**Interface documentation**

**for TuitionCloud**

**1 Description of TuitionCloud**

*When a third-party system connects to the TC, you need to use TuitionCloud . TuitionCloud**provides interfaces for TC operations, such as entering the classroom, watching playback, etc.(The following TuitionCloud is referred to as TC)*

**2 Interface description**

**2.1 Get tcapitoken**

**2.1.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/accesstoken*

**(2) methods** *POST*

**2.1.2 Description**

**This interface does not require tcapitoken.**

*A tcapitoken is the TC’s unique, global API call credential. Third party system will need to use the tcapitoken when calling various APIs The developer needs to save it appropriately.*

*A tcapitoken’s storage needs to be able to retain a minimum of 512 characters. The validity period of an tcapitoken is currently two hours. They need to be refreshed regularly.*

*Getting a duplicate will cause the previously obtained tcapitoken to become invalid.*

*After getting tcapitoken, the developer needs to add tcapitoken to the header so that the interface can be successfully called.*

*Instructions on usage and generation methods for tcapitokens required for TC API calls:*

*(1)Developers of TC are recommended to use a Central Control Server to get and renew the tcapitoken , and other tcapitokens used by Business Logic Servers will all come from the Central Control Server.*

*You should not try to review them individually or it will easily cause a conflict, leading to the tcapitoken being overruled which will affect your operations;*

*(2)The current effective period for the tcapitoken will be communicated from the returned expire\_in, which at present is a value within 7,200 seconds.*

*The Central Control Server needs to refresh a new tcapitoken in advance according to this validity period. The Central Control Server may continue to output old tcapitoken during the refreshing process. The Official Platform’s back-end will continue to maintain the usability of both old and new access\_tokens for a period of 5 minutes, which will smooth the operation of third party transitions.*

*(3)The tcapitoken validity period may be adjusted in future, so the Central Server’s internal timer not only needs to refresh automatically, it also needs to provide a passively refreshing tcapitoken API.*

*This makes it easy for business servers to be able to trigger the tcapitoken refresh process in situations where an API call learns that the access\_token has timed out.*

*(4)Developers should do a cache on tcapitoken without having to refresh tcapitoken every time.*

**2.1.3 Request parameter descriptions**

*Send JSON data format as follows*

*{*

*"apiKey" : "APIKEY",*

*"privateKey" : "PRIVATEKEY"*

*}*

**2.3.1 Parameter descriptions**

|  |  |  |
| --- | --- | --- |
| Parameters | Is it required? | Description |
| *apiKey* | *Yes* | *Third party user’s unique credential,cannot be changed.* |
| *privateKey* | *Yes* | *Third party user’s unique credential key,can be changed.* |

**2.1.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*"data": {*

*"tcapitoken ":"TCAPITOKEN"*

*}*

*}*

**2.1.4.1 Parameter descriptions**

|  |  |
| --- | --- |
| Parameters | Description |
| *tcapitoken* | *Returned credential* |

**2.1.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid APIKEY error):*

*{*

*"code":1024,*

*"msg":"Api key is not found"*

*}*

*For more error codes, please see the list of errors.*

**2.2 Generate class url**

**2.2.1 API call request descriptions**

**(1)URL**  *tc.aculearn.com/rest/acutuition/enter/classroom*

**(2) methods** *POST*

**2.2.2 Description**

*The third-party system can call this interface through the central control server, and enter the TC class system through the returned url.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

*Generate class urls for different type of users, front-end need redirect user to this generated url to enter a class.*

*This generated url will only available for two hours, don’t recommend to expose this url to end user. The best practice is user clicks the third-party system’s url to enter class, every time third-party system will generate class url to redirect user into the class.*

