Rayvision Render API Protocal Description

Revision History

Version	Date	Edited By	Description
V5.0	2020-01-02	Shunhui Wang	Task thumbnail Get raysync transmission message Get raysync authentication key Full speed rendering
V4.0	22-Jan-2019	Shunhui Wang	Task settings timeout stop time,Task Thumbnail interface added;
V3.0	2-Nov-2018	Yue Li	Error code description added; And status code added to the task list query
V2.0	11-Oct-2018	Yue Li	
V1.0	12-Sep-2018	Yue Li	

Table of Content

General parameter guide

HTTP request header

Request header	Instruction	Memo
accessId	ID authorization	Provided by render platform
channel	Channel reminer	Fixed value：4
platform	Platform identification	
UTCTimestamp	Timestamp	UTC Time stamp（seconds）
nonce	Random number	Replay attacks prevention
signature	Digital signature（Not processed by signature algorithm）	Generated according to the signature rule, for Details: Signature Generation Rule
version	Version info	1.0.0

Request parameter

Refer the separate request parameter for details

Return data structure

Parameter	Data type	Description	Memo
version	String	Version info	Fixed value：1.0.0
result	Boolean	Indicates the request result.	
message	String	A message indicates the request result.	
code	Integer	request return code	For reference: error code description
serverTime	Long	Server timestamp	UTC +8
data	T	Return data details	Check interface guide for details: Return data

Signature generation rules

Apply for security credentials：

accessId is used to identify the API caller identity, and the accessKey is the key that used to encrypt the signature string, and validate the signature string on the server-side. User must keep the security credentials strictly to prevent disclosure.

Generate signature string：

With the security credentials accessId and accessKey, you can generate a signature string.

The signature range includes custom http request headers and method request bodies

Assume the accessId and accessKey of the user are as below：

accessId: AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE

accessKey: Gu5t9xGARNpq86cd98joQYCN3EXAMPLE

Signature method：

1.   Sort the parameters

First sort all custom http request headers and request parameters in ascending order by lexicographical order (ASCII) of the parameter name

Header:
```
{
    "accessId": AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE,
    "channel": 7,
    "platform": 1,
    "UTCTimestamp": 1535957371,
    "nonce": 11886,
    "version": "1.0.0"
}
```

Body:
```
{
    "zone":2
}
```

After ascending order sorting:
```
{
    "UTCTimestamp":1535957371,
    "accessId":AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE,
    "channel":7,
    "nonce":11886,
    "platform":1,
    "version":1.0.0,
    "zone":2
}
```

For the request structure of complex objects, supplementary description of parameter formatting is needed to be added, the subscript is needed to be added on the array, and parent-child object attributes are connected using "**.**"

For instance：
There may be parameter passing of complex objects in the later slabele， for instance
```
{
    "taksId":2
    "renderEnvs":[{
        envId:1
        pluginIds:[2,3,4]
    },{
        envId:3
        pluginIds:[7,8,10]

    }]
}
```

The formatting result is as follows
```
{
    "taksId":2
    "renderEnvs0.envId":1
    "renderEnvs0.pluginIds0":2
    "renderEnvs0.pluginIds1":3
    "renderEnvs0.pluginIds2":4
    "renderEnvs1.envId":3
```

```
    "renderEnvs1.pluginIds0":7
    "renderEnvs1.pluginIds1":8
    "renderEnvs1.pluginIds2":10
}
```

2. Jointly request the character string

The request header sorted in the previous step will be formatted into the form of "head name" = "head value". For example, for channel, the header name is "channel" and the header value is "7", so after the formatting "channel=7" will be displayed

Jointly request the character string

UTCTimestamp=1535957371&accessId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE&channel=7&nonce=11886&platform=1&version=1.0.0&zone=2

3. Combine the signatures of the original character string

This step generates a signature of character string that consists of the following parameters:

1) Request method: Only support POST method 7 full caps

2) Request host: AKA the module request domain name，for example：task.renderbus.com。

3) Request address: AKA the Interface path in the interface description, for example：
/api/render/common/queryPlatforms

4) Request character string: the request string generated in the previous step

Structure：

[Request method]: Request domain name & request character string

Combine the signatures of the original character string ~ example:

 [POST]task.renderbus.com:/api/render/common/queryPlatforms&UTCTimestamp=1535957371&accessId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE&channel=7&nonce=11886&platform=1&version=1.0.0&zone=2

4. Generate signature string

First, use the HmacSHA256 algorithm to sign the **signatures of the original character string** that obtained in the previous step, and then encode the generated signature string using Base64 to obtain the final signature string.

```
String accessKey = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE";
String srcStr
= "[POST]task.renderbus.com:/api/render/common/queryPlatforms&UTCTimestamp=1535957371&accessId
=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE&channel=7&nonce=11886&platform=1&version=1.0.0&z
one=2";

Mac mac = Mac.getInstance("HmacSHA256");
```

```
SecretKeySpec secretKeySpec =
new SecretKeySpec(accessKey.getBytes("UTF-8"), mac.getAlgorithm());

mac.init(secretKeySpec);
byte[] hash = mac.doFinal(srcStr.getBytes("UTF-8"));
String signStr = DatatypeConverter.printBase64Binary(hash);

return signStr;
```

