WordSteps Official API

v 1.2

September 9, 2011

Revision History

Date	Version	Author	Changes Summary
09.09.2011	1.0	Alex Peshkov	Initial draft, words and dicts basic classes and methods.
02.10.2011	1.1	Alex Peshkov	Labels methods description. Removing dictionary overflow error when adding new words to dictionary (since now dictionary is unlimited). Since now words.get() method has additional pagination

			attributes.
09.10.2011	1.1	Alex Peshkov	Dicts.getAllLangs() method description. Removing explicit list of available languages from the doc. New bad credentials error code when performing authorize method.
09.11.2011	1.2	Alex Peshkov	1) Dicts.get() and dicts.create() methods now have lesson_time property instead of lesson_time_ago.
			2) All numerical (int and float) values in JSON output format are now used without quotes (e.g. user_id=19 instead of user_id="19" and for empty values course_id=null instead of course_id="")
			3) New methods: • dicts.getCreated() • dicts.update() • dicts.findAll() • words.updateStatus() • words.updateTrans() • words.translate() • words.getTransLangs()
			4) Courses' methods are implemented: • courses.get() • courses.getDicts()
			5) Methods, which return word/words (words.get(), words.add() etc.) now contain one more new parameter source.
			6) Method words.add() now has 2 additional optional parameters: source and example. Since now it contains examples in response.
			7) Method words.get() now has 2 more values for the extended parameter. It could display examples for the given words.

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Authorization

To authorize your application, you heed to have an application development key which basically consists of 2 parameters: *app_id* and *secret_key*. *app_id* is a public ID of your application, *secret_key* - secret part needed for your app verification so it should be kept in secret place.

To access any API method, you have to verify your app and authorize the user. When done, you will get an *access_token* which is needed to call any API method. This is basically how OAuth 2.0 works. There are 3 ways to request an access token.

Server-side flow (authentication code flow)

NOT IMPLEMENTED

Client-side flow (implicit flow)

NOT IMPLEMENTED

Client credential flow

To get an access_token using user's credentials, make a request:

```
https://api.wordsteps.com/oauth/authorize?
response_type=password&user=USER_NAME&password=USER_PASSWORD&app_id=AP
P_ID&secret_key=SECRET_KEY
```

where:

- USER_NAME WordSteps user name or email
- USER_PASSWORD WordSteps user password
- APP_ID app_id of your application.
- SECRET_KEY secret_key of your application.

You'll get a response in JSON format:

```
{"response":{"access_token":"7891a19b1950a9137f14e69f2a443abf543700086","expi
res_in":86400,"user_id":"19","user_name":"scorp"}}
```

where:

- access_token requested access token
- expires_in access token expiration time in seconds
- user id ID of authorized user
- user_name user name of the user

You can also get a response in XML format. To make this, call authorize.xml method instead of authorize:

```
https://api.wordsteps.com/oauth/authorize.xml?
response_type=password&user=USER_NAME&password=USER_PASSWORD&app_id=AP
P_ID&secret_key=SECRET_KEY
```

The response will be:

```
<response>
  <access_token>7891a19b1950a9137f14e69f2a443abf543700086</access_token>
  <expires_in>86400</expires_in>
  <user_id>19</user_id>
    <user_name>scorp</user_name>
</response>
```

Handling auth errors

When requesting access token, you can get errors which should be properly handled by your

application. There are 2 possible error formats, depending on the format of your request:

JSON format:

```
{"error":{"error code":1,"error msg":"Incorrect login\/password pair."}}
```

XML format:

```
<error>
  <error_code>1</error_code>
  <error_msg>Incorrect login/password pair.</error_msg>
</error>
```

Possible errors:

error code	possible reasons
1	Unknown application; Application was disabled by administrator; Wrong secret key; Unsupported authorization method; Unsupported response type; Not enough params to perform credentials auth;
3	Incorrect login/password pair

Renewing access token

When acces_token is about to expire, you can request a new one to avoid user's authorization. Note that you can get a new acces_token only in case the old one has not been expired. To request a new acces_token, make a request using the old access token value as a parameter:

JSON format:

```
https://api.wordsteps.com/oauth/access_token?
access token=77b1a19b174cf4f482d4e69f3cb2e9ce216130052
```

Response:

```
{"response":{"access_token":"1191a19b1d305a258aa4e69f802aeaaa353430823","expi
res_in":86400,"user_id":"19","user_name":"scorp"}}
```

XML format:

```
https://api.wordsteps.com/oauth/access_token.xml? access token=77b1a19b174cf4f482d4e69f3cb2e9ce216130052
```

Response:

```
<response>
  <access_token>1191a19b1d305a258aa4e69f802aeaaa353430823</access_token>
  <expires_in>86400</expires_in>
  <user_id>19</user_id>
    <user_name>scorp</user_name>
</response>
```

There also could be some errors in common format (see **Handling auth errors** section):

```
{"error":{"error_code":1,"error_msg":"Failed to resolve access token: wrong
access token code.
"}}
```

or the same in XML format.

error code	possible reason
1	Bad params to perform access_token action; Access token is expired; Failed to resolve access token: wrong access token code.

Making API calls

To call the API method, you should make a request:

```
https://api.wordsteps.com/method/METHOD_NAME?
PARAMETERS&access_token=ACCESS_TOKEN
```

where:

- METHOD_NAME name of the API method from the below list
- PARAMETERS parameters for the method
- ACCESS TOKEN value of access token obtained during authorization.