**2.2.3 Request parameter descriptions**

*Send JSON data format as follows*

*{*

*"name" : "NAME",*

*"userId" : "USERID",*

*"type" : "TYPE",*

*"roomId" : "ROOMID"*

*}*

**2.2.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *name* | *Yes* | *User’s name* | *String* |
| *userId* | *Yes* | *User’s id, if the user with the same userId already entered, the user will be kicked after entering through this class url.* | *String* |
| *type* | *Yes* | *User’s type, 1 is Teacher, 2 is Assistant, 3 is Student, 5 is Inspector* | *Number* |
| *roomId* | *Yes* | *The id of the classroom you are about to enter.* | *String* |

**2.2.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*"data": {*

*"classUrl":"CLASSURL"*

*}*

*}*

**2.2.4.1 Parameter descriptions**

|  |  |
| --- | --- |
| Parameters | Description |
| *classUrl* | *Classroom’s url, the generated url will be expired in 2 hours.*  *The class url will be different every time you generate it. The best practice is that generate class url for every time entering classroom.* |

**2.2.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid param error):*

*{*

*"code":1001,*

*"msg":"enterClassroom error, param error"*

*}*

*For more error codes, please see the list of errors.*

**2.3 Generate playback url**

**2.3.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/enter/playback*

**(2)methods** *POST*

**2.3.2 Description**

*The third-party system can call this interface through the central control server, and enter the TC playback system through the returned url.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

*This generated url will only available for two hours, don’t recommend to expose this url to end user. The best practice is user clicks the third-party system’s url to playback records, every time third-party system will generate playback url to redirect user into the playback.*

**2.3.3 Request parameter descriptions**

*Send JSON data format as follows*

*{*

*"recordId" : "RECORDID"*

*}*

**2.3.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *recordId* | *Yes* | *Record’s id* | *String* |

**2.3.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*"data": {*

*"playbackUrl":"PLAYURL"*

*}*

*}*

**2.3.4.1 Parameter descriptions**

|  |  |
| --- | --- |
| Parameters | Description |
| *playbackUrl* | *Playback’s url, the generated url will be expired in 2 hours.*  *The playback url will be different every time you generate it. The best practice is that generate class url for every time entering playback.* |

**2.3.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid param error):*

*{*

*"code":1001,*

*"msg":"enterClassroom error, param error"*

*}*

*For more error codes, please see the list of errors.*

**2.4 Add courseware**

**2.4.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/courseware*

**(2)methods** *POST*

**2.4.2 Description**

*Third-party systems can call this interface through the central control server to add courseware.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

**2.4.3 Request parameter descriptions**

*Send JSON data format as follows*

*{*

*"coursewares" : [*

*{*

*“id” : “COURSEWARE\_ID”,*

*“name” : “COURSEWARE\_NAME”,*

*“contentType” : “CONTENTTYPE\_FROMCLIENT”,*

*“userId” : “USERID\_FORWHOMUPLOAD”,*

*“userName” : “USER\_NAME\_FORWHOMUPLOAD”,*

*“classroomId” : “CLASSROOMID\_FORBELONG”,*

*“resourceId” : “RESOURCEID\_OFCOURSEWARE”*

*},*

*]*

*}*

**2.4.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *coursewares* | *Yes* | *This is a list of courseware* | *List* |
| *id* | *No* | *If specified id, this courseware will use this id as courseware id, if the id is already existed in coursewares, the old courseware will be replaced.*  *If not specified id, this courseware id will be generated automatically.* | *String* |
| *contentType* | *No* | *ContentType of this courseware, come from client.* | *String* |
| *userId* | *Yes* | *For whom upload this courseware* | *String* |
| *userName* | *Yes* | *The user name of user who upload this courseware* | *String* |
| *classroomId* | *No* | *If specified classroomId for this courseware, this courseware will only belongs to this classroom. Which is private courseware.*  *If not specified classroomId, this courseware is public courseware which can be associated with any classroom.*  *Recommend to use the public courseware for third-party integration.* | *String* |
| *resourceId* | *Yes* | *The resourceId of this courseware.* | *String* |