The final signature string：

6tvuz8bgDCz5vtS3amuMWVbOqzhaeWaOhNcWMqx9zcg=

5. Set up the signature

Set the generated signature string to the **http request header**
signature=6tvuz8bgDCz5vtS3amuMWVbOqzhaeWaOhNcWMqx9zcg=

Error code description

Error code=	Status code	Info	description
SUCCESS	200	success	Indicate the success result
FAIL	100	fail	Indicate the fail result
NEED_REDIRECT	301	need_redirect	Need to redirect to other addresses
FORBIDDEN	403	forbidden	No authorization to access
RESOURCE_NOT_FOUND	404	resource_not_found	Sources none existing
DO_NOT_HAVE_ANY_MORE_RECORD	700	do_not_have_any_more_record	No more records contained
INTERNAL_ERROR	500	internal_error	Server processing failure
PARAMETER_INVALID	600	parameter_invalid	Invalid parameter
PARAMETER_CANT_BE_EMPTY	601	parameter_cant_be_empty	Required parameter missing
NEED_USER_LOGIN	602	need_user_login	Indicate the user need to log in
ILLEGAL_PROTOCOL	603	illegal_protocol	Illegal request
VALIDATE_CODE_ERROR	604	validate_code_error	Indicate the mobile phone verification code error
VINSUFFICIENT_PERMISSIONS	605	vinsufficient_permissions	Insufficient permissions
VALIDATE_COMMOM_CODE_ERROR	606	validate_commom_code_error	Verification code error
VALIDATE_SEND_CODE_ERROR	607	validate_send_code_error	Indicates the verification code was failed to send
USER_AREA_ERROR	608	user_area_error	Customer's domestic and foreign regions do not match
SIGNATURE_EXPIRED	610	signature_expired	Signature expired

Error code=	Status code	Info	description
SIGNATURE_INVALID	611	signature_invalid	Invalid signature

Interface description

Obtain the platform list

Interface path: */api/render/common/queryPlatforms*

Request parameters:

Parameters	Type	Description	Memo
zone	Integer	Domestic and foreign regions are Mandatary field	Domestic：1, Foreign：2

Return parameters:

Parameters	Type	Description	Memo
platform	Integer	Platform number	
name	String	Platform number description	

Example of requesting:

```
{
    "zone":2
}
```

Example of returning:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": [
        {
            "platform": 2,
            "name": "query_platform_w2"
        }
    ],
    "serverTime": 1535949047370
}
```

Obtain the user information

Interface path: */api/render/user/queryUserProfile*

Request parameter: default

Return parameter: for details please refer to: the example of return

Parameter	Type	Description	Memo

The example of requesting: default

The example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "userId": 10001136,
        "userName": "rayvision",
        "platform": 2,
        "phone": "173333333333",
        "email": "",
        "company": "",
        "name": "",
        "job": "",
        "communicationNumber": "",
        "softType": 2000,
        "softStatus": 1,
        "businessType": 1,
        "status": 1,
        "infoStatus": 0,
        "accountType": 1,
        "userType": 1,
        "mainUserId": 0,
        "level": 49,
        "pictureLever": null,
        "zone": 1,
        "rmbbalance": 0,
        "usdbalance": 0,
        "rmbCumulative": 0,
        "usdCumulative": 0,
        "credit": 0,
        "coupon": 49.93,
        "description": "",
        "country": "China",
        "city": "Zhongshan City, Guangdong Province",
        "address": "",
        "cpuPrice": 0.67,
        "gpuPrice": 20,
        "shareMainCapital": 0,
```

```
        "subDeleteTask": 0,
        "useMainBalance": 0,
        "hideBalance": 0,
        "hideJobCharge": 0,
        "useLevelDirectory": 1,
        "downloadDisable": 0,
        "displaySubaccount": 1,
        "subaccountLimits": 5,
        "houdiniFlag": 0,
        "c4dFlag": 0,
        "blenderFlag": 0,
        "keyshotFlag": 0,
        "studentEndTime": null
    },
    "serverTime": 1535953580730
}
```

Obtain user settings

Interface path: */api/render/user/queryUserSetting*

Request parameter: default

Return parameter:

Parameter	Type	Description	Memo
infoStatus	Integer		
accountType	Integer		
shareMainCapital			
subDeleteTask			
useMainBalance			
singleNodeRenderFrames	String	Multiple frames rendered on one machine	
maxIgnoreMapFlag	String	Can choose to ignore the max map error or not	0 Do not ignore, 1 Ignore
autoCommit	String	Can choose start scene parameter rendering	1 Do not start, 2 Start
separateAccountFlag	Integer	Separate the primary and secondary account settings	
mifileSwitchFlag	Integer	Indicate the switch option of mi Document analysis risk	
assfileSwitchFlag	Integer	Do not analyze the ass file switch identifier	

Parameter	Type	Description	Memo
manuallyStartAnalysisFlag	Integer	Manually turn on the analysis switch	
downloadDisable	Integer	Choose to disable downloading or not	1 Disable, 0 Do not disable
taskOverTime	Integer	Timeout - hour	