By default, response will be returned in JSON format. For example:

```
https://api.wordsteps.com/method/dicts.get?
user_id=19&learn_lang=en&access_token=5ab1a19b129ebb704484e672dab255e8
579953282
```

To get the result in XML format, you have to add .xml postfix to the name of the method, e.g. METHOD NAME.xml:

```
https://api.wordsteps.com/method/dicts.get.xml?
user_id=19&learn_lang=en&access_token=5abla19b129ebb704484e672dab255e8
```

API methods

Below is the list of all available API methods.

dicts.get

Gets list of all user's dictionaries, containing in his/her profile. If specified user is the same as the authorized one (who requested the access token), all dictionaries are returned. Otherwise only public dictionaries will be returned.

Parameters

name of parameter	is mandatory	description
user_id	1	ID of the user
learn_lang	√	One of the user's learning languages in ISO 639-1 format. Dictionaries of that learning language will be returned. List of available learning languages could be obtained by dicts.getAllLangs() method.
sort		Need to define sorting order of the dictionaries list. One of 4 possible values: add_a add_d les_a les_d add_a - ascending sort dictionaries by addition date (the date when dictionary was created/added to the user's prodile) add_d - descending sort by addition date. les_a - ascending sort by last lesson time for the dictionaries. les_d - descending sort by last lesson time. If not specified, add_d is used by default.
page_number		Number of page with results to return. Default is 1.
limit		The size of the page, e.g. number of dictionaries returned for each page. Default is 30 .

Result

JSON format:

```
{"response":{"total":67,"dicts":[{"dict_id":528,"author_id":20446,
"name":"Trees
(\u0414\u0435\u0445\u0435\u0442\u044f)","learn_lang":"en","trans_lang
```

```
":"ru", "complexity":33, "privacy":1, "size":31, "created":1314647959, "lesson_time":null, "course_id":1}, {"dict_id":529, "author_id":20446, "name":"Flowers (\u0426\u0432\u0445\u0442\u044b)", "learn_lang":"en", "trans_lang":"ru", "comple xity":30, "privacy":1, "size":31, "created":1314647958, "lesson_time":null, "cours e id":1}]}
```

XML format:

```
<response>
 <total>67</total>
 <dicts>
   <dict>
     <dict id>528</dict id>
     <author id>20446</author id>
     <name>Trees (Деревья)</name>
     <learn lang>en</learn lang>
     <trans lang>ru</trans lang>
     <complexity>33</complexity>
     <privacy>1</privacy>
     <size>31</size>
     <created>1314647959</created>
     <lesson time></lesson time>
     <course id>1</course id>
   </dict>
   <dict>
     <dict id>529</dict id>
     <author id>20446</author id>
     <name>Flowers (Цветы)</name>
     <learn_lang>en</learn lang>
     <trans lang>ru</trans lang>
     <complexity>30</complexity>
     <privacy>1</privacy>
     <size>31</size>
     <created>1314647958</created>
     <lesson time></lesson time>
     <course id>1</course id>
   </dict>
 </dicts>
</response>
```

where:

- total total number of dictionaries in the user's profile for the given learning language
- dict id ID of the dictionary
- author id ID of the user who created the dictionary
- name name of the dictionary
- learn lang learning language of the dictionary in ISO 639-1 format
- trans lang translation language of the dictionary in ISO 639-1 format
- complexity complexity from 0 (easy) to 50 (hard)
- privacy privacy option of the dictionary
 - 1 accessible for all users
 - 4 private (accessible only for the creator of the dictionary)
- size number of words in the dictionary
- created time of dictionary creation as a UNIX timestamp.
- lesson time last lesson time as a UNIX timestamp or null in case no lesson has been

passed yet.

 course_id - ID of the course if the dictionary belongs to some course, otherwise null/ empty.

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
101	Invalid language code
102	Invalid user ID

dicts.getCreated

Gets list of dictionaries, created by specified user. If specified user is the same as the authorized one (who requested the access token), all created dictionaries are returned. Otherwise only public dictionaries will be returned.

Parameters

name of parameter	is mandatory	description
user_id	~	ID of the user
learn_lang	~	One of the user's learning languages in ISO 639-1 format. Dictionaries of that learning language will be returned. List of available learning languages could be obtained by dicts.getAllLangs() method.

sort	Need to define sorting order of the dictionaries list. One of 4 possible values: add_a add_d les_a les_d add_a - ascending sort dictionaries by addition date (the date when dictionary was created/added to the user's prodile) add_d - descending sort by addition date. les_a - ascending sort by last lesson time for the dictionaries. les_d - descending sort by last lesson time. If not specified, add_d is used by default.
page_number	Number of page with results to return. Default is 1.
limit	The size of the page, e.g. number of dictionaries returned for each page. Default is 30 .

Result

JSON format:

XML format:

```
<response>
 <total>67</total>
 <dicts>
   <dict>
     <dict id>528</dict id>
     <author id>20446</author id>
     <name>Trees (Деревья)</name>
     <learn lang>en</learn lang>
     <trans lang>ru</trans lang>
     <complexity>33</complexity>
     <privacy>1</privacy>
     <size>31</size>
     <created>1314647959</created>
     <lesson time></lesson time>
     <course id>1</course id>
   </dict>
   <dict>
     <dict id>529</dict id>
     <author id>20446</author id>
     <name>Flowers (Цветы)</name>
     <learn lang>en</learn lang>
     <trans lang>ru</trans lang>
```

- total total number of dictionaries in the user's profile for the given learning language
- dict_id ID of the dictionary
- author id ID of the user who created the dictionary
- name name of the dictionary
- learn_lang learning language of the dictionary in ISO 639-1 format
- trans lang translation language of the dictionary in ISO 639-1 format
- complexity complexity from 0 (easy) to 50 (hard)
- privacy privacy option of the dictionary
 - 1 accessible for all users
 - 4 private (accessible only for the creator of the dictionary)
- size number of words in the dictionary
- created time of dictionary creation as a UNIX timestamp.
- lesson_time last lesson time as a UNIX timestamp or null in case no lesson has been passed yet.
- course_id ID of the course if the dictionary belongs to some course, otherwise null/ empty.