**2.4.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*"data": {*

*"coursewares": [*

*{*

*“id” : “COURSEWARE\_ID”,*

*“name” : “COURSEWARE\_NAME”,*

*“contentType” : “CONTENTTYPE\_FROMCLIENT”,*

*“userId” : “USERID\_FORWHOMUPLOAD”,*

*“userName” : “USERNAME\_FORWHOMUPLOAD”,*

*“classroomId” : “CLASSROOMID\_FORBELONG”,*

*“resourceId” : “RESOURCEID\_OFCOURSEWARE”*

*“status” : “CONVERSIONSTATUS\_COURSEWARE”,*

*“pdfUri” : “PDFURI\_AFTERCONVERSION”,*

*“pages” : “PAGES\_AFTERCONVERSION”,*

*“size” : “SIZE\_OFCOURSEWARE”,*

*“type” : “TYPE\_OFCOURSEWARE”,*

*“createTime” : “CREATETIME\_OFCOURSEWARE”,*

*“updateTime” : “UPDATETIME\_OFCOURSEWARE”,*

*“numId” : “NUMBERID\_OFCOURSEWARE”,*

*}*

*]*

*}*

*}*

**2.4.4.1 Parameter descriptions**

|  |  |  |
| --- | --- | --- |
| Parameters | Description | type of data |
| *coursewares* | *This is a list of courseware* | *List* |
| *id* | *The same with request* | *String* |
| *contentType* | *The same with request* | *String* |
| *userId* | *The same with request* | *String* |
| *userName* | *The same with request* | *String* |
| *classroomId* | *The same with request* | *String* |
| *resourceId* | *The same with request* | *String* |
| *status* | *Conversion status of courseware. 1 is pending, 10 is converting, 20 is available, 30 is failed* | *Number* |
| pdfUri | *Pdf file name which is extracted from the resource which is the Office file.*  *The value is sub file name.*  *Use generate resource download url API to download this sub file.*  *Like “1.pdf”* | *String* |
| pages | *Image file name array for each page which is extracted from the resource which is the Office file.*  *Page order is the array sequence.*  *The values is sub file names.*  *Use generate resource download url API to download this sub file.*  *Like “[1.png, 2, png, 3.png]”* | *String Array* |
| *size* | *Courseware’s size* | *Number* |
| *createTime* | *Creation time* | *Number* |
| *updateTime* | *Update time* | *Number* |

**2.4.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid param error):*

*{*

*"code":1001,*

*"msg":"postCourseware error, json is null"*

*}*

*For more error codes, please see the list of errors.*

**2.5 Add classroom**

**2.5.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/classroom*

**(2)methods** *POST*

**2.5.2 Description**

*Third-party systems can call this interface through the central control server to add classroom.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

*To enter a classroom, third-party system first has to create a classroom, then generate the classroom url for user to enter.*

**2.5.3 Request parameter descriptions**

*Send JSON data format as follows*

*{*

*"roomId" : "ROOMID",*

*"userId":"USERID",*

*"startTime":"STARTTIME",*

*"endTime":"ENDTIME",*

*"name":"NAME",*

*"coursewareIds":[”COURSEWAREID”],*

*"info":{“INFO”},*

*"videoResolution" : 1,*

*"videoFps" : 1,*

*"type" : 1,*

*}*

**2.5.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *roomId* | *No* | *Room’s id, can be third party id for room, third party must keep the unique for each room.* | *String* |
| *userId* | *No* | *User’s id* | *String* |
| *startTime* | *Yes* | *Start time of the classroom. But the start time doesn’t mean user has to wait till the time to start. Actually class can be start at any time after classroom created.*  *If third-party system want to manage to decide the start time, please manage to generate the class url at the proper time for the requirement.* | *Number* |
| *endTime* | *Yes* | *End time of the classroom, if end time is reached Teacher will be prompt the class is going to end, want to continue or not? Teacher can choose to keep the class.* | *Number* |
| *name* | *Yes* | *Classroom name* | *String* |
| *type* | *NO* | *Type of classroom,1 is one-to-many, 2 is one-to-one,default is one-to-many.* | *Integer* |
| *coursewareIds* | *No* | *List of courseware ids which are the public coursewares.* | *List* |
| *videoResolution* | *NO* | *Video resolution,1 is 320x240,2 is 176x144,default is 1* | *Integer* |
| *info* | *No* | *The info object,*  *{"welcomeMessage":"Welcome Message*  *}*  *This is how third-party can customize the welcome message.*  *Third-party also can store some information with the classroom.* | *Object* |
| *videoFps* | *NO* | *Number of video frames,1 is 10 frames,2 is 15 frames,3 is 20 frames,4 is 25 frames,5 is 30 frames,default is 1* | *Integer* |