Example of request: default

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "infoStatus": null,
        "accountType": null,
        "shareMainCapital": 0,
        "subDeleteTask": 0,
        "useMainBalance": 0,
        "singleNodeRenderFrames": "1",
        "maxIgnoreMapFlag": "1",
        "autoCommit": "2",
        "separateAccountFlag": 0,
        "mifileSwitchFlag": 0,
        "assfileSwitchFlag": 0,
        "manuallyStartAnalysisFlag": 0,
        "downloadDisable": 0,
        "taskOverTime": 12
    },
    "serverTime": 1535954828406
}
```

Update user settings

Interface path: */api/render/user/updateUserSetting*

Request parameter:

Parameter	Type	Description	Memo
taskOverTime	Integer	Set up of Task timeout situation	

Return parameter: default

Example of return:
```
{
    "taskOverTime": 13
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Obtain user transfer BID

Interface path: */api/render/task/getTransferBid*

Request parameter: default

Return parameter:

Parameter	Type	Description	Memo
config_bid	String	Configuration file transfer ID	
output_bid	String	Download the transfer file ID	
input_bid	String	Asset upload transfer ID	

Example of request: default

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "config_bid": "30201",
        "output_bid": "20201",
        "input_bid": "10201"
    },
    "serverTime": 1535957964631
}
```

Create task ID

Interface path: */api/render/task/createTask*

Request parameter:

parameter	Type	Description	Memo
count	Integer	The numbers of created task ID	
outUserId	Long	Optional, External user ID	Used to distinguish third-party accessed users

Return parameter:

parameter	Type	Description	Memo
aliasTaskIdList	List<String>	Task ID alias	
taskIdList	List<Integer>	Task ID	

Example of request:

```
{
    "count":1,
    "outUserId": 100001
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "aliasTaskIdList": [
            "2W19097"
        ],
        "taskIdList": [
            19097
        ]
    },
    "serverTime": 1535959487092
}
```

Submit task

Interface path: */api/render/task/submitTask*

Request parameter:

parameter	Type	Description	Memo
taskId	Integer	Submit task ID	

Return parameter: default

Example of request:

```
{
    "taskId": 19111
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Obtain analysis error code

Interface path: */api/render/common/queryErrorDetail*

Request parameter:

parameter	Type	Description	Memo
code	String	Mandatary，error code	
language	String	Optional，language	0：Chinese（default）1：English

Return parameter: List<CodeInfo>

parameter	Type	Description	Memo
id			
code	Integer	error code	
type	Integer	Type	0 Warning-can be ignored，1 Error-can not be ignored
languageFlag	Integer	languageType	0Chinese，1English
desDescriptionCn	String	Chinese description	
desSolutionCn	String	Solution	
solutionPath	String	Connect to solution	
isRepair	Integer	Check if repairable or not	1 Repairable，0 Non-repairable
isOpen	Integer	Check if turn on the intercept of the error or not	0 Not turn on the intercept，1 Turn on the intercept
updateTime	Date	The final update time	

Example of request:

```
{
   "code":15000
}
```

Example of return:

```
{
   "version": "1.0.0",
   "result": true,
   "message": "success",
   "code": 200,
   "data": [
      {
         "id": 5,
         "code": "15000",
         "type": 1,
         "languageFlag": 0,
         "desDescriptionCn": "Stuck or failed to initiate 3ds max",
```

"desSolutionCn": "1. Check if the corresponding version of 3ds max has a special popup window, if any, manually close it; \n2. Check if the operating system has set a high level of permissions."",
        "solutionPath": "http://note.youdao.com/noteshare?id=d8f1ea0c46dfb524af798f6b1d31cf6f",
        "isRepair": 0,
        "isDelete": 1,
        "isOpen": 1,
        "lastModifyAdmin": "",
        "updateTime": 1534387709000
      }
   ],
   "serverTime": 1535962451356
}

Obtain the task list

Interface path: */api/render/task/getTaskList*

Request parameter:

parameter	Type	Description	Memo
pageNum	Integer	Mandatary， number of current page	
pageSize	Integer	Mandatary， quantities of displaying per page	
statusList	List<Integer>	status code list， query the status of the task in the list	Check task status description for details

Task status description：

Status	Status code	Description
WAITING	0	Waiting
RENDERING	5	Rendering
PRE_RENDERING	8	Prepared to be handled
STOP	10	Stop
ARREARAGE_STOP	20	Stop due to arrearage
TIME_OUT_STOP	23	Stop due to timing out
FINISHED	25	Finished
FINISHED_HAS_FAILED	30	Finished with failed frames contained
ABANDON	35	Give up

Status	Status code	Description
FINISHED_TEST	40	Test completed
FAILED	45	Failed
ANALYSE	50	Analyzing

Return parameter: list<Task Info>

parameter	Type	Description	Memo

parameter	Type	Description	Memo
sceneName	String	Scene Name	
id	Integer	Task id	
taskAlias	String	Task Name	
taskStatus	Byte	Task status	1/Waiting, 5/Rendering, 10/Stop, 15/User Stop, 20/Stop due to arrearage, 25/Finished, 30/Finished with failed frames contained, 35/Give up, 40/Test completed, 45/Failed
statusText	String	Status Text	
preTaskStatus	Byte	Preprocessing Task Status	
preStatusText	String	Preprocessing Task Status Text	
totalFrames	Integer	Total frames	
abortFrames	Integer	Abort frames	
executingFrames	Integer	Executing frames	
doneFrames	Integer	Done frames	
failedFrames	Integer	Failed frames	
framesRange	String	Frames range	
projectName	String	Project name	
renderConsume	BigDecimal	Task render consume	
taskArrears	BigDecimal	Task arrears	
submitDate	Date	Submit Date	
startTime	Date	Start Date	