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
101	Invalid language code
102	Invalid user ID

dicts.findAll

Searches for the dictionaries according to the given query. Search operation is performed through the list of *all public dictionaries* containing at least **7** (and more) words, which were created by all the users of the WordSteps service.

Parameters

name of parameter	is mandatory	description
query	√	Search query. It could be any string to match dictionary's name, its words or their translations. Could not be less then 3 characters long. It could also be a number to match dictionary's ID.
learn_lang	√	One of the user's learning languages in ISO 639-1 format. Dictionaries of that learning language will be returned. List of available learning languages could be obtained by dicts.getAllLangs() method.
trans_lang	✓	One of the user's learning languages in ISO 639-1 format. Dictionaries of that learning language will be returned. List of available learning languages could be obtained by dicts.getAllLangs() method.
fuzzy		Defines what kind of search should be performed. Could be of 2 values: • 1 - makes fulltext search for the given query; • 0 - makes search for the dictionaries, which name or ID are equals to the given query. Default is 1.
page_number		Number of page with results to return. Default is 1.
limit		The size of the page, e.g. number of dictionaries returned for each page. Default is 30 .

Result

JSON format:

```
{"response":{"total":2,"dicts":[{"dict_id":724,"author_id":19,"name":"Banking (\u0411\u0430\u043d\u043a\u043e\u0432\u0441\u043a\u043e\u0435\u0435\u0435\u0435\u0435\u0435\u0435\u0435\u0435\u0435\u0435\u0436\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043e\u043
```

XML format:

```
<response>
 <total>2</total>
  <dicts>
   <dict>
     <dict id>724</dict id>
     <author id>19</author id>
     <name>Banking (Банковское дело)</name>
     <learn lang>en</learn lang>
     <trans lang>ru</trans lang>
     <complexity>0</complexity>
     vacy>1
     <size>8</size>
     <created>1308596675</created>
     <lesson time>1321283802</lesson time>
     <course id>4</course id>
   </dict>
   <dict>
     <dict id>720</dict id>
     <author id>19</author id>
     <name>Bank (Банк)</name>
     <learn lang>en</learn lang>
     <trans lang>ru</trans lang>
     <complexity>0</complexity>
     <privacy>1</privacy>
     <size>8</size>
     <created>1308504492</created>
     <lesson time/>
     <course id>5</course id>
   </dict>
  </dicts>
</response>
```

- total total number of found dictionaries
- dict id ID of the dictionary
- author id ID of the user who created the dictionary
- name name of the dictionary
- learn_lang learning language of the dictionary in ISO 639-1 format
- trans_lang translation language of the dictionary in ISO 639-1 format
- complexity complexity from 0 (easy) to 50 (hard)
- privacy privacy option of the dictionary
 - 1 accessible for all users
 - 4 private (accessible only for the creator of the dictionary)
- size number of words in the dictionary
- created time of dictionary creation as a UNIX timestamp.
- lesson_time last lesson time as a UNIX timestamp or null in case no lesson has been passed yet.
- course_id ID of the course if the dictionary belongs to some course, otherwise null/ empty.

error code	description
------------	-------------

1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
101	Invalid language code
116	Search query is too short of empty

dicts.create

Creates new dictionary for the authorized user.

Parameters

name of parameter	is mandatory	description
name	1	Name of new dictionary.
learn_lang	*	Dictionary's learning language in ISO 639-1 format. List of available learning languages could be obtained by dicts.getAllLangs() method.
trans_lang	1	Dictionary's translation language in ISO 639-1 format. List of available learning languages could be obtained by dicts.getAllLangs() method.
privacy		Dictionary's privacy: • 1 - public, available for all users. • 4 - private, available only for creator. Default is 4.

Result

JSON format:

```
{"response":{"dict_id":26838,"author_id":19,"name":"Test1","learn_lang":"en",
"trans_lang":"ru","complexity":0,"privacy":1,"size":0,"created":1315576211,"l
esson_time":null,"course_id":null}}
```

XML format:

```
<response>
  <dict_id>26839</dict_id>
  <author_id>19</author_id>
  <name>Test1</name>
  <learn lang>en</learn lang>
```

```
<trans_lang>ru</trans_lang>
<complexity>0</complexity>
<privacy>1</privacy>
<size>0</size>
<created>1315576253</created>
<lesson_time>null</lesson_time>
<course_id/>
</response>
```

- dict id ID of created dictionary
- author id ID of the user who created the dictionary
- name name of the dictionary
- learn lang learning language of the dictionary in ISO 639-1 format
- trans lang translation language of the dictionary in ISO 639-1 format
- complexity complexity from 0 (easy) to 50 (hard)
- privacy privacy option of the dictionary
- size number of words in the dictionary
- created time of dictionary creation as a UNIX timestamp.
- lesson_time last lesson time as a UNIX timestamp or null in case no lesson has been passed yet.
- course_id ID of the course if the dictionary belongs to some course, otherwise null/ empty.

•

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
101	Invalid language code
104	Invalid dictionary name
105	Invalid privacy

dicts.update

Updates dictionary's parameters.

