that can occur while using or configuring the VFC to WFE Metadata Integrator.

- [Overview](#)
- [Configuration](#)
- [Log files](#)
- [Troubleshooting steps](#)
- [Troubleshooting examples](#)

Configuration

See the [VFC to WFE Metadata Integrator Configuration Guide](#) for more information on the configuration process.


Log files

The VFC to WFE Metadata Integrator offers extensive log configuration functionality, which can be amended to provide more information when troubleshooting.

The Integrator writes its log to the following file:

```
INSTALLDIR/Logs/log_YYYYMMDD.log
```

where INSTALLDIR is the installation directory of the Integrator, and YYYYMMDD represents the current date. The log file path is configured in the Serilog section of the appsettings.Production.json file.

 We recommend you do not change the log file path.


A new log file is created both at set time intervals and when the log file size exceeds the value configured in the appsettings.Production file. The default configuration defines the time interval as every day, and the log file size as 100 MB.

The previous log file gets added to a .tar.gz file. The location where the archived log files are saved can be configured in the Internal section of the appsettings.Production file. By default, they are saved in a folder called Archived that is placed within the Logs folder. By omitting the parameter to configure the archived folder path, the archived log files are placed in the Logs folder, next to the active log file.

You can configure the archived log file compression level and the number of archived log files that are kept. When the maximum number of archived log files is reached, the oldest archive file is removed.

Refer to the [Configuration Guide](#) for more information on logging configuration.

If you require more detailed logging for troubleshooting, you can change the logging settings for the Integrator by editing the appsettings.Production configuration file.

Section	Parameter	Description	Default value
Serilog	MinimumLevel	Log level setting of the application. <div style="border: 1px solid #ccc; padding: 5px; background-color: #fff9c4;">  Only increase the log level temporarily when you are doing troubleshooting. Leaving the log level on Debug/Verbose level can have an adverse effect on system performance which could lead to data loss in critical situations. </div>	Information
Serilog	fileSizeLimitBytes	Maximum size of a log file in bytes. If a file reaches the file size limit, the next log message is written into the next file.	104857600

Related information

[Serilog Configuration Guide](#)

Troubleshooting steps

- Verify that the appsettings.Production.json file has been created.
- Verify that the Log folder and a log file in it have been created.
- Verify that the configured parameters in the WFE, VFC, Secrets, and DataMapping sections of the appsettings.Production.json file are accurate.
- If the appsettings.Production.json file was modified, restart the Integrator service.

Troubleshooting examples

Missing appsettings.Production.json	
Log message	Unhandled exception. System.IO.FileNotFoundException: The configuration file 'appsettings.Production.json' was not found and is not optional. The expected physical path was 'C:\Program Files (x86)\VFC Integrator\appsettings.Production.json'.
Cause	The appsettings.Production.json file is not present in the installation folder of the Integrator.
Solution	The appsettings.Production.json configuration file must be present in the installation folder of the Integrator. Rerun the installation process or add the file to the folder manually.

Invalid JSON in appsettings.Production.json	
Log message	Unhandled exception. System.IO.InvalidDataException: Failed to load configuration from file 'C:\Program Files (x86)\VFC Integrator\appsettings.Production.json'. ---> System.FormatException: Could not parse the JSON file.
Cause	Empty or corrupted appsettings.Production.json file.
Solution	Check the appsettings.Production.json configuration file contains valid configuration details.

Invalid JSON in appsettings.Production.json	
---	--

Log message	Unhandled exception. System.ArgumentNullException: Value cannot be null. (Parameter 'uriString')
Cause	Empty or corrupt appsettings.Production.json file.
Solution	Check the appsettings.Production.json configuration file contains valid configuration details.

Missing VFC API user name	
Log message	Appsettings Config Error: VFC API Username shouldn't be empty
Cause	The VFC API user name value is empty.
Solution	Enter a valid user name in the appsettings.Production file.

Missing VFC API password	
Log message	Appsettings Config Error: VFC API Password shouldn't be empty
Cause	The VFC API password value is empty.
Solution	Enter a valid password in the appsettings.Production file.

Invalid WfeApiKey values	
Log message	System.Net.Http.HttpRequestException: WfeApiKey Id or Value not valid
Cause	The values for WfeApiKey contain invalid data.
Solution	Check the values in the WfeApiKey parameter of the appsettings.Production file match the details of the External API key created for the WFE tenant.

Parent organization does not exist	
Log message	Check if organisation with name 'Your VFC integration Organization name' exists.
Cause	The WFE parent organization configured in the appsettings.Production file does not exist with the name specified in the ParentOrganizationName parameter.
Solution	Create the parent organization or check that the name is correctly configured.

Parent group does not exist	
Log message	The provided parent group 'Your VFC integration Group name' doesn't exist.
Cause	The WFE parent group configured in the appsettings.Production file does not exist with the name specified in the ParentGroupName parameter.
Solution	Create the parent group or check that the name is correctly configured.

Invalid VFC database connection string	
Log message	
Cause	
Solution	

Log message	Can not connect to the VFC database with the configured connection string. Check configuration value of 'Vfc.MediaRepositoryDbConnectionString'
Cause	The VFC database connection string configured in the appsettings.Production file is incorrect.
Solution	Enter valid connection details to the VFC database in the MediaRepositoryDbConnectionString parameter of the appsettings.Production file.

Invalid VFC Media Repository address

Log message	System.Net.Http.HttpRequestException: No such host is known. (yourvfcmediarepositoryserver:443)
Cause	The address to the VFC Media Repository server configured in the appsettings.Production file is incorrect.
Solution	Enter the correct address of the VFC Media Repository server in the MediaRepositoryServerUrl parameter of the appsettings.Production file.

Untrusted root authentication error

Log message	<p>Can't reach the VFC Provisioning API v3 at '/verba/ws-provisioning-3' please check the ConnectionStrings and Secrets configuration values.</p> <p>System.Net.Http.HttpRequestException: The SSL connection could not be established, see inner exception.</p> <p>---> System.Security.Authentication.AuthenticationException: The remote certificate is invalid because of errors in the certificate chain: UntrustedRoot</p>
Cause	The VFC Media Repository server certificate installed on the server running the Integrator is invalid or is missing.
Solution	Ensure that a valid certificate is installed on the server, and that the date and time of the server is correct.