parameter	Type	Description	Memo
completedDate	Date	Completed Date	
renderDuration	Long	Task render duration	
userName	String	User name	
producer	String	producer	
taskLevel	Byte	Task level	
taskUserLevel	Integer	Task level of user	
taskLimit	Integer	Task node limit	
taskOverTime	Long	Task timeout reminder time	
outputFileName	String	Output file name	
munuTaskId	String	Dispatch id	
layerParentId	String	About maya task, parent id	
cgId	Integer	Task type	2001/maya, 2000/max
taskKeyValueVo	Object	Task keyword	
userAccountConsume	Bigdecimal	User account consume	
couponConsume	Bigdecimal	Coupon consume	
isOpen	Byte	Whether the front-end expansion button is expanded or not	
taskType	String	Task type	Preprocessing, Render photon, Render picture

parameter	Type	Description	Memo
renderCamera	String	Render camera	
cloneParentId	Integer	Clone parent id	
cloneOriginalId	Integer	Clone original id	
shareMainCapital	Byte	Whether to Share Main Account Assets	(0：no 1：yes)
taskRam	Integer	Task render memory	
respRenderingTaskList	**List<TaskInfo>**	Child tasks of the open task	Structure the same of this object
layerName	String	Layer name	
taskTypeText	String	Task type text	photon/picture

The taskKeyValueVo description

parameter	Type	Description	Memo
tiles	String	Tile number	
allCamera	String	All Cameras	
RenderableCarema	String	Render Cameras	

Example of request:

```
{
    "pageNum": 1,
    "pageSize": 1
}
```

Example of return:

```
{
    "version": "1.0.0",
```

"result": true,
"message": "success",
"code": 200,
"data": {
    "pageCount": 32,
    "pageNum": 1,
    "total": 32,
    "size": 1,
    "items": [
        {
            "sceneName": "cloakroom.max",
            "id": 18278,
            "taskAlias": "P18278",
            "taskStatus": 0,
            "statusText": "render_task_status_0",
            "preTaskStatus": 25,
            "preStatusText": "render_task_status_25",
            "totalFrames": 0,
            "abortFrames": null,
            "executingFrames": null,
            "doneFrames": null,
            "failedFrames": 0,
            "framesRange": "0",
            "projectName": "",
            "renderConsume": null,
            "taskArrears": 0,
            "submitDate": 1535602289000,
            "startTime": null,
            "completedDate": null,
            "renderDuration": null,
            "userName": "xiaoguotu_ljian",
            "producer": null,
            "taskLevel": 79,
            "taskUserLevel": 0,
            "taskLimit": 200,
            "taskOverTime": null,
            "userId": 10001520,
            "outputFileName": null,
            "munuTaskId": "",
            "layerParentId": 0,
            "cgId": 2001,
            "taskKeyValueVo": {
                    "tiles": null,
                    "allCamera": null,
                    "renderableCamera": null
                },
            "userAccountConsume": null,
            "couponConsume": null,
            "isOpen": 1,
            "taskType": "",
            "renderCamera": "VRayCam003",
            "cloneParentId": null,
            "cloneOriginalId": null,

```
"shareMainCapital": 0,
"taskRam": null,
"respRenderingTaskList": [
    {
        "sceneName": "cloakroom.max",
        "id": 18280,
        "taskAlias": "P18280",
        "taskStatus": 25,
        "statusText": "render_task_status_25",
        "preTaskStatus": null,
        "preStatusText": null,
        "totalFrames": 1,
        "abortFrames": 0,
        "executingFrames": 0,
        "doneFrames": 1,
        "failedFrames": 0,
        "framesRange": "0",
        "projectName": "",
        "renderConsume": 1.57,
        "taskArrears": 0,
        "submitDate": 1535602289000,
        "startTime": 1535602601000,
        "completedDate": 1535603874000,
        "renderDuration": 1176,
        "userName": "xiaoguotu_ljian",
        "producer": null,
        "taskLevel": 79,
        "taskUserLevel": 0,
        "taskLimit": 200,
        "taskOverTime": 86400000,
        "userId": 10001520,
        "outputFileName": "18280_cloakroom",
        "munuTaskId": "2018083000075",
        "layerParentId": 18278,
        "cgId": 2001,
        "taskKeyValueVo": {
            "tiles": null,
            "allCamera": null,
            "renderableCamera": null
        },
        "userAccountConsume": 0,
        "couponConsume": 1.57,
        "isOpen": 0,
        "taskType": "RenderPhoton",
        "renderCamera": "VRayCam003",
        "cloneParentId": 0,
        "cloneOriginalId": 0,
        "shareMainCapital": 0,
        "taskRam": null,
        "respRenderingTaskList": null,
        "layerName": null,
        "taskTypeText": "render_photons_task",
        "isDelete": 1
```

```
        },
        {
          "sceneName": "cloakroom.max",
          "id": 18281,
          "taskAlias": "P18281",
          "taskStatus": 25,
          "statusText": "render_task_status_25",
          "preTaskStatus": null,
          "preStatusText": null,
          "totalFrames": 17,
          "abortFrames": 0,
          "executingFrames": 0,
          "doneFrames": 17,
          "failedFrames": 0,
          "framesRange": "0",
          "projectName": "",
          "renderConsume": 6.7,
          "taskArrears": 0,
          "submitDate": 1535602289000,
          "startTime": 1535603885000,
          "completedDate": 1535604765000,
          "renderDuration": 5028,
          "userName": "xiaoguotu_ljian",
          "producer": null,
          "taskLevel": 79,
          "taskUserLevel": 0,
          "taskLimit": 200,
          "taskOverTime": 86400000,
          "userId": 10001520,
          "outputFileName": "18281_cloakroom",
          "munuTaskId": "2018083000079",
          "layerParentId": 18278,
          "cgId": 2001,
          "taskKeyValueVo": {
              "tiles": null,
              "allCamera": null,
              "renderableCamera": null
          },
          "userAccountConsume": 0,
          "couponConsume": 6.7,
          "isOpen": 0,
          "taskType": "Render",
          "renderCamera": "VRayCam003",
          "cloneParentId": 0,
          "cloneOriginalId": 0,
          "shareMainCapital": 0,
          "taskRam": null,
          "respRenderingTaskList": null,
          "layerName": null,
          "taskTypeText": "render_major_picture_task",
          "isDelete": 1
        }
    ],
```

```
            "layerName": null,
            "taskTypeText": null,
            "isDelete": 1
        }
    ]
  },
  "serverTime": 1535964116655
}
```