Parameters

name of parameter is mandatory	description
--------------------------------	-------------

dict_id	✓	ID of the dictionary.
name		New name for the dictionary. If not specified, the name won't be changed.
privacy		New privacy: • 1 - public, available for all users. • 4 - private, available only for creator. If not specified, privacy won't be changed.

Result

JSON format:

```
{"response":{"dict_id":26838,"author_id":19,"name":"New
Name","learn_lang":"en","trans_lang":"ru","complexity":0,"privacy":4,"size":1
7,"created":1315576211,"lesson time":null,"course id":null}}
```

XML format:

```
<response>
  <dict_id>26839</dict_id>
  <author_id>19</author_id>
  <name>New Name</name>
  <learn_lang>en</learn_lang>
    <trans_lang>ru</trans_lang>
    <complexity>0</complexity>
    <privacy>4</privacy>
    <size>17</size>
    <created>1315576253</created>
    <lesson_time>null</lesson_time>
    <course_id/>
</response>
```

where:

- dict_id ID of updated dictionary
- author id ID of the user who created the dictionary
- name new name of the dictionary
- learn lang learning language of the dictionary in ISO 639-1 format
- trans_lang translation language of the dictionary in ISO 639-1 format
- complexity complexity from 0 (easy) to 50 (hard)
- privacy new privacy option of the dictionary
- size number of words in the dictionary
- created time of dictionary creation as a UNIX timestamp.
- lesson_time last lesson time as a UNIX timestamp or null in case no lesson has been passed yet.
- course_id ID of the course if the dictionary belongs to some course, otherwise null/ empty.

error code	description

1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
105	Invalid privacy
106	Access denied

dicts.delete

Deletes dictionary from the user's profile of the authorized user.

Parameters

name of parameter	is mandatory	description
dict_id	✓	ID of the dictionary to delete.

Result

JSON format:

{"response":{"result":1}}

XML format:

<response>
<result>1</result>
</response>

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
103	Invalid dictionary ID

dicts.getAllLangs

Gets all available learning and translation languages for the dictionaries.

Parameters

name of parameter	is mandatory	description
lang		As the response contains names of available languages, this parameter defines the language of these names to be translated to. Parameter should have ISO 639-1 language format. By default languages' names are output in English. List of available values for this parameter is available in Addendum section (Available interface language codes section).

Result

```
{"response":{"langs":[{"code":"ar","pic":"http:\/\/s3.amazonaws.com\/static.wordsteps.com\/pics\/content\/common\/flags\/ar.gif","name":"Arabic"},{"code":"zh","pic":"http:\/\/s3.amazonaws.com\/static.wordsteps.com\/pics\/content\/common\/flags\/zh.gif","name":"Chinese"},{"code":"cs","pic":"http:\/\/s3.amazonaws.com\/static.wordsteps.com\/pics\/content\/common\/flags\/
```

cs.gif", "name": "Czech"}, { "code": "en", "pic": "http:\/\//s3.amazonaws.com\/

static.wordsteps.com\/pics\/content\/common\/flags\/
en.gif","name":"English"},{......}]}}

XML format (lang=ru):

JSON format (lang=en):

</response>

where:

- code ISO 639-1 language code
- pic URL of the flag for the language
- name localized name of the language. The lang parameter of the method is used to set localization language.

words.get

Gets list of words from the given dictionary. Result could be returned in either *simple* or *extended* format and with or without examples. Simple format gives information needed just for displaying words, extended - for displaying and for learning them using spaced-repetition algorithm outside of WordSteps server. Example is a phrase or sentence containing current word.

Parameters

name of parameter	is mandatory	description
dict_id	√	ID of the dictionary.
page_number		Number of page with results to return. Default is 1.
limit		The size of the page, e.g. number of words returned for each page. Default is 50 .
extended		Two possible numeric values:

Result

JSON format (extended=0):

```
{"response":{"words":[{"word_id":2594,"word":"apple","translation":"\u044f\u0
431\u043b\u043e\u043a\u043e","transcription":"[\u00e6pl]","sound":"\/snd\/
apple.mp3","status":1,"progress":0,"source":null
},{"word_id":2595,"word":"apricot","translation":"\u0430\u0431\u0440\u0438\u043a\u043a\u0442","transcription":"['eiprik\u0254t]","sound":"\/snd\/
apricot.mp3","status":1,"progress":0},{"word_id":3426,"word":"avoca
do","translation":"\u0430\u0432\u043e\u043a\u0430\u0434\u043e","tra
nscription":"[,\u00e6v\u0259u'k\u0251:d\u0259u]","sound":"\/snd\/
avocado.mp3","status":1,"progress":0,"source":"readme.txt"}]}}
```

