

ODDCAST TTS MODULE REST API

1. HTTP GET/POST API Request

The API supports both GET & POST http requests. The syntax example below describes only the http GET request.

Sample syntax:

```
http://cache.oddcast.com/tts/gen.php?EID=2&LID=1&VID=2&TXT=Test+Message&EXT=mp3&FX_TYPE=p&FX_LEVEL=1&ACC=8879&SESSION=50cdbf7c4e5d117dcb2eff424e10054&CS=ec1e9c6249980c208186bd64ce8ce6e1
```

Note: BOLD parameters are required

Parameters	Description
EID	Engine Id.
LID	Language Id.
VID	Voice Id.
TXT	Text to be used for audio creation (Encoded)
EXT	swf / mp3 /ogg. Default mp3.
FX_TYPE	Sound effect type. Default empty.
FX_LEVEL	Sound effect level. Default empty.
FNAME	Unique file name for the returned file. Note: if filename is not unique the result may be unexpected.
ACC	Account id
SESSION	Used to verify the session (see Session Verification section)
CS	Checksum – implemented as an md5 of all above parameter and secret word

CS = md5 (**EID** + **LID** + **VID** + **TXT** + EXT + FX_TYPE + FX_LEVEL + FNAME + **ACC** + SESSION + **SECRET PHRASE**)

Arguments Explained:

- | | |
|---------|--|
| EID | Required. Integer – Voice Family ID. See languages and voices listed listed in Appendix . |
| LID | Required. Integer – Language ID, as listed in Appendix . |
| VID | Required. Integer – Voice ID, as listed in Appendix . |
| TXT | Required. String - The text to speak. Most languages are limited to 900 characters. The exceptions are Chinese & Japanese which are limited to 225 characters. A longer text string will be truncated. |
| FX_TYPE | Optional. Character. Audio effect – one of: <ul style="list-style-type: none">• “D” – Duration levels: -3, -2, -1, 1, 2, 3• “P” – Pitch levels: -3, -2, -1, 1, 2, 3• “S” – Speed levels: -3, -2, -1, 1, 2, 3 |

- “R” – Robotic:
 - Bullhorn level: 3 (note: levels 1 and 2 are deprecated)
- “T” – Time:
 - Echo level: 1
 - Reverb level: 2
 - Flanger level: 3
 - Phase level: 4
- “W” – Whisper levels: 1, 2, 3

`FX_LEVEL` Optional. Integer. Effect level must be provided if effect is provided.

Return values:

In case of success, mp3, swf or ogg binary stream is returned. If `FNAME` parameter is provided, a file is generated on Oddcast temp storage, and a URL to the file is returned. File will be named per specified parameter. The audio data is single channel (mono), has a 22Khz sample rate and is encoded at a 48Kbps bitrate.

In case of failure – one of the following error codes is returned.

Error Code	Message	Reason
100	No data found in request.	Missing all request parameters.
101	Missing Required Parameter	Missing EID
102	Missing Required Parameter	Missing LID
103	Missing Required Parameter	Missing VID
104	Missing Required Parameter	Missing TXT
105	Missing Required Parameter	Missing ACC
107	Missing Required Parameter	Missing CS
201	Unknown account id	ACC failed the verification lookup
202	Invalid session	SESSION failed the verification lookup
203	Invalid checksum	Checksum failure
204	Authorization failure	Verification lookup failed (General)
205	Inactive account.	Inactive account.
300	General error	General error
301	Too many TTS Requests	Too many TTS Requests
302	TTS Failed	TTS Failed
400	APS Failed	APS Failed

2. Session Certification (optional)

This extra security measure should be considered when the the API is being called from a client where the source code may be exposed (eg. a web browser). To implement Session Certification, a 'Callback URL' on your servers must be specified within your OTM account (contact your Oddcast technical representative to get this done). If you want to to

implement Session Certification, the Callback URL must be implemented on your servers according to the specification below.

If a Callback URL for the account IS NOT setup then this step is ignored and the checksum is to be calculated without the session parameter.

When the Callback URL IS setup, then to ensure that the call to generate TTS is authentic, a request will be verified by following steps.

- Your server must maintain a list of all valid session IDs of current web browser sessions (eg php sessions). The format of the session ID is unimportant, as long as it is current and unique.
- Upon receiving the gen.php request from your client, with a session parameter provided, the Oddcast server will invoke your callback to verify the session is genuine.
- If the request is not confirmed (by your server) as genuine, then an error will be returned.