**2.5.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*“code”:1,*

*“data”:{*

*"id" : "ID",*

*"enterpriseId" : "ENTERPRISEID",*

*"nid":"NID",*

*"name": "NAME",*

*"startTime": 23434534,*

*"endTime" : 34534433,*

*"type" : 1,*

*"videoResolution" : 1,*

*"videoFps" : 1,*

*"coursewareIds" : coursewareIds,*

*"memberIds" : memberIds,*

*"userId" : "USERID",*

*"info" : info,*

*"createTime" : 1432423423445,*

*"updateTime" : 134354354353*

*}*

*}*

**2.5.4.1 Parameter descriptions**

|  |  |
| --- | --- |
| Parameters | Description |
| *id* | *Classroom’s id* |
| *enterpriseId* | *The institution id of the class affiliation* |
| *nid* | *Classroom’s numberId* |
| *name* | *Classroom’s name* |
| *startTime* | *Start time of the classroom* |
| *endTime* | *End time of the classroom* |
| *type* | *Type of classroom,1 is one-to-many, 2 is one-to-one* |
| *teacherPwd* | *Teacher's password to enter the classroom* |
| *assitantPwd* | *Assistant's password to enter the classroom* |
| *studentPwd* | *Student's password to enter the classroom* |
| *observerPwd* | *Inspector’s password to enter the classroom* |
| *videoResolution* | *Video resolution,1 is 320x240,2 is 176x144* |
| *videoFps* | *Number of video frames,1 is 10 frames,2 is 15 frames,3 is 20 frames,4 is 25 frames,5 is 30 frames* |
| *teacherUrl* | *The url of the teacher entering the classroom* |
| *studentUrl* | *The url of the student entering the classroom* |
| *coursewareIds* | *The data type is list,List of courseware ids* |
| *memberIds* | *The data type is list,List of classroom member ids* |
| *userId* | *The id of the person who created the classroom* |
| *info* | *The info object contains two fields,*  *{"welcomeMessage":"Welcome Message"}* |
| *createTime* | *Creation time* |
| *updateTime* | *Update time* |

**2.5.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid param error):*

*{*

*"code":1025,*

*"msg":"ClassRoom is not found"*

*}*

*For more error codes, please see the list of errors.*

**2.6 Get courseware information**

**2.6.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/courseware/{coursewareId}*

**(2)methods** *GET*

**2.6.2 Description**

*Third-party systems can call this interface through the central control server to get courseware.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