JSON format (extended=1):

```
{"response":{"words":[{"word id":2594,"word":"apple","translation":"\u044f\u0
431\u043b\u043e\u043a\u043e","transcription":"[\u00e6pl]","sound":"\/snd\/
apple.mp3", "status":1, "progress":0, "source": "readme.txt", "ease factor":2.5, "p
rev ease factor":0, "next interval":0, "prev interval":0, "lesson number":0, "suc
c yes count":0, "yes count":0, "no count":0, "next lesson time":null, "last lesso
n time":null, "first lesson time":null, "last change time":1318173615}, {......
...}]}}
JSON format (extended=2):
{"response":{"words":[{"word id":2594,"word":"apple","translation":"\u044f
\u0431\u043b\u043e\u043a\u043e","transcription":"[\u00e6pl]","sound":"\/
snd\/apple.mp3", "status":1, "progress":0, "source":null, "examples":["The
rotten apple injures its
neighbours."]}, {"word id":2595, "word": "apricot", "translation": "\u0430\
u0431\u0440\u0438\u043a\u043e\u0441","transcription":"[ 'eiprik\u0254t
]","sound":"\/snd\/
apricot.mp3", "status":1, "progress":0, "source":null, "examples":null}, {......
..}]}}
JSON format (extended=3):
{"response":{"words":[{"word id":2594,"word":"apple","translation":"\u044f\u0
431\u043b\u043e\u043a\u043e","transcription":"[\u00e6pl]","sound":"\/snd\/
apple.mp3", "status":1, "progress":0, "source":null, "ease factor":2.5, "prev ease
factor":0, "next interval":0, "prev interval":0, "lesson number":0, "succ yes co
unt":0, "yes count":0, "no count":0, "next lesson time":null, "last lesson time":
null, "first lesson time":null, "last change time":null, "examples": ["The rotten
apple injures its neighbours."]},{......}]}}
XML format (extended=0):
<response>
 <words>
   <word>
     <word id>2594</word id>
     <word>apple</word>
     <translation>яблоко</translation>
     <transcription>[ æpl ]</transcription>
     <sound>/snd/apple.mp3</sound>
     <status>1</status>
     oqress>0
     <source>readme.txt</source>
   </word>
   </words>
</response>
XML format (extended=1):
<response>
 <words>
   <word>
     <word id>2594</word id>
     <word>apple</word>
```

```
<translation>яблоко</translation>
     <transcription>[ æpl ]</transcription>
     <sound>/snd/apple.mp3</sound>
     <status>1</status>
     opress>0
     <source>readme.txt</source>
     <ease factor>2.5/ease factor>
     <prev ease factor>0</prev ease factor>
     <next interval>0</next interval>
     <prev interval>0</prev interval>
     <lesson number>0</lesson number>
     <succ yes count>0</succ yes count>
     <yes count>0</yes count>
     <no count>0</no count>
     <next lesson time/>
     <last lesson time/>
     <first lesson time/>
     <last change time>1318173615/last change time>
   </word>
   </words>
</response>
XML format (extended=2):
<response>
 <words>
   <word>
     <word id>2594</word id>
     <word>apple</word>
     <translation>яблоко</translation>
     <transcription>[ æpl ]</transcription>
     <sound>/snd/apple.mp3</sound>
     <status>1</status>
     cprogress>0</progress>
     <source/>
     <examples>
      <example>The rotten apple injures its neighbours.</example>
     </examples>
   </word>
   <word>
     <word id>2595</word id>
     <word>apricot</word>
     <translation>абрикос</translation>
     <transcription>[ 'eiprikot ]</transcription>
     <sound>/snd/apricot.mp3</sound>
     <status>1</status>
     oqress>0
     <source/>
     <examples/>
   </word>
</words>
</response>
XML format (extended=3):
<response>
 <words>
```

```
<word>
     <word id>2594</word id>
     <word>apple</word>
     <translation>яблоко</translation>
     <transcription>[ æpl ]</transcription>
     <sound>/snd/apple.mp3</sound>
     <status>1</status>
     cprogress>0
     <source/>
     <ease factor>2.5/ease factor>
    <prev ease factor>0</prev ease factor>
     <next interval>0</next interval>
     <prev interval>0</prev interval>
     <lesson number>0</lesson number>
     <succ yes count>0</succ yes count>
     <yes count>0</yes count>
     <no count>0</no count>
     <next lesson time/>
     <last lesson time/>
    <first lesson time/>
     <last change time/>
     <examples>
      <example>The rotten apple injures its neighbours.</example>
    </examples>
   </word>
   </words>
</response>
```

- word_id ID of the word
- word- word value
- translation translation value
- transcription transcription value of empty string
- sound URL to the sound file containing pronunciation of the word
- status learning status of the word:
 - 1 "learn", word is currently under learning
 - 3 "learned", word has been learned, not participated in the learning process any more
 - 4 "postpone", postponed word
- progress learning progress of the word in percents (from 0 to 100).
- source web-site, file name or other name of source where this word was obtained from.
 If the value is not set then the parameter is null/empty.
- examples set of phrases or sentences where the word is used in
- other params needed for implementation of the learning process outside of the WordSteps server.

error code	description
------------	-------------

1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
103	Invalid dictionary ID
106	Access denied

words.add

Adds new word to the given dictionary.

Parameters

name of parameter	is mandatory	description
dict_id	1	ID of the dictionary.
word	1	Word to add to the dictionary.
trans	1	Translation of the word.
source		The name of source where the word was obtained from (e.g. website URL, file name etc). Maximum size is 256 characters.
example		Phrase or sentence which contains the given word. It could be the context of the word, where the word was met or some other example. Maximum size is 512 characters.

Result

JSON format:

```
{"response":{"word":{"word_id":6250,"word":"tree","translation":"\
u0434\u0435\u0440\u0435\u0432\u043e","transcription":"[ tri:
]","sound":"https:\/\/s3.amazonaws.com\/static.wordsteps.com\/snd\/
https:\/\/s3.amazonaws.com\/static.wordsteps.com\/snd\/en\/ws\/t\/r\/
tree.mp3","status":1,"progress":0,"source":"readme.txt","examples":["The rotten apple injures its neighbours."]}}
```

XML format:

```
<transcription>[ tri: ]</transcription>
<sound>
    https://s3.amazonaws.com/static.wordsteps.com/snd/https://
    s3.amazonaws.com/static.wordsteps.com/snd/en/ws/t/r/tree.mp3
</sound>
<status>1</status>
<progress>0</progress>
<source>readme.txt</source>
<examples>
    <example>The rotten apple injures its neighbours.</example>
</examples>
</word>
</response>
```

- word id ID of the word
- word word value
- translation translation value
- transcription transcription value of empty string
- sound URL to the sound file containing pronunciation of the word
- status learning status of the word:
 - 1 "learn", word is currently under learning
 - 3 "learned", word has been learned, not participated in the learning process any more
 - 4 "postpone", postponed word
- progress learning progress of the word in percents (from 0 to 100)
- source web-site, file name or other name of source where this word was obtained from.
 If the value is not set then the parameter is null/empty
- examples set of phrases or sentences where the word is used in.

