

TalentLMS

Cloud based, Lean and Complete LMS with an emphasis on Usability and easy Course creation

TalentLMS API Documentation

Version 1.0

www.talentlms.com

In a nutshell

The TalentLMS API is organized around Representational State Transfer ([REST](#)). Our API is designed to use built-in HTTP features, like HTTP authentication and HTTP response codes. Regarding the responses, JSON is returned in all responses from the API, including errors.

If your TalentLMS domain is called “*samples*”, then the API endpoint for your domain is: **<https://samples.talentlms.com/api>**

Version 1.0 of the API consumes data – information about users, courses, categories, groups, branches and general details about your domain. Apart from that, via the API you can login/signup a user in your domain and enroll a user to a course. The summary of resource URL patterns is:

- /v1/users
- /v1/users/id: {userID}
- /v1/courses
- /v1/courses/id: {courseID}
- /v1/categories
- /v1/categories/id: {categoryID}
- /v1/groups
- /v1/groups/id: {groupID}
- /v1/branches
- /v1/branches/id: {branchID}
- /v1/siteinfo
- /v1/userlogin
- /v1/usersignup
- /v1/addusertocourse

Only super administrators are able to activate API support and get the API key.

Authentication

You authenticate to the TalentLMS API by providing the API key in the request. You can manage your API key from your super-admin account (Account & Settings → Basic settings). Be sure to keep your API key secret, as it is the main resource to authenticate to the API.

To use your API key, a call to *TalentLMS::setApiKey()* is needed only once. The PHP library stores the key and sends it in each request. After setting the API key, you need to specify your domain, by calling *TalentLMS::setDomain()*¹.

¹ See a complete example at the end of this document, describing the basic usage of the PHP library.

Errors

TalentLMS API uses HTTP response codes to indicate success or failure of requests. Specifically, codes in the 2xx range indicate success, codes in the 4xx range indicate an error that resulted from the provided arguments (e.g. instead of an integer a string is supplied) and 500 error code indicate an internal TalentLMS error.

All errors return JSON consisting of a type (`invalid_request_error` or `api_error`) and a message describing the error.

Response codes summary

Code	Description
200	Request executed properly
400	A required parameter is missing or an invalid type (e.g. a string) was supplied instead of an integer
401	Invalid API key provided
403	API is not enabled for the specified domain or the domain is currently inactive
404	The requested resource (e.g. user) does not exist
500	Internal server error

Users

You can retrieve individual users as well as a list of all your users. To retrieve a specific user you need to call *TalentLMS_User::retrieve({userID})* where *{userID}* is the unique identifier describing the requested user. To retrieve all your users you need to call *TalentLMS_User::all()*.

Retrieving a user – Example response

```
{
  "id":"1",
  "login":"dummy",
  "first_name":"Dummy",
  "last_name":"Dummy",
  "email":"dummy@gmail.com",
  "user_type":"SuperAdmin",
  "language":"english",
  "timezone":"(GMT +02:00) Athens, Istanbul, Minsk",
  "status":"active",
  "created_on":"17/07/2012, 15:29:25",
  "avatar":"example.talentlms.com/pages/images/unknown_users.png",
  "bio":null,
  "login_key":"http://example.talentlms.com/index/autologin/key:x5p5ghehpnv56w85i3ey",
  "courses":[{"id":"1",
    "name":"Social media",
    "role":"instructor",
    "enrolled_on":"17/07/2012, 15:29:25",
    "completed_on":""},
    {"id":"12",
    "name":"Intro to TalentLMS",
    "role":"instructor",
    "enrolled_on":"17/07/2012, 15:29:25",
    "completed_on":""},
    {"id":"19",
    "name":"Money as debt",
    "role":"instructor",
    "enrolled_on":"17/07/2012, 15:29:25",
    "completed_on":""}],
  "branches":[{"id":"1",
    "name":"mybranch"}],
  "groups":[{"id":"1",
    "name":"My group"}]
}
```

Retrieving all users – Example response

```
{
  "id": "1",
  "login": "dummy",
  "first_name": "Dummy",
  "last_name": "Dummy",
  "email": "dummy@gmail.com",
  "user_type": "SuperAdmin",
  "language": "english",
  "timezone": "(GMT +02:00) Athens, Istanbul, Minsk",
  "status": "active",
  "created_on": "17/07/2012, 15:29:25",
  "avatar": "example.talentlms.com/pages/images/unknown_users.png",
  "bio": null,
  "login_key": "http://example.talentlms.com/index/autologin/key:x5p5ghehpnv56w85i3ey",
  "id": "2",
  "login": "dummy2",
  "first_name": "Dummy2",
  "last_name": "Dummy2",
  "email": "dummy2@gmail.com",
  "user_type": "Admin-Type",
  "language": "english",
  "timezone": "(GMT 00:00) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London",
  "status": "active",
  "created_on": "03/08/2012, 15:29:14",
  "avatar": "example.talentlms.com/pages/images/unknown_users.png",
  "bio": "My short bio",
  "login_key": "http://example.talentlms.com/index/autologin/key:mwc9e94f87pdauk14y4n"
}
```