Stop task

Interface path: */api/render/task/stopTask*

Request parameter:

parameter	Type	Description	Memo
taskParam	List<Integer>	Combination of the task ID	

Return parameter: default

Example of request:

```
{
    "taskParam":[1111307,1111309]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Start task

Interface path: */api/render/task/startTask*

Request parameter:

parameter	Type	Description	Memo

parameter	Type	Description	Memo
taskParam	List<Integer>	Combination of the task ID	

Return parameter: default

Example of request:

```
{
    "taskParam":[1111307,1111309]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Abandon task

Interface path: */api/render/task/abortTask*

Request parameter:

parameter	Type	Description	Memo
taskParam	List<Integer>	Combination of the task ID	

Return parameter: default

Example of request:

```
{
    "taskParam":[1111307,1111309]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Delete task

Interface path: */api/render/task/deleteTask*

Request parameter:

parameter	Type	Description	Memo
taskParam	List<Integer>	Task ID list	

Return parameter: default

Example of request:

```
{
    "taskParam":[1111307,1111309]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Obtain the task rendering frame details

Interface path: */api/render/task/queryTaskFrames*

Request parameter:

parameter	Type	Description	Memo
taskId	Integer	Task ID	Task ID, Is the unique identifier of

parameter	Type	Description	Memo
			the task, mandatary field
searchKeyword	String	Query based on the name of the multiple frames that rendered on one machine	Is a string that be queried based on name of the multiple frames that rendered on one machine, optional field
pageNum	Integer	Current page number	-
pageSize	Integer	Size of the data that displayed per page	-

Return parameter: List<FrameInfo>

parameter	Type	Description	Memo
id			
userId	Long	userID	
framePrice	Double	Render pricing	
feeType	Integer	Fee charge type	0 Quantity-based, 1 Machine-bashed, 2 Project-based
platform	Integer	Platform	
frameIndex	String	Frame sequence name	
frameBlock	String	Current frame number	
frameStatus	Integer	Current frame status	1/Waiting,2/Processing,3/Stopped,4/Complete,5/Failed,6/Waiting for the pre-handeling,7/Waiting for photonic frame rendering completed,8/Waiting for the priority rendering completed,9/ Wait for the photon job to finish rendering,10/Waiting for the settlement job rendering completed,11/Task timing out
feeAmount	Double	Balance deduction	
couponFee	Double	Vouchers deduction	

parameter	Type	Description	Memo
startTime	Long	Start time (ms)	
endTime	Long	End time (ms)	
frameExecuteTime	Long	Rendering frame time	
frameStatusText	String	Frame status description	
arrearsFee	Double	Render frame arrears amount	
taskId	Long	Task ID	
frameType	Integer	Frame Type	1/Pre-rendering (only one frame, even for multi-camera case), 2/photon frame, 3/combine photon frame, 4/priority frame, 5/main render frame, 6 priority /maya/max composite rendering frame, 7/maya/max rendering main picture composite frame, 8/houdini settlement frame, 9/max channel frame
recommitFlag	Integer	Recount times	Indicate the recount time default is 0,increased as the recount time increase
taskOverTime	Integer	overtime	Overtime details
gopName	String	Houdini Settlement node name	
frameRam	Integer	Memory of the task rendering frame	No memory requirement if description does not specified

Example of request:

```
{
    "taskId": 19088,
    "pageNum": 1,
    "pageSize": 2
}
```