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
103	Invalid dictionary ID
106	Access denied
108	Invalid word
109	Invalid translation

words.updateStatus

Updates the status of the word in the dictionary.

Parameters

name of parameter	is mandatory	description
dict_id	✓	ID of the dictionary.
word_id	✓	ID of the word to update.
status	1	New status for the word: • 1 - "learn", word is currently under learning • 3 - "learned", word has been learned, not participated in the learning process any more • 4 - "postpone", postponed word

Result

JSON format:

```
{"response":{"word":{"word_id":6250,"word":"tree","translation":"\
u0434\u0435\u0445\u0435\u0432\u043e","transcription":"[ tri:
]","sound":"https:\/\/s3.amazonaws.com\/static.wordsteps.com\/snd\/
https:\/\/s3.amazonaws.com\/static.wordsteps.com\/snd\/en\/ws\/t\/r\/
tree.mp3","status":4,"progress":0,"source":"readme.txt"}}}
```

XML format:

where:

- word id ID of the word
- word word value
- translation translation value
- transcription transcription value of empty string

- sound URL to the sound file containing pronunciation of the word
- status new learning status of the word:
 - 1 "learn", word is currently under learning
 - 3 "learned", word has been learned, not participated in the learning process any more
 - 4 "postpone", postponed word
- progress learning progress of the word in percents (from 0 to 100)
- source web-site, file name or other name of source where this word was obtained from. If the value is not set then the parameter is **null**/empty.

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
103	Invalid dictionary ID
106	Access denied
110	Invalid word ID
114	Invalid status

words.updateTrans

Updates translation of the word in the dictionary.

Parameters

name of parameter	is mandatory	description
dict_id	1	ID of the dictionary.
word_id	1	ID of the word to update.
trans	1	New translation for the word.

Result

JSON format:

```
]","sound":"https:\/\/s3.amazonaws.com\/static.wordsteps.com\/snd\/
https:\/\/s3.amazonaws.com\/static.wordsteps.com\/snd\/en\/ws\/t\/r\/
tree.mp3","status":4,"progress":0,"source":"readme.txt"}}}
```

XML format:

where:

- word id ID of the word
- word word value
- translation new translation value
- transcription transcription value of empty string
- sound URL to the sound file containing pronunciation of the word
- status learning status of the word:
 - 1 "learn", word is currently under learning
 - 3 "learned", word has been learned, not participated in the learning process any more
 - 4 "postpone", postponed word
- progress learning progress of the word in percents (from 0 to 100)
- source web-site, file name or other name of source where this word was obtained from. If the value is not set then the parameter is **null**/empty.

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
103	Invalid dictionary ID

106	Access denied
109	Invalid translation
110	Invalid word ID

words.delete

Deletes words from the dictionary. Note that user could delete only his/her own words from the dictionary. If current dictionary is created by another user, the error response will be returned when trying to delete the words from this dictionary.

Parameters

name of parameter	is mandatory	description
dict_id	1	ID of the dictionary.
words_ids	1	Comma-separated list of words IDs to delete.

Result

JSON format:

{"response":{"result":1}}

XML format:

<response>
<result>1</result>
</response>

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
103	Invalid dictionary ID
106	Access denied

110	Invalid words IDs
-----	-------------------

words.translate

Translates word of phrase from one specified language to another.

Parameters

name of parameter	is mandatory	description
src_lang	1	Source language of the word (or phrase) in ISO 639-1 format. List of supported languages could be obtained by words.getTransLangs() method.
trans_lang	1	Target language of the specified word in ISO 639-1 format. List of supported languages could be obtained by words.getTransLangs() method.
word	1	Word or phrase to translate.

Result

JSON format:

```
{"response":{"translations":[{"text":"\u0434\u0435\u0443\u0435\u0432\u043e"}]
}}
```

XML format:

where:

• text - translation of the given word.

error code	description
------------	-------------

1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
101	Invalid source or translation language
108	Invalid word
115	Translation service is not available.

words.getTransLangs

Gets all available source and translation languages which could be used for translation of words and phrases via words.translate() method. Note that the set of source languages is the same as the set of translation languages.

Parameters

name of parameter	is mandatory	description
lang		As the response contains names of available languages, this parameter defines the language of these names to be translated to. Parameter should have ISO 639-1 language format. By default languages' names are output in English. List of available values for this parameter is available in Addendum section (Available interface language codes section).