User single-sign-on

As you can see from the above responses, there is a *login_key* property. Its purpose is to make it possible for your users to access content in your TalentLMS domain without having to login directly via the login page. In order to make it happen you have to redirect the user's browser to the URL provided in *login_key* property. The *login_key* URL changes every time it is used, so don't store it anywhere. You need to make a fresh request for each and every login.

User login

You can login a user in your domain by calling `TalentLMS_User::login(array('login' => '{username}', 'password' => '{password}'))`. If the provided credentials are valid and correspond to an active user, then the above call returns a response in the following format.

```
{
  "user_id":"1",
  "login_key":"http://example.talentlms.com/index/autologin/key:12drwr6d2dx14qi98ya"
}
```

All you have to do is to redirect the user's browser to the URL provided in "login_key" key, via a simple redirect function like the one below.

```
function redirect($url){
    header("location:$url");
    exit;
}
```

User signup

You can signup a user in your domain by calling *TalentLMS_User::signup(array('first_name' => '{firstName}', 'last_name' => '{lastName}', 'email' => '{emailAddress}', 'login' => '{userName}', 'password' => '{password}'))*. If there are custom registration fields, you can pass them in the array in the following form: *'custom_field_XXX' => '{customFieldValue}'*, where XXX is the index of the custom field (1 – 5). Checkbox custom fields can be equal to 'on' or 'off'. If the provided arguments are valid, then the above call returns a response in the following format.

```
{
  "id":"3",
  "login":"dummy3",
  "first_name":"Dummy3",
  "last_name":"Dummy3",
  "email":"dummy3@gmail.com",
  "user_type":"Learner",
  "language":"English",
  "timezone":"(GMT 00:00) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London",
  "status":"active",
  "created_on":"29/09/2012, 17:59:06",
  "avatar":"example.talentlms.com/pages/images/unknown_users.png",
  "bio" null,
  "login_key":"http://example.talentlms.com/index/autologin/key:43i14ncsad21xf8s8hcs"
}
```

Courses

You can retrieve individual courses as well as a list of all your courses. To retrieve a specific course you need to call *TalentLMS_Course::retrieve({courseID})* where *{courseID}* is the unique identifier describing the requested course. To retrieve all your courses you need to call *TalentLMS_Course::all()*.

Retrieving a course – Example response

```
{
  "id":"12",
  "name":"Intro to TalentLMS",
  "code": "",
  "category_id":"3",
  "description":"A short introduction to TalentLMS",
  "price":"$0",
  "status":"active",
  "creation_date": "",
  "creator_id":"1",
  "hide_from_catalog":"0",
  "time_limit":"0",
  "shared":"0",
  "avatar":"example.talentlms.com/pages/images/unknown_small.png",
  "big_avatar":"example.talentlms.com/pages/images/unknown_small.png",
  "certification":"Classic",
  "certification_duration":"Forever",
  "users":[{"id":"1",
    "name":"D. Dummy",
    "role":"instructor",
    "completed_on":""},
    {"id":"2",
    "name":"D. Dummy2",
    "role":"learner",
    "completed_on":""}],
  "units":[{"type":"Unit",
    "name":"TalentLMS - Introduction"},
    {"type":"Video",
    "name":"TalentLMS - Video introduction"},
    {"type":"Unit",
    "name":"An organic interface that works on any device"},
    {"type":"Unit",
    "name":"Branches as a way to customize the environment for sub-sets of users"}],
  "rules":["You must complete all content"],
  "prerequisites":[]
}
```

Retrieving all courses – Example response

```
{
  "id": "1",
  "name": "Social media",
  "code": "",
  "category_id": "3",
  "description": "This course explains what is Social Media, their history, how they can help us communicate in the modern Era, and why they have become so popular.",
  "price": "$0",
  "status": "active",
  "creation_date": "",
  "creator_id": "1",
  "hide_from_catalog": "0",
  "time_limit": "0",
  "shared": "0",
  "avatar": "example.talentlms.com/pages/images/unknown_small.png",
  "big_avatar": "example.talentlms.com/pages/images/unknown_small.png",
  "certification": "Classic",
  "certification_duration": "11 days"},
  {"id": "12",
  "name": "Intro to TalentLMS",
  "code": "",
  "category_id": "3",
  "description": "A short introduction to TalentLMS",
  "price": "$0",
  "status": "active",
  "creation_date": "",
  "creator_id": "1",
  "hide_from_catalog": "0",
  "time_limit": "0",
  "shared": "0",
  "avatar": "example.talentlms.com/pages/images/unknown_small.png",
  "big_avatar": "example.talentlms.com/pages/images/unknown_small.png",
  "certification": "Classic",
  "certification_duration": "Forever"
}]
```