**2.6.3 Request parameter descriptions**

**2.6.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *coursewareId* | *Yes* | *Courseware’s id* | *String* |

**2.6.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*“code”:1,*

*“data”:{*

*"id" : "ID",*

*"enterpriseId" : "ENTERPRISEID",*

*"numId" : 34534545,*

*"userName": "USERNAME",*

*"classroomId" : "CLASSROOMID",*

*"contentType" : "CONTENTTYPE",*

"name" : "NAME",

"type" : 1,

"status" : 1,

"resourceId" : "RESCOURCEID",

"pdfUri" : "1.pdf",

"pages" : [“1.png”, “2.png”],

"userId" : "USERID",

*"size" : 234234,*

"createTime" : 1432423423445,

"updateTime*" : 134354354353,*

*}*

*}*

**2.6.4.1 Parameter descriptions**

|  |  |
| --- | --- |
| Parameters | Description |
| *id* | *Courseware’s id* |
| *enterpriseId* | *The institution id of the institution to which the courseware belongs* |
| *numId* | *Courseware’s numberId* |
| *userName* | *The name of the user who uploaded the courseware* |
| *classroomId* | *Classroom’s id* |
| *contentType* | *Uploaded type of courseware* |
| name | *Courseware’s name* |
| type | *Courseware’s type,1 is a public courseware, 10 is a private courseware* |
| status | *Courseware’s status,1 is the conversion, 10 is the conversion completed, 30 is the conversion failure* |
| resourceId | *RecourseId on the resource server after uploading the courseware* |
| pdfUri | *Pdf file name which is extracted from the resource which is the Office file.*  *The value is sub file name.*  *Use generate resource download url API to download this sub file.*  *Like “1.pdf”* |
| pages | *Image file name array for each page which is extracted from the resource which is the Office file.*  *Page order is the array sequence.*  *The values is sub file names.*  *Use generate resource download url API to download this sub file.*  *Like “[1.png, 2.png, 3.png]”* |
| userId | *The id of the user who uploaded the courseware* |
| *size* | *Courseware’s size* |
| *createTime* | *Creation time* |
| *updateTime* | *Update time* |

**2.6.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid param error):*

*{*

*"code":*1044*,*

*"msg":"Courseware is not found"*

*}*

*For more error codes, please see the list of errors.*

**2.7 Upload Resources**

**2.7.1 API call request descriptions**

**(1)URL** *res.aculearn.com/**rest/resource/upload*

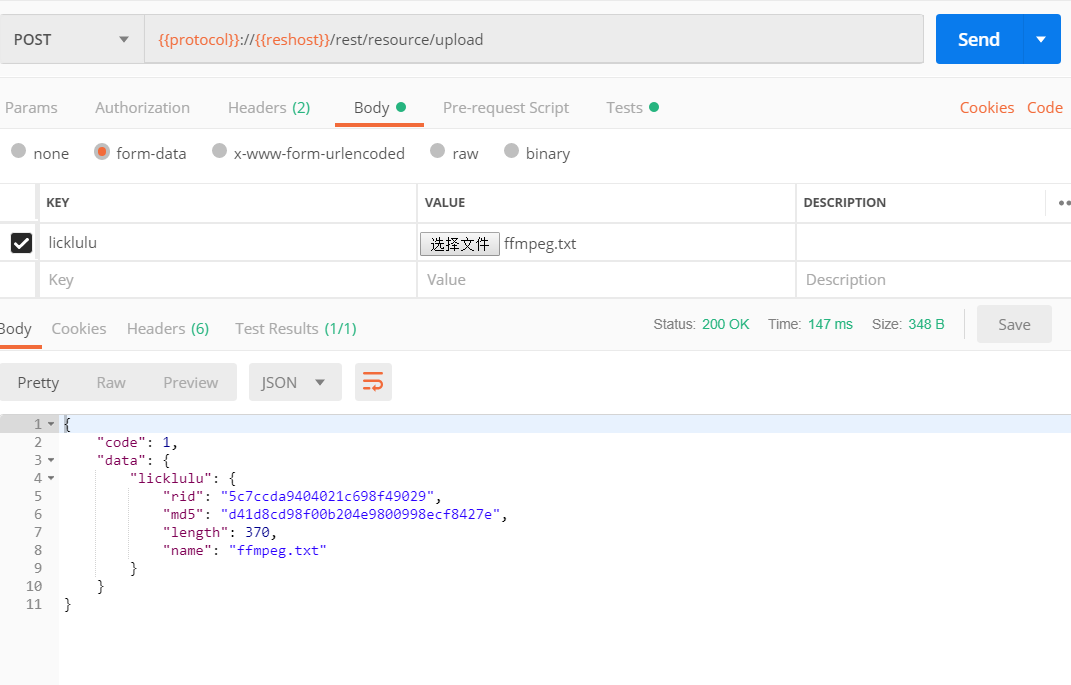
**(2)methods** *POST*

**2.7.2 Description**

*Third-party systems can call this interface to add resources directly without token control. But the upload is into temporary folder (resources in temporary folder will deleted after 1 hours.), Third-party systems have to call another interface to mark this resource will be used, in this case the resource will never be deleted unless third-party systems call the delete method.*