Result

JSON format (lang=en):

```
{"response":{"langs":[{"code":"ar","pic":"http:\/\/s3.amazonaws.com\/
static.wordsteps.com\/pics\/content\/common\/flags\/
ar.gif","name":"Arabic"},{"code":"zh","pic":"http:\/\/s3.amazonaws.com\/
static.wordsteps.com\/pics\/content\/common\/flags\/
zh.gif","name":"Chinese"},{"code":"cs","pic":"http:\/\/s3.amazonaws.com\/
static.wordsteps.com\/pics\/content\/common\/flags\/
cs.gif","name":"Czech"},{"code":"en","pic":"http:\/\/s3.amazonaws.com\/
static.wordsteps.com\/pics\/content\/common\/flags\/
en.gif","name":"English"},{........}]}}
```

XML format (lang=ru):

```
<response>
 <langs>
   <lang>
    <code>en</code>
    <pic>http://s3.amazonaws.com/static.wordsteps.com/pics/content/common/
    flags/en.gif</pic>
    <name>aнглийский</name>
   </lang>
   <lang>
    <code>ar</code>
    <pic>http://s3.amazonaws.com/static.wordsteps.com/pics/content/common/
    flags/ar.gif</pic>
    <name>apaбский</name>
   </lang>
   </langs>
</response>
```

- code ISO 639-1 language code
- pic URL of the flag for the language
- name localized name of the language. The lang parameter of the method is used to set localization language.

labels.get

Gets list of dictionaries' labels for the given user.

Parameters

name of parameter	is mandatory	description
user_id	✓	ID of the user.

Result

JSON format:

```
{"response":{"labels":[{label_id:108,"user_id":19,"name":"spectrum","creation _time":1316603495,"order_number":1316603493},{"label_id":110,"user_id":19,"name":"1 course","creation_time":1317243429,"order_number":1316603491}]}}
```

XML format:

- label_id ID of the label
- user id ID of the owner of the label
- name name of the label
- creation_time time of creation of the label as a UNIX timestamp
- order number displaying order number of the label

•

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
102	Invalid user ID

labels.getForDicts

Gets list of labels applied for the given dictionaries in the user's profile.

Parameters

name of parameter	is mandatory	description
dicts_ids	✓	Comma-separated list of dictionaries' IDs.

Result

JSON format:

```
{"response":{"labels":[{"label_id":108,"user_id":19,"name":"spectrum","creation_time":1316603495,"order_number":1316603493},{"label_id":110,"user_id":19,"name":"1 course","creation time":1317243429,"order number":1316603491}]}}
```

XML format:

```
<response>
<labels>
<label>
```

- label_id ID of the label
- user id ID of the owner of the label
- name name of the label
- creation_time time of creation of the label as a UNIX timestamp
- order_number displaying order number of the label

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
103	Invalid dictionary ID

labels.create

Creates new dictionary label with the given name.

Parameters

name of parameter	is mandatory	description
name	1	Label name

Result

JSON format:

{"response":{"label":{"label_id":122,"user_id":19,"name":"new_label","creatio

```
n time":1317577139,"order number":1317577139}}}
```

XML format:

```
<response>
  <label>
    <label_id>121</label_id>
    <user_id>19</user_id>
    <name>new_label</name>
     <creation_time>1317577085</creation_time>
     <order_number>1317577085</order_number>
     </label>
</response>
```

where:

- label id ID of the label
- user_id ID of the owner of the label
- name name of the label
- creation_time time of creation of the label as a UNIX timestamp
- order_number displaying order number of the label

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
111	Invalid label name
112	Label with this name already exists

labels.update

Updates label's name.

Parameters

name of parameter	is mandatory	description
label_id	1	ID of the label to update
name	1	New label name

Result

JSON format:

```
{"response":{"label":{"label_id":116,"user_id":19,"name":"new_name","creation _time":1317566012,"order_number":1316603492}}}
```

XML format:

```
<response>
  <label>
    <label_id>116</label_id>
    <user_id>19</user_id>
    <name>new_name</name>
    <creation_time>1317566012</creation_time>
    <order_number>1316603492</order_number>
  </label>
</response>
```

where:

- label_id ID of the label
- user_id ID of the owner of the label
- name new name of the label
- creation_time time of creation of the label as a UNIX timestamp
- order number displaying order number of the label

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
106	Access denied
111	Invalid label name
112	Label with this name already exists
113	Invalid label ID

labels.move

Places label after the label with specified ID (*before_label_id*). If *before_label_id* is not set then label will be placed to the top of the user's labels list.

Parameters

name of parameter	is mandatory	description
label_id	1	ID of the label to move
before_label_id		ID of the label after which the target one should be placed.

Result

JSON format:

{"response":{"result":1}}

XML format:

<response>
<result>1</result>
</response>

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
106	Access denied
113	Invalid label ID

labels.apply

Applies labels to the given dictionaries. Note that before applying a new set of labels, all the labels, previously applied to these dictionaries, will be removed from them. And if no labels are specified, then method just removed all the old labels from the dictionaries.

Parameters

name of parameter	is mandatory	description
dicts_ids	1	Comma-separated dictionaries' IDs
labels_ids		Comma-separated labels' IDs

Result

JSON format:

{"response":{"result":1}}

XML format:

<response>

<result>1</result>

</response>

Error codes

error code	description
1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
103	Invalid dictionaries IDs

labels.delete

Deletes label from the user's profile. This method just removes the label and do nothing with dictionaries which were applied to the given label.

Parameters

name of parameter	is mandatory	description
label_id	~	ID of the label

Result

JSON format:

{"response":{"result":1}}

XML format:

<response>

<result>1</result>

</response>

error code	description
	•

1	Access token is expired; IP address was changed; Wrong access token code
2	Invalid method signature; Invalid method parameters;
100	System error
106	Access denied
113	Invalid label ID

courses.get

Gets list of courses available for the given user. Course is a set of dictionaries representing specific area of application (i.e. "Travelling", "Business" etc.).

Parameters

name of parameter	is mandatory	description
lang		As the response contains names of courses, this parameter defines the language of these names to be translated to. Parameter should have ISO 639-1 language format. By default languages' names are output in English. List of available values for this parameter is available in Addendum section (Available interface language codes section).

