





# [VERBIO CLOUD]

HTTP POST - Function Reference – V. 1.0

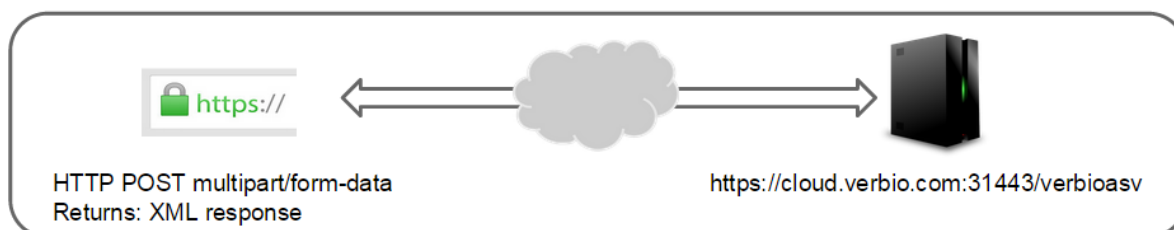
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## Request information

- ❖ **URL:** <https://cloud.verbio.com:31443/verbioasv>



- ❖ HTTPS request that needs **http basic authentication + "asv\_api\_key" parameter** in HTTP POST.
- ❖ Requests to the cloud ASV API must be done via **HTTP POST "multipart/form-data"** request.
- ❖ **POST parameters:**
  - *asv\_command*: ASV function to execute. Possible values are:
    - ✓ **"newuser"**: request a new user ID within the User Database. If success, the system returns the new user ID to be used.
    - ✓ **"addfile"**: add a training file for a specified user ID (got using "newuser" command). It must be run for each audio file recorded by the user within the training session.
    - ✓ **"train"**: creates the voice fingerprint for the specified user ID. It is necessary to previously add training audio files using the "addfile" command.
    - ✓ **"verify"**: get a confidence level about the verification identity of a user ID and a provided audio file with recorded voice.
    - ✓ **"userinfo"**: get user ID information (available training material).
  - See section "Commands" for more information about commands and parameters.
  - *asv\_user*: ASV user ID when performing a "verify", "addfile", "train" or "userinfo" function.
  - *asv\_api\_key*: key code to be able to use ASV from the client side (to be provided by Verbio).
  - *audio*: audio file (16KHz, PCM linear 16bit, mono, raw data). Only needed when performing an "addfile" or "verify" function.
  - *asv\_verify\_prompt* [optional]: prompt shown to the user when executing a verify function (used to check -via ASR- if the user said the prompt sentence). That is, for *liveness detection*, sometimes the sentence to be pronounced is dynamically generated.
  - *"asv\_lang"* [optional]: language identifier depending on the language used by the users.
- ❖ The POST request returns an **xml response**.  
See section "Commands" for more information about XML content.

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## Commands

### *newuser*

---

Request a new user ID within the User Database. If success, the system returns the new user ID to be used

#### Parameters:

“asv\_command”

“asv\_api\_key”

#### Request:

\$ curl -k --user \$USER:\$PASSWORD -include --form asv\_api\_key=\$API\_KEY --form asv\_command="newuser" <https://cloud.verbio.com:31443/verbioasv>

#### Response: (in red, the most important response items for that command)

<asv\_result>

<asv\_user></asv\_user>

<asv\_audio\_file></asv\_audio\_file>

<asv\_command>newuser</asv\_command>

<asv\_prompt></asv\_prompt>


<asv\_retval>**0295**</asv\_retval> // a new user id or -1 on error

<asv\_score>0.0</asv\_score>

<asv\_error>None</asv\_error>

<asv\_log></asv\_log>

</asv\_result>

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## *addfile*

Add a training file for a specified user ID (got using “newuser” command). It must be run for each audio file recorded by the user within the training session.