*Resource Server will not save file name information, if third-party systems need file name, please save the file information like name into your business database, associate it with the resourceId which generate by our Resource Server.*

Request screenshot and Response screenshot



**2.7.3 Request parameter descriptions**

*Upload is using multipart/form-data protocol, in this case you may upload multiple files and return you multiple resourceIds.*

**2.7.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"{fieldName}" : {*

*“rid” : “RESOURCE\_ID”,*

*“length” : “RESOURCE\_LENGTH”,*

*“md5” : “RESOURCE\_MD5,*

*“**name” : “RESOURCE\_FILENAME”*

*},*

*"{fieldName}" : {*

*“rid” : “RESOURCE\_ID”,*

*“length” : “RESOURCE\_LENGTH”,*

*“md5” : “RESOURCE\_MD5,*

*“name” : “RESOURCE\_FILENAME”*

*}*

*}*

**2.7.4.1 Parameter descriptions**

|  |  |  |
| --- | --- | --- |
| Parameters | Description | type of data |
| *{fieldName}* | *This is a variable. It is the field name for uploaded file in multipart/form-data protocol* | *String* |
| *rid* | *ResourceId of uploaded file.* | *String* |
| *length* | *length of uploaded file.* | *String* |
| *md5* | *MD5 of uploaded file.* | *String* |
| *name* | *Name of uploaded file.* | *String* |

**2.7.5 error descriptions**

*For more error codes, please see the list of errors.*

**2.8 Generate Resource Download Url**

**2.8.1 API call request descriptions**

**(1)URL** *tc.aculearn.com**/rest/acutuition/resource/{resourceId}/url?name={**fileName}&type={**contentType}&expire={**expireSeconds}&*

*rtype={resourceType}*

**(2)methods** *POST*

**2.8.2 Description**

*Third-party systems can call this interface to generate resource download url. The url will be available to download specified resource within the expire time.*

***2.8.2.1* Official and informal directories**

**2.8.3 Request parameter descriptions**

*Upload is using multipart/form-data protocol, in this case you may upload multiple files and return you multiple resourceIds.*

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *resourceId* | *Yes* | *Id of the resource that you want to download* | *String* |
| *fileName* | *No* | *When download, browser will use this name to save as local file.* | *String* |
| *contentType* | *No* | *When download, server will use this content type for downloading.* | *String* |
| *expireSeconds* | *No* | *Default is 10 seconds, specified the seconds that the download url will be expired.* | *Number* |
| *resourceType* | *NO* | *If the incoming resourceType is 0, the resource is downloaded from temporary folder.If the incoming resourceType is empty or 1, the resource is downloaded from official folder.* | *Number* |

**2.8.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*1.If fileName is specified in the request , the resourceType is specified as 1 or empty.*

*{*

*"code": 1,*

*"data": {*

*"url": “https://res.aculearn.com/rest/resource/**generated/{fileName}?s={secretcode}*

*}*

*}*

*2.If NOT specified fileName in request url*

*{*

*"code": 1,*

*"data": {*

*"url": “https://res.aculearn.com/rest/resource/generated?s={secretCode}*

*}*

*}*

*To download the sub files under this resource, third-party system need recombine the url like below,*

*[https://res.aculearn.com/](https://res.aculearn.com/rest/resource/generated/subfile/{subFileName}?s={secretCode})**[rest/resource/generated/subfile/{subFileName}?s={secretCode}](https://res.aculearn.com/rest/resource/generated/subfile/{subFileName}?s={secretCode})*