Example of return:

```json
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "pageCount": 9,
        "pageNum": 1,
        "total": 17,
        "size": 2,
        "items": [
            {
                "id": 1546598,
                "userId": null,
                "framePrice": null,
                "feeType": null,
                "platform": null,
                "frameIndex": "0-1",
                "frameStatus": 4,
                "feeAmount": 0.44,
                "startTime": 1535960273000,
                "endTime": 1535960762000,
                "frameExecuteTime": 489,
                "frameStatusText": "task_frame_status_4",
                "arrearsFee": null,
                "munuJobId": "0",
                "taskId": 19088,
                "munuTaskId": "2018090300040",
                "frameType": 5,
                "couponFee": 0,
                "recommitFlag": 0,
                "isCopy": null,
                "frameBlock": "1",
                "taskOverTime": 86400000,
                "gopName": null,
                "frameRam": null
            },
            {
                "id": 1546599,
                "userId": null,
                "framePrice": null,
                "feeType": null,
                "platform": null,
                "frameIndex": "0-2",
                "frameStatus": 4,
                "feeAmount": 0.43,
                "startTime": 1535960856000,
                "endTime": 1535961338000,
                "frameExecuteTime": 482,
```

```
            "frameStatusText": "task_frame_status_4",
            "arrearsFee": null,
            "munuJobId": "1",
            "taskId": 19088,
            "munuTaskId": "2018090300040",
            "frameType": 5,
            "couponFee": 0,
            "recommitFlag": 0,
            "isCopy": null,
            "frameBlock": "2",
            "taskOverTime": 86400000,
            "gopName": null,
            "frameRam": null
        }
    ]
},
"serverTime": 1535966967143
}
```

Obtain the overview of task rendering frames

Interface path: */api/render/task/queryAllFrameStats*

Request parameter: default

Return parameter:

parameter	Type	Description	Memo
executingFramesTotal	Integer	Number of frames in rendering	
doneFramesTotal	Integer	Number of frames completed	
failedFramesTotal	Integer	Number of rendered frames failed	
waitingFramesTotal	Integer	Number of frames in waiting	
totalFrames	Integer	Number of overall rendered frames	

Example of request: default

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "executingFramesTotal": 1,
        "doneFramesTotal": 308,
```

```
        "failedFramesTotal": 2,
        "waitingFramesTotal": 153,
        "totalFrames": 577
    },
    "serverTime": 1535968038725
}
```

Re-submit the failed frames

Interface path: */api/render/task/restartFailedFrames*

Request parameter:

parameter	Type	Description	Memo
taskParam	List<Integer>	Task ID list	

Return parameter: default

Example of request:

```
{
    "taskParam":[1111307,1111309]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Re-submit the specified frames

Interface path: */api/render/task/restartFrame*

Request parameter:

parameter	Type	Description	Memo
taskIds	Integer	Task ID	
ids	List<Integer>	Combine the frame ID	Effective if 0 displayed when selectALL

parameter	Type	Description	Memo
selectAll	Integer	Choose if re-submit all	1 All, 0 Only the specified frame

Return parameter: default

Example of request:

```
{
    "taskIds": 10001,
    "selectAll":0,
    "ids":[0,1,2,3]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Obtain the task details

Interface path: /api/render/task/queryTaskInfo

Request parameter:

parameter	Type	Description	Memo
taskIds	List<Integer>	Combine the shell task ID	

Return parameter: List<TaskInfo>

parameter	Type	Description	Memo

parameter	Type	Description	Memo
sceneName	String	Scene Name	
id	Integer	Task id	
taskAlias	String	Task Name	
taskStatus	Byte	Task status	1/Waiting, 5/Rendering, 10/Stop, 15/User Stop, 20/Stop due to arrearage, 25/Finished, 30/Finished with failed frames contained, 35/Give up, 40/Test completed, 45/Failed
statusText	String	Status Text	
preTaskStatus	Byte	Preprocessing Task Status	
preStatusText	String	Preprocessing Task Status Text	
totalFrames	Integer	Total frames	
abortFrames	Integer	Abort frames	
executingFrames	Integer	Executing frames	
doneFrames	Integer	Done frames	
failedFrames	Integer	Failed frames	
framesRange	String	Frames range	
projectName	String	Project name	
renderConsume	BigDecimal	Task render consume	
taskArrears	BigDecimal	Task arrears	
submitDate	Date	Submit Date	

parameter	Type	Description	Memo
startTime	Date	Start Date	
completedDate	Date	Completed Date	
renderDuration	Long	Task render duration	
userName	String	User name	
producer	String	producer	
taskLevel	Byte	Task level	
taskUserLevel	Integer	Task level of user	
taskLimit	Integer	Task node limit	
taskOverTime	Long	Task timeout reminder time	
outputFileName	String	Output file name	
munuTaskId	String	Dispatch id	
layerParentId	String	About maya task, parent id	
cgId	Integer	Task type	2001/maya, 2000/max
taskKeyValueVo	Object	Task keyword	
userAccountConsume	Bigdecimal	User account consume	
couponConsume	Bigdecimal	Coupon consume	
isOpen	Byte	Whether the front-end expansion button is expanded or not	
taskType	String	Task type	Preprocessing,

parameter	Type	Description	Memo
			Render photon, Render picture
renderCamera	String	Render camera	
cloneParentId	Integer	Clone parent id	
cloneOriginalId	Integer	Clone original id	
shareMainCapital	Byte	Whether to Share Main Account Assets	(0：no 1：yes)
taskRam	Integer	Task render memory	
respRenderingTaskList	List<TaskInfo>	Child tasks of the open task	Structure the same of this object
layerName	String	Layer name	
taskTypeText	String	Task type text	photon/picture

Example of request:

```
{
    "taskIds": [19084]
}
```

Example of return:
```
{
   "version": "1.0.0",
   "result": true,
   "message": "success",
   "code": 200,
   "data": {
      "pageCount": 1,
      "pageNum": 1,
      "total": 1,
      "size": 100,
      "items": [
         {
            "sceneName": "3d66.com_593362_2018.max",
            "id": 19084,
            "taskAlias": "P19084",
```

"taskStatus": 0,
"statusText": "render_task_status_0",
"preTaskStatus": 25,
"preStatusText": "render_task_status_25",
"totalFrames": 0,
"abortFrames": null,
"executingFrames": null,
"doneFrames": null,
"failedFrames": 0,
"framesRange": "0",
"projectName": "",
"renderConsume": null,
"taskArrears": 0,
"submitDate": 1535958477000,
"startTime": null,
"completedDate": null,
"renderDuration": null,
"userName": "xiaoguotu_ljian",
"producer": null,
"taskLevel": 60,
"taskUserLevel": 0,
"taskLimit": null,
"taskOverTime": null,
"userId": 10001520,
"outputFileName": null,
"munuTaskId": "",
"layerParentId": 0,
"cgId": 2001,
"taskKeyValueVo": {
        "tiles": null,
        "allCamera": null,
        "renderableCamera": null
    },
"userAccountConsume": null,
"couponConsume": null,
"isOpen": 1,
"taskType": "",
"renderCamera": "Camera001",
"cloneParentId": null,
"cloneOriginalId": null,
"shareMainCapital": 0,
"taskRam": null,
"respRenderingTaskList": [
  {
    "sceneName": "3d66.com_593362_2018.max",
    "id": 19087,
    "taskAlias": "P19087",
    "taskStatus": 25,
    "statusText": "render_task_status_25",
    "preTaskStatus": null,
    "preStatusText": null,
    "totalFrames": 1,
    "abortFrames": 0,

```
      "executingFrames": 0,
      "doneFrames": 1,
      "failedFrames": 0,
      "framesRange": "0",
      "projectName": "",
      "renderConsume": 1.31,
      "taskArrears": 0,
      "submitDate": 1535958477000,
      "startTime": 1535958658000,
      "completedDate": 1535960243000,
      "renderDuration": 1471,
      "userName": "xiaoguotu_ljian",
      "producer": null,
      "taskLevel": 60,
      "taskUserLevel": 0,
      "taskLimit": null,
      "taskOverTime": 86400000,
      "userId": 10001520,
      "outputFileName": "19087_3d66.com_593362_2018",
      "munuTaskId": "2018090300037",
      "layerParentId": 19084,
      "cgId": 2001,
      "taskKeyValueVo": {
          "tiles": null,
          "allCamera": null,
          "renderableCamera": null
      },
      "userAccountConsume": 1.31,
      "couponConsume": 0,
      "isOpen": 0,
      "taskType": "RenderPhoton",
      "renderCamera": "Camera001",
      "cloneParentId": 0,
      "cloneOriginalId": 0,
      "shareMainCapital": 0,
      "taskRam": null,
      "respRenderingTaskList": null,
      "layerName": null,
      "taskTypeText": "render_photons_task",
      "isDelete": 1
  },
  {
      "sceneName": "3d66.com_593362_2018.max",
      "id": 19088,
      "taskAlias": "P19088",
      "taskStatus": 10,
      "statusText": "render_task_status_10",
      "preTaskStatus": null,
      "preStatusText": null,
      "totalFrames": 17,
      "abortFrames": 6,
      "executingFrames": 0,
      "doneFrames": 11,
```

```
              "failedFrames": 0,
              "framesRange": "0",
              "projectName": "",
              "renderConsume": 4.84,
              "taskArrears": 0,
              "submitDate": 1535958477000,
              "startTime": 1535960247000,
              "completedDate": 1535967000000,
              "renderDuration": 5420,
              "userName": "xiaoguotu_ljian",
              "producer": null,
              "taskLevel": 60,
              "taskUserLevel": 0,
              "taskLimit": null,
              "taskOverTime": 86400000,
              "userId": 10001520,
              "outputFileName": "19088_3d66.com_593362_2018",
              "munuTaskId": "2018090300040",
              "layerParentId": 19084,
              "cgId": 2001,
              "taskKeyValueVo": {
                 "tiles": null,
                 "allCamera": null,
                 "renderableCamera": null
              },
              "userAccountConsume": 4.84,
              "couponConsume": 0,
              "isOpen": 0,
              "taskType": "Render",
              "renderCamera": "Camera001",
              "cloneParentId": 0,
              "cloneOriginalId": 0,
              "shareMainCapital": 0,
              "taskRam": null,
              "respRenderingTaskList": null,
              "layerName": null,
              "taskTypeText": "render_major_picture_task",
              "isDelete": 1
           }
        ],
        "layerName": null,
        "taskTypeText": null,
        "isDelete": 1
      }
    ]
  },
  "serverTime": 1535969100700
}
```

Add a custom label

Interface path: *api/render/common/addLabel*

Request parameter:

parameter	Type	Description	Memo
newName	String	Label name	
status	String	Lable status	

Return parameter: default

Example of request:

```
{
    "newName": "myLabel",
    "status": 0
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Delete custom label

Interface path: */api/render/common/deleteLabel*

Request parameter:

parameter	Type	Description	Memo
delName	String	Label name	

Return parameter: default

Example of request:

```
{
    "delName": "myLabel"
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1535957894211
}
```

Obtain custom label

Interface path: */api/render/common/getLabelList*

Request parameter: default

Return parameter:

parameter	Type	Description	Memo
projectNameList	List	Project name list	
Object.projectName	String	Project name	
Object.projectId	Integer	Project id	