Result

JSON format:

```
{"response":{"courses":[{"course_id":1,"name":"\u0410\u043a\u0442\u0438\u0432\u043d\u044b\u0439\u043b\u043e\u0432\u0430\u0440\u043d\u044b\u0439\u0431\u043d\u043d\u044b\u0439\u0431\u043d\u043d\u044b\u0430\u043d\u044c","pic":"\/pics\/content\/sell\/slider\/s_active_voc_cover.jpg","duration":347,"learn_langs":["en"],"trans_langs":["ru","es","it","fr","de","pt","zh","ja","en"]}]}}
```

```
<name>Активный Словарный Запас на Каждый День</name>
     <pic>/pics/content/sell/slider/s active voc cover.jpg</pic>
     <duration>347</duration>
     <learn langs>
       <learn lang>en</learn lang>
     </learn langs>
     <trans langs>
      <trans lang>ru</trans lang>
      <trans lang>es</trans lang>
      <trans lang>it</trans lang>
      <trans lang>fr</trans lang>
      <trans lang>de</trans lang>
      <trans lang>pt</trans lang>
      <trans lang>zh</trans lang>
      <trans lang>ja</trans lang>
      <trans lang>en</trans lang>
     </trans langs>
   </course>
   <course>
     <course id>8</course id>
     <name>Mинилекс и Минифраз Гуннемарка</name>
     <pic>/pics/content/sell/slider/s minilex english.jpg</pic>
     <duration>347</duration>
     <learn langs>
      <learn lang>en</learn lang>
     </learn langs>
     <trans langs>
       <trans lang>ru</trans lang>
     </trans langs>
   </course>
  </courses>
</response>
```

- course id ID of the course
- name name of the course
- pic course's cover picture URL
- duration number of days left till the course expiration for the given user
- learn_langs set of languages in ISO 639-1 format to learn by the course. Each course
 could be for learning more then 1 language. This method returns the languages,
 available for the given user. Defines a set of learning languages of dictionaries,
 containing in the course.
- trans_langs all available translation languages of the course in ISO 639-1 format. Defines a set of translation languages of dictionaries, containing in the course.

error code	description
	Access token is expired; IP address was changed; Wrong access token code

2	Invalid method signature; Invalid method parameters;
100	System error

courses.getDicts

Gets list of dictionaries, containing in the course.

Parameters

name of parameter	is mandatory	description
course_id	1	ID of the course
learn_lang	1	Learning language of the course in ISO 639-1 format. Defines the learning language of dictionaries to return. List of available learning languages of the course could be obtained by courses.get() method.
trans_lang	1	Translation language of the course in ISO 639-1 format. Defines the translation language of dictionaries to return. List of available learning languages of the course could be obtained by courses.get() method.

Result

JSON format:

```
{"response":{"total":"30", "dicts":[{"dict_id":587, "author_id":19,"
name":"Fruits
    (\u0424\u0440\u0443\u0443\u0442\u044b)", "learn_lang":"en", "trans_lang":"
ru", "complexity":0, "privacy":1, "size":40, "created":1275138523, "lesson_ti
me":null, "course_id":1}, {"dict_id":588, "author_id":19, "name":"Vegetables
    (\u041e\u0432\u0443e\u0449\u0438)", "learn_lang":"en", "trans_lang":"ru"
,"complexity":0, "privacy":1, "size":45, "created":1275138523, "lesson_t
ime":null, "course_id":1}, {"dict_id":589, "author_id":22, "name":"Trees
    (\u0414\u0435\u0445\u0445\u04432\u044c\u044f)", "learn_lang":"en", "trans_lang":
"ru", "complexity":0, "privacy":1, "size":37, "created":1275138523, "lesson_time":
null, "course_id":1}]}}
```

XML format:

```
<author id>19</author id>
     <name>Fruits (Фрукты) </name>
     <learn lang>en</learn lang>
     <trans lang>ru</trans lang>
     <complexity>0</complexity>
     <privacy>1</privacy>
     <size>40</size>
     <created>1275138523</created>
     <lesson time/>
     <course id>1</course id>
   </dict>
   <dict>
     <dict id>588</dict id>
     <author id>19</author id>
     <name>Vegetables (Овощи)</name>
     <learn lang>en</learn lang>
     <trans lang>ru</trans lang>
    <complexity>0</complexity>
     <privacy>1</privacy>
     <size>45</size>
     <created>1275138523</created>
     <lesson time/>
     <course id>1</course id>
   </dict>
  </dicts>
</response>
```

- total total number of dictionaries in the course
- dict id ID of the dictionary
- author_id ID of the course owner
- name name of the dictionary
- learn lang learning language of the dictionary in ISO 639-1 format
- trans lang translation language of the dictionary in ISO 639-1 format
- complexity complexity from 0 (easy) to 50 (hard)
- privacy privacy option of the dictionary
 - 1 accessible for all users
 - 4 private (accessible only for the creator of the dictionary)
- size number of words in the dictionary
- created time of dictionary creation as a UNIX timestamp.
- lesson_time last lesson time as a UNIX timestamp or null in case no lesson has been passed yet.
- course id ID of the course.

error code	description
1	Access token is expired; IP address was changed; Wrong access token code

2	Invalid method signature; Invalid method parameters;
100	System error
101	Invalid language code
106	Course is not accessible
117	Invalid course ID

Addendum

List of available interface languages ISO 639-1 codes • IN English • IN Es Spanish • IN Russian • IT Italian • IN Japanese

- JA Japanese