*The subFileName is the file name that can be downloaded from the resource.*

**2.8.4.1 Parameter descriptions**

|  |  |  |
| --- | --- | --- |
| Parameters | Description | type of data |
| *url* | *The generated url for downloading the resource within certain time.* | *String* |
| *secretCode* | *Secret code is to hide the resource information for security reason* | *String* |
| *subFileName* | *Normally a resource is a file to download, but some cases, a resource can be extract to multiple files, like office file can be extracted to pdf and image files. The extracted files are the sub files, can use this key append below url like above for downloading.* | *String* |

**2.8.5 error descriptions**

*For more error codes, please see the list of errors.*

**2.9 Get records for classroom**

**2.9.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/classroom/{classroomId}/records?o={offset}&l={limit}*

**(2)methods** *GET*

**2.9.2 Description**

*Third-party systems can call this interface through the central control server to get records.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

*Record will be generated every time user start/end class automatically. This API can list all the records for a classroom. Use recordId for each record can generate playback url for user watch classroom playback.*

**2.9.3 Request parameter descriptions**

**2.9.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *classroomId* | *Yes* | *The id of classroom.* | *String* |
| *offset* | *No* | *Default is 0, the offset of returning list.* | *Integer* |
| *limit* | *No* | *Default is 1000, the limit of returning list.* | *Integer* |

**2.9.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*"data": {*

*"records": [*

*{*

*“**id” : “RECORD\_ID”,*

*“**startTime” : “RECORD\_STARTTIME”,*

*“**endTime” : “RECORD\_ENDTIME”,*

*“**classroomId” : “RECORD\_CLASSROOMID”,*

*“**size” : “RECORD\_SIZE”,*

*“**createTime” : “RECORD\_CREATETIME”,*

*“**updateTime” : “RECORD\_UPDATETIME”,*

*“**numId” : “RECORD\_NUMBERID”,*

*}*

*]*

*}*

*}*

**2.9.4.1 Parameter descriptions**

|  |  |  |
| --- | --- | --- |
| Parameters | Description | type of data |
| *records* | *This is a list of records* | *List* |
| *id* | *Id of the record* | *String* |
| *startTime* | *When the record is started.* | *Number* |
| *endTime* | *When the record is ended* | *Number* |
| *classroomId* | *classroomId for the record* | *String* |
| *size* | *Total size of record* | *Number* |
| *createTime* | *When the record is created* | *Number* |
| *updateTime* | *When the record is updated* | *Number* |
| numId | *numId for the record* | *Number* |

**2.9.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid param error):*

*{*

*"code":3001,*

*"msg":"get records error"*

*}*

*For more error codes, please see the list of errors.*

**2.10 Delete classroom**

**2.10.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/classroom/{classroomId}*

**(2)methods** *DELETE*

**2.10.2 Description**

*Third-party systems can call this interface through the central control server to delete classroom.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

**2.10.3 Request parameter descriptions**

**2.10.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *classroomId* | *Yes* | *The id of classroom.* | *String* |

**2.10.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*}*

**2.11 Delete courseware**

**2.11.1 API call request descriptions**

**(1)URL** *tc.aculearn.com/rest/acutuition/**courseware/{**coursewareId}*

**(2)methods** *DELETE*

**2.11.2 Description**

*Third-party systems can call this interface through the central control server to delete courseware.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

**2.11.3 Request parameter descriptions**

**2.11.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *coursewareId* | *Yes* | *The id of courseware.* | *String* |

**2.11.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*}*

**2.12 Delete some classroom courseware**

**2.12.1 API call request descriptions**

**(1)URL**

*tc.aculearn.com/rest/acutuition/courseware/*

*{coursewareId}*/*/fromrooms*

**(2)methods POST**

**2.12.2 Description**

*Third-party systems can call this interface through the central control server to delete courseware according to classroom ids.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

**2.12.3 Request parameter descriptions**

**2.12.3.1 Parameter descriptions**

*Send JSON data format as follows*

*{*

*"classroomIds":["id1", "id2"]*

*}*

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *coursewareId* | *Yes* | *The id of courseware.* | *String* |
| *classroomIds* | *Yes* | *The id list of classroom* | *List* |