### Parameters:

“asv\_command”

“asv\_api\_key”

“asv\_user”


“audio” (16KHz, PCM linear 16bit, mono, raw data)

### Request:

```
$ curl -k --user $USER:$PASSWORD -include --form asv_api_key=$API_KEY --form
asv_command="addfile" --form asv_user=user_ID --form audio=@path_to_audio_file
https://cloud.verbio.com:31443/verbioasv
```

### Response: (in red, the most important response items for that command)

```
<asv_result>
  <asv_user>0295</asv_user>
  <asv_audio_file>audio_file.pcm</asv_audio_file>
  <asv_command>addfile</asv_command>
  <asv_prompt></asv_prompt>
  <asv_retval>0</asv_retval> // 0 on success, -1 on error
  <asv_score>0.0</asv_score>
  <asv_error>None</asv_error><asv_log></asv_log>
</asv_result>
```

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## *train*

Create the voice fingerprint for the specified user ID. It is necessary to previously add training audio files using the “addfile” command.

### Parameters:

“asv\_command”

“asv\_api\_key”


“asv\_user”

### Request:

```
$ curl -k --user $USER:$PASSWORD -include --form asv_api_key=$API_KEY --form asv_command="train"
--form asv_user=user_ID https://cloud.verbio.com:31443/verbioasv
```

### Response: (in red, the most important response items for that command)

```
<asv_result>
  <asv_user>0295</asv_user>
  <asv_audio_file></asv_audio_file>
  <asv_command>train</asv_command>
  <asv_prompt></asv_prompt>
  <asv_retval>0</asv_retval> //0 on success, -1 on error
  <asv_score>0.0</asv_score>
  <asv_error>None</asv_error><asv_log></asv_log>
</asv_result>
```

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## verify

Get a confidence level about the verification identity of a user ID and a provided audio file with recorded voice.

### Parameters:

“asv\_command”

“asv\_api\_key”

“asv\_user”


“audio” (16KHz, PCM linear 16bit, mono, raw data)

### Request:

```
$ curl -k --user $USER:$PASSWORD -include --form asv_api_key=$API_KEY --form
asv_command="verify" --form asv_user=user_ID --form audio=@path_to_audio_file
https://cloud.verbio.com:31443/verbioasv
```

### Response: (in red, the most important response items for that command)

```
<asv_result>
  <asv_user>0295</asv_user>
  <asv_audio_file>60044130-9db5-11e4-9868-002590d72a66.pcm</asv_audio_file>
  <asv_command>verify</asv_command>
  <asv_prompt></asv_prompt>
  <asv_retval>1</asv_retval> // 1: user identity verified, 0: user identity not verified, -1: error
  <asv_score>112.17</asv_score> //confidence about the veracity of the voice
  <asv_error>None</asv_error><asv_log></asv_log>
</asv_result>
```

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## *userinfo*

Get user ID information (available training material).

### Parameters:

“asv\_command”

“asv\_api\_key”

“asv\_user”

### Request:

\$ curl -k --user \$USER:\$PASSWORD -include --form asv\_api\_key=\$API\_KEY --form asv\_command="userinfo" --form asv\_user=user\_ID <https://cloud.verbio.com:31443/verbioasv>


**Response:** (in red, the most important response items for that command)

```
<asv_result>
  <asv_user>0295</asv_user>
  <asv_audio_file></asv_audio_file>
  <asv_command>userinfo</asv_command>
  <asv_prompt></asv_prompt>
  <asv_retval>
    <userinfo><asv_nfiles>2</asv_nfiles><asv_files_age>14</asv_files_age><asv_speech_ms>558</asv_speech_ms></userinfo>
  </asv_retval>
  <asv_score>0.0</asv_score>
  <asv_error>None</asv_error><asv_log></asv_log>
</asv_result>
```

Where:

- ❖ **asv\_nfiles**: quantity of audio files provided using the “addfile” method.
- ❖ **asv\_files\_age**: days elapsed from the last uploaded file.
- ❖ **asv\_speech\_ms**: quantity of training audio “time” available, provided using the “addfile” method.



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## Credentials

**USER:** provided by Verbio. Please, contact your sales representative.

**PASSWORD:** provided by Verbio. Please, contact your sales representative.

**API\_KEY:** provided by Verbio. Please, contact your sales representative.