Notes:

- Once a Callback URL has been setup in your account, all subsequent API requests must provide a valid session ID. The SESSION parameter will henceforth be mandatory.
- The Callback URL will not be called for every TTS request, but will be sampled for each session.

Oddcast server implementation notes (you may skip this part)

- Check the provided session in OTM session reference table. If found and last access was less than an hour ago, process TTS and return.
- If session found in OTM session reference table and creation time is older than one hour - call account configured Callback URL to re-verify the session.
- If provided session is not available in session reference table, make verification call to callback url of the account.

Verification Syntax:

POST request to account callback url.

Parameter	Description
ACC	Account id
SESSION	Provided session id

Return Values	Description
1	SESSION is valid
0	Error – invalid session

3. Example

Following sample page can serve as a test/review environment

<http://cache.oddcast.com/tts/test.php>

Appendix A – Generating the Checksum

To calculate the checksum, concatenate all the parameters in the order they appear in the documentation and add the secret word, which you may set up in your account.

Apply the md5 one way function to the resulting string, to generate the checksum X, and append it to the parameter list as CS=X

The checksum is created in the following way:

```
CS = md5 (EID + LID + VID + TXT + EXT + FX_TYPE + FX_LEVEL + ACC +  
SESSION + SECRET PHRASE)
```

Note:

- TXT value should not be encoded for checksum computation.
- Leading or trailing spaces should be trimmed from the TXT value
- Optional parameters which are not used are to be omitted when computing the checksum.

Appendix B – Checksum Generation PHP Code Snippet:

```
//Set optional value to empty if not given.
```

```
$ext = isset($_POST['EXT']) && in_array(trim(strtolower($_POST['EXT'])),  
array('mp3','swf')) ? trim(strtolower($_POST['EXT'])) : '';
```

```
$fxType = isset($_POST['FX_TYPE']) && strlen($_POST['FX_TYPE']) > 0 ?  
$_POST['FX_TYPE'] : '';
```

```
$fxLevel = isset($_POST['FX_LEVEL']) && strlen($_POST['FX_LEVEL']) > 0 ?  
$_POST['FX_LEVEL'] : '';
```

```
//Construct parameters.
```

```
$get = 'EID='.$_POST['EID']  
      . '&LID='.$_POST['LID']  
      . '&VID='.$_POST['VID']  
      . '&TXT='.urlencode($_POST['TXT'])  
      . '&EXT='.$ext  
      . '&FX_TYPE='.$fxType  
      . '&FX_LEVEL='.$fxLevel  
      . '&ACC='.$_POST['ACC']  
      . '&SESSION='.$_POST['SESSION'];
```

```
//Construct checksum
```

```
$CS = md5($_POST['EID'].$_POST['LID'].$_POST['VID'].$_POST['TXT'].  
$ext.$fxType.$fxLevel.$_POST['ACC'].$_POST['SESSION'].$_POST['SECRET']);
```

```
//Construct full URL
```

```
$url = 'http://cache.oddcast.com/tts/gen.php?' . $get . '&CS=' . $CS;
```

Appendix B: Text to Speech Languages and Voices

The following tables list Voice Family IDs, Language IDs and Voice IDs available for use with the OTM.

Language	ID
Arabic	27
Catalan	5
Chinese	10
Danish	19
Dutch	11
English	1
Esperanto	31
Finnish	23
French	4
Galician	15
German	3
Greek	8
Italian	7
Japanese	12
Korean	13
Norwegian	20
Polish	14
Portuguese	6
Romanian	30
Russian	21
Spanish	2
Swedish	9
Turkish	16