**2.12.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*}*

**2.13 Get in and out of the classroom record**

**2.13.1 API call request descriptions**

**(1)URL**

*tc.aculearn.com/rest/acutuition/classroom*

*/{classroomId}/inout?s={startTime}&e={endTime}&l={limit}*

**(2)methods** *GET*

**2.13.2 Description**

*Third-party systems can call this interface through the central control server to get in and out of classroom records.*

*After getting tcapitoken, the developer needs to add x-tcapitoken to the header so that the interface can be successfully called.*

**2.13.3 Request parameter descriptions**

**2.13.3.1 Parameter descriptions**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameters | Is it required? | Description | type of data |
| *classroomId* | *Yes* | *The id of classroom.* | *String* |
| *startTime* | *No* | *Starting time* | *Number* |
| *endTime* | *NO* | *End time* | *Number* |
| *limit* | *No* | *Default is 1000, the limit of returning list.* | *Number* |

**2.13.4 Return descriptions**

*Under normal circumstances, TC will return the following JSON data packets to third party system:*

*{*

*"code": 1,*

*"data": {*

*[*

*{*

*“id” : “INOUTCLASS\_ID”,*

*“type” : “USER\_TYPE”,*

*“outTime” : “OUTTIME”,*

*“classTime” : “CLASSTIME”,*

*“userId” : “USERID”,*

*“userName” : “USERNAME”,*

*“roomId” : “ROOMID”*

*}*

*]*

*}*

*}*

**2.13.4.1 Parameter descriptions**

|  |  |  |
| --- | --- | --- |
| Parameters | Description | type of data |
| *id* | *InoutClass’s id* | *String* |
| *type* | *User’s type* | *Number* |
| *outTime* | *Out of classroom’s time, it can be null* | *Number* |
| *classTime* | *In to classroom’s time* | *Number* |
| *userId* | *User’s id* | *String* |
| *userName* | *User’s name* | *String* |
| *roomId* | *The classroom’s id* | *String* |

**2.13.5 error descriptions**

*When errors occur, TC will return information including the error code. A JSON packet example is given below (this example is an invalid param error):*

*{*

*"code":*1001*,*

*"msg":"param error"*

*}*

*For more error codes, please see the list of errors.*

**2.14** **Callback class url**

**2.14.1 API call request descriptions**

**(1)URL** *Third-party’s url*

**(2)methods** *POST*

**2.14.2 Description**

*When you click to start class, end class, TC will call back the url of Third-party with below data.*

**2.14.3 Post descriptions**

*Under normal circumstances, TC will send JSON string to third party system:*

|  |  |  |
| --- | --- | --- |
| Parameters | Description | type of data |
| *staus* | *InoutClass’s status, 1 is start class, 0 is end class.* | *Number* |
| *id* | *InoutClass’s id* | *String* |
| *ctype* | *The type of person who clicked on class, 1 is teacher* | *Number* |
| *userId* | *The userId of person who clicked on class* | *String* |
| *type* | *Call back url’s type* | *Number* |
| *enterpriseId* | *Enterprise’s id* | *String* |
| *roomId* | *Classroom’s id* | *String* |
| *startTime* | *Classroom’s startTime* | *Number* |
| *endTime* | *Classroom’s endTime* | *Number* |
| *createTime* | *InoutClass’s createTime* | *Number* |
| *teacherStartTime* | *The time when teacher click on start class button, only when status is 0* | *Number* |
| *teacherEndTime* | *The time when teacher click on end class button, only when status is 0* | *Number* |

1. **Error code**

|  |  |
| --- | --- |
| code | message |
| *4001* | *No session* |
| *4002* | *Token not found* |
| *1001* | *Illegal parameter* |
| *1024* | *Illegal apikey* |
| *1025* | *Classroom not found* |
| *1043* | *Record not found* |
| *1044* | *Courseware not found* |