Enroll user to course

You can enroll a user to a course by calling `TalentLMS_Course::addUser(array('user_id' => '{userId}', 'course_id' => '{courseId}', 'role' => '{userRoleInCourse}'))`, where the argument 'role' is optional and can be equal to 'learner' or 'instructor'. If the above call executes successfully, it returns the role assigned to the user for the specific course.

```
{"role": "learner"}
```


Categories

You can retrieve individual categories as well as a list of all your categories. To retrieve a specific category you need to call *TalentLMS_Category::retrieve({categoryID})* where *{categoryID}* is the unique identifier describing the requested category. To retrieve all your categories you need to call *TalentLMS_Category::all()*.

Retrieving a category – Example response

```
{
  "id":"3",
  "name":"Samples",
  "parent_category_id":null,
  "courses":[{"id":"1",
    "name":"Social media",
    "description":"This course explains what is Social Media, their history, how they can help us communicate in the modern Era, and why they have become so popular.",
    "avatar":"example.talentlms.com/pages/images/unknown_small.png",
    "big_avatar":"example.talentlms.com/pages/images/unknown_small.png"},
    {"id":"12",
    "name":"Intro to TalentLMS",
    "description":"A short introduction to TalentLMS",
    "avatar":"example.talentlms.com/pages/images/unknown_small.png",
    "big_avatar":"example.talentlms.com/pages/images/unknown_small.png"},
    {"id":"19",
    "name":"Money as debt",
    "description":"Money as Debt is a short animated documentary film by Canadian artist and filmmaker Paul Grignon about the monetary systems practiced through modern banking. The film presents Grignon's view of the process of money creation by banks and its historical background.",
    "avatar":"example.talentlms.com/pages/images/unknown_small.png",
    "big_avatar":"example.talentlms.com/pages/images/unknown_small.png"}]
}
```

Retrieving all categories – Example response

```
[[
  {"id":"3",
  "name":"Samples",
  "parent_category_id":null},
  {"id":"4",
  "name":"Test",
  "parent_category_id":null
}]
```

Groups

You can retrieve individual groups as well as a list of all your groups. To retrieve a specific group you need to call *TalentLMS_Group::retrieve({groupID})* where *{groupID}* is the unique identifier describing the requested group. To retrieve all your groups you need to call *TalentLMS_Group::all()*.

Retrieving a group – Example response

```
{
  "id":"1",
  "name":"My group",
  "description":"My first group",
  "key":"MLdDOnOBn",
  "users":[{"id":"1",
    "name":"D. Dummy"},
    {"id":"2",
    "name":"D. Dummy2"}],
  "courses":[{"id":"19",
    "name":"Money as debt"},
    {"id":"1",
    "name":"Social media"}]
}
```

Retrieving all groups – Example response

```
[{
  "id":"1",
  "name":"My group",
  "description":"My first group",
  "key":"MLdDOnOBn"},
  {"id":"2",
  "name":"Test",
  "description":"",
  "key":"8t4F2Op98"}]
```

Branches

You can retrieve individual branches as well as a list of all your branches. To retrieve a specific branch you need to call *TalentLMS_Branch::retrieve({branchID})* where *{branchID}* is the unique identifier describing the requested branch. To retrieve all your branches you need to call *TalentLMS_Branch::all()*.

Retrieving a branch – Example response

```
{
  "id":"1",
  "name":"mybranch",
  "description":"My first branch",
  "avatar":"example.talentlms.com/pages/images/unknown_small.png",
  "theme":"Default",
  "timezone":"(GMT +02:00) Athens, Istanbul, Minsk",
  "language":"english",
  "group_id":null,
  "disallow_global_login":"0",
  "users":[{"id":"1",
    "name":"D. Dummy"},
    {"id":"2",
    "name":"D. Dummy2"}],
  "courses":[{"id":"1",
    "name":"Social media"},
    {"id":"12",
    "name":"Intro to TalentLMS"}]
}
```