TTS Voice Family: ID = 2

<i>Language</i>	<i>Lang. ID</i>	<i>Voice Name</i>	<i>Voice ID</i>	<i>Gender</i>	<i>Description</i>	<i>Expressive Cues*</i>
English	1	Susan	1	F	US	√
English	1	Dave	2	M	US	√
English	1	Elizabeth	4	F	UK	√
English	1	Simon	5	M	UK	√
English	1	Catherine	6	F	UK	√
English	1	Allison	7	F	US	√
English	1	Steven	8	M	US	√
English	1	Alan	9	M	Australian	√
English	1	Grace	10	F	Australian	√
English	1	Veena	11	F	Indian	√
Spanish	2	Carmen	1	F	Castilian	√
Spanish	2	Juan	2	M	Castilian	√
Spanish	2	Francisca	3	F	Chilean	
Spanish	2	Diego	4	M	Argentine	
Spanish	2	Esperanza	5	F	Mexican	
Spanish	2	Jorge	6	M	Castilian	√
Spanish	2	Carlos	7	M	American	√
Spanish	2	Soledad	8	F	American	√
Spanish	2	Leonor	9	F	Castilian	√
Spanish	2	Ximena	10	F	American	√
German	3	Stefan	2	M		√
German	3	Katrin	3	F		√
French	4	Bernard	2	M	European	√
French	4	Jolie	3	F	European	√
French	4	Florence	4	F	European	√
French	4	Charlotte	5	F	Canadian	√
French	4	Olivier	6	M	Canadian	√
Catalan	5	Montserrat	1	F		√
Catalan	5	Jordi	2	M		√
Catalan	5	Empar	3	F	Valencian	√
Portuguese	6	Amalia	2	F	European	√
Portuguese	6	Eusebio	3	M	European	√
Italian	7	Paola	1	F		√
Italian	7	Silvana	2	F		√
Italian	7	Valentina	3	F		√
Italian	7	Luca	5	M		√
Italian	7	Marcello	6	M		
Italian	7	Roberto	7	M		
Italian	7	Matteo	8	M		√
Italian	7	Giulia	9	F		√
Italian	7	Federica	10	F		√
Greek	8	Afroditi	1	F		√

Greek	8	Nikos	3	M		√
Swedish	9	Annika	1	F		√
Swedish	9	Sven	2	M		√
Chinese	10	Linlin	1	F	Mandarin	
Chinese	10	Lisheng	2	F	Mandarin	
Dutch	11	Willem	1	M		√
Dutch	11	Saskia	2	F		√
Polish	14	Zosia	1	F		√
Polish	14	Krzysztof	2	M		√
Galician	15	Carmela	1	F		√
Turkish	16	Kerem	1	M		√
Turkish	16	Zeynep	2	F		√
Turkish	16	Selin	3	F		√
Danish	19	Frida	1	F		√
Danish	19	Magnus	2	M		√
Norwegian	20	Vilde	1	F		√
Norwegian	20	Henrik	2	M		√
Russian	21	Olga	1	F		√
Russian	21	Dmitri	2	M		√
Finnish	23	Milla	1	F		√
Finnish	23	Marko	2	M		√
Arabic	27	Tarik	1	M		√
Arabic	27	Laila	2	F		√
Romanian	30	Ioana	1	F		√
Esperanto	31	Ludoviko	1	M		√

* *Expressive Cues* are a set of special tags which you may use in your text to specify distinct non-verbal expressions, such as laughing, crying, sighing, coughing, etc. Expressive Cues can be used only with a subset of voices, as indicated above. For a complete list of Expressive Cue tags see separate documentation.

TTS Voice Family: ID = 3

<i>Language</i>	<i>Lang. ID</i>	<i>Voice Name</i>	<i>Voice ID</i>	<i>Gender</i>	<i>Description</i>
English	1	Kate	1	F	US
English	1	Paul	2	M	US
English	1	Julie	3	F	US
English	1	Bridget	4	F	UK
English	1	Hugh	5	M	UK
English	1	Ashley	6	F	US
English	1	James	7	M	US
English	1	Beth	8	F	US
Spanish	2	Violeta	1	F	Mexican
Spanish	2	Francisco	2	M	Mexican
Spanish	2	Gloria	3	F	Mexican

French	4	Chloe	1	F	Canadian
French	4	Leo	2	M	Canadian
Portuguese	6	Helena	1	F	Brazilian
Portuguese	6	Rafael	2	M	Brazilian
Chinese	10	Lily	1	F	Mandarin
Chinese	10	Hui	3	F	Mandarin
Chinese	10	Liang	4	M	Mandarin
Chinese	10	Qiang	5	M	Mandarin
Chinese	10	Kaho	6	M	Cantonese
Chinese	10	Kayan	7	F	Cantonese
Chinese	10	Yafrang	8	F	Taiwanese
Japanese	12	Show	2	M	
Japanese	12	Misaki	3	F	
Korean	13	Yumi	1	F	
Korean	13	Junwoo	2	M	
Thai	26	Sarawut	1	M	
Thai	26	Somsi	2	F	