Retrieving all branches – Example response

```
{
  "id": "1",
  "name": "mybranch",
  "description": "My first branch",
  "avatar": "example.talentlms.com/pages/images/unknown_small.png",
  "theme": "Default",
  "timezone": "(GMT +02:00) Athens, Istanbul, Minsk",
  "language": "english",
  "group_id": null,
  "disallow_global_login": "0"},
  {"id": "2",
  "name": "test",
  "description": "",
  "avatar": "example.talentlms.com/pages/images/unknown_small.png",
  "theme": "Green",
  "timezone": "(GMT -03:00) Buenos Aires, Georgetown, Brasilia, Greenland",
  "language": "english",
  "group_id": "2",
  "disallow_global_login": "0"}
}
```

Domain details

You can retrieve general details about your domain, including the total number of users, courses, categories, groups and branches in your domain. Also, you can retrieve the signup method used (direct, captcha, email or manual). To retrieve these details you need to call *TalentLMS_Siteinfo::get()*.

Retrieving domain details – Example response

```
{
  "total_users": "2",
  "total_courses": "4",
  "total_categories": "2",
  "total_groups": "2",
  "total_branches": "2",
  "signup_method": "direct"
}
```

Appendix

The following source code shows a complete example of how to access the TalentLMS API, using the PHP library.

```
<?php

header('Content-Type: text/html; charset=utf-8');
require_once(dirname(__FILE__).'/talentlms/lib/TalentLMS.php');

try{
    TalentLMS::setApiKey('m8LnkM55HNyimpeq7usv3TRVIVpKwq');
    TalentLMS::setDomain('example.talentlms.com');

    $owner = TalentLMS_User::retrieve(1);
    $talentlmsIntro = TalentLMS_Course::retrieve(12);
    $samples = TalentLMS_Category::retrieve(3);
    $mybranch = TalentLMS_Branch::retrieve(1);
    $mygroup = TalentLMS_Group::retrieve(1);

    $users = TalentLMS_User::all();
    $courses = TalentLMS_Course::all();
    $categories = TalentLMS_Category::all();
    $branches = TalentLMS_Branch::all();
    $groups = TalentLMS_Group::all();
    $siteInfo = TalentLMS_Siteinfo::get();

    printf("My domain consists of: %d users, %d courses, %d categories, %d groups and
%d branches", $siteInfo['total_users'], $siteInfo['total_courses'],
$siteInfo['total_categories'], $siteInfo['total_groups'], $siteInfo['total_branches']);
}
catch(Exception $e){
    echo $e->getMessage();
}

?>
```

The following example shows the way to print the users of each branch in your TalentLMS domain.

```
<?php

header('Content-Type: text/html; charset=utf-8');
require_once(dirname(__FILE__).'/talentlms/lib/TalentLMS.php');

try{
    TalentLMS::setApiKey('m8LnkM55HNyimpeq7usv3TRVIVpKwq');
    TalentLMS::setDomain('example.talentlms.com');

    $branches = TalentLMS_Branch::all();

    foreach($branches as $branch){
        $currentBranch = TalentLMS_Branch::retrieve($branch['id']);
        $users = $currentBranch['users'];

        if(count($users) > 0){
            echo 'Users of branch <b>'.$currentBranch['name'].'</b> are:<br/>';
            echo '<ul>';

            foreach($users as $user){
                echo '<li>'.$user['name'].'</li>';
            }

            echo '</ul>';
        }
    }
}
catch(Exception $e){
    echo $e->getMessage();
}

?>
```

The following example shows the way to print the users who have completed the most courses.

```
<?php

header('Content-Type: text/html; charset=utf-8');
require_once(dirname(__FILE__).'/talentlms/lib/TalentLMS.php');

try{
    TalentLMS::setApiKey('m8LnkM55HNYimpeq7usv3TRVIVpKwq');
    TalentLMS::setDomain('example.talentlms.com');

    $users = TalentLMS_User::all();
    $countCompletedCourses = array();

    foreach($users as $user){
        $currentUser = TalentLMS_User::retrieve($user['id']);
        $courses = $currentUser['courses'];
        $countCompletedCourses[$currentUser['id']] = 0;

        foreach($courses as $course){
            if($course['completed_on'] != ''){
                $countCompletedCourses[$currentUser['id']]++;
            }
        }
    }

    $maxs = array_keys($countCompletedCourses, max($countCompletedCourses));
    $topUsers = array();

    foreach($maxs as $max){
        $topUser = TalentLMS_User::retrieve($max);
        $topUsers[] = $topUser['first_name'].' '.$topUser['last_name'];
    }

    if(count($topUsers)){
        echo 'Users who have completed the most courses are: '.implode(", ",
$topUsers);
    }
}
catch(Exception $e){
    echo $e->getMessage();
}

?>
```