Example of request:

```
{}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "projectNameList": [
            {
                "projectId": 3671,
                "projectName": "myLabel"
            }
        ]
    },
    "serverTime": 1546998557770
}
```

Obtain the supported rendering software

Interface path: */api/render/common/querySupportedSoftware*

Request parameter: default

Return parameter:

parameter	Type	Description	Memo
isAutoCommit	Integer	Choose if submit automatically or not	
renderInfoList	List<Software>	Renderer version list	
defaultCgId	Integer	Default renderer ID	

Software

parameter	Type	Description	Memo
cgId	Integer	Render software ID	
cgName	String	Render software name	
cgType	String	Render file suffix support	
iconPath	String	Rendering software icon address	
isNeedProjectPath	Integer		
isNeedAnalyse	Integer	Need to analyze	
isSupportLinux	Integer	Indicates if linux is supported or not	

Example of request: default

Example of return:

```
{
  "version": "1.0.0",
  "result": true,
  "message": "success",
  "code": 200,
  "data": {
    "isAutoCommit": 2,
    "renderInfoList": [
      {
```

```
            "cgId": 2000,
            "cgName": "Maya",
            "cgType": "ma;mb",
            "iconPath": "/img/softimage/maya.png",
            "isNeedProjectPath": 3,
            "isNeedAnalyse": 1,
            "isSupportLinux": 1
        }
    ],
    "defaultCgId": 2001
  },
  "serverTime": 1535973558961
}
```

Obtain supported rendering software plugins

Interface path: */api/render/common/querySupportedPlugin*

Request parameter:

parameter	Type	Description	Mem o
cgId	Render software ID		

Return parameter:

parameter	Type	Description	Mem o
cgPlugin	List<Plugin>	Supported plugin list	
cgVersion	List<**Soft Version**>	Supported software list	

Plugin

parameter	Type	Description	Mem o
cvId	Integer	Rendering software version ID (**Soft Version.id**)	
pluginName	String	Plugin name	
pluginVersions	List<**Plugin Version**>	Plugin version list	

PluginVersion

parameter	Type	Description	Memo
pluginId	Integer	Plugin version ID	
pluginName	String	Plugin name	
pluginVersion	String	Plugin version	

SoftVersion

parameter	Type	Description	Memo
id	Integer	Render software version ID	
cgId	Integer	Render software ID	
cgName	String	Render software name	
cgVersion	String	Render software version	

Example of request:

```
{
    "cgId": 2012
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "cgPlugin": [
            {
                "cvId": 19,
                "pluginName": "zblur",
                "pluginVersions": [
                    {
                        "pluginId": 1652,
                        "pluginName": "zblur",
                        "pluginVersion": "zblur 2.02.019"
                    }
```

```
        ]
      },
    ],
    "cgVersion": [
      {
        "id": 23,
        "cgId": 2005,
        "cgName": "CINEMA 4D",
        "cgVersion": "R19"
      }
    ]
  },
  "serverTime": 1535973841043
}
```

New user rendering environment configuration

Interface path: *api/render/common/addRenderEnv*

Request parameter:

parameter	Type	Description	Memo
cgId	Integer	Render software ID	**Soft Version.cgId**
cgName	String	Render software name	**Soft Version.cgName**
cgVersion	String	Render software version	**Soft Version.cgVersion**
renderLayerType	Integer	Maya render Type	
editName	String	render environment custom name	
renderSystem	Integer	Render system	0 linux, 1 windows
pluginIds	List<Integer>	render plugin list	**Plugin Version.plugin Id**

Return parameter:

parameter	Type	Description	Memo
editName	String	render environment custom name	

Example of request:

```
{
  "cgId": 2000,
```

```
    "cgName": "Maya",
    "cgVersion": "2020",
    "renderLayerType":0,
    "editName":"testRenderEnv",
    "renderSystem":"0",
    "pluginIds":[1166]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "editName": "testRenderEnv"
    },
    "serverTime": 1535957894211
}
```

Adjust user render environment configuration

Interface path: */api/render/common/updateRenderEnv*

Request parameter:

parameter	Type	Description	Memo
cgId	Integer	Render software ID	**Soft Version.cgId**
cgName	String	Render software name	**Soft Version.cgName**
cgVersion	String	Render software version	**Soft Version.cgVersion**
renderLayerType	Integer	Maya render Type	
editName	String	render environment custom name	Adjust the configuration name that required a passing
renderSystem	Integer	Render system	0 linux, 1 windows
pluginIds	List<Integer>	render plugin list	**Plugin Version plugin Id**

Return parameter: default

Example of request:

```
{
    "cgId": 2000,
    "cgName": "Maya",
    "cgVersion": "2020",
    "renderLayerType":0,
    "editName":"testRenderEnv",
    "renderSystem":"0",
    "pluginIds":[]
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1536027063801
}
```

Delete user render environment configuration

Interface path: */api/render/common/deleteRenderEnv*

Request parameter:

parameter	Type	Description	Memo
editName	String	render environment custom name	

Return parameter: default

Example of request:
```
{
    "editName":"testRenderEnv"
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
```

```
    "data": null,
    "serverTime": 1536027063801
}
```

Set up default render environment configuration

Interface path: */api/render/common/setDefaultRenderEnv*

Request parameter:

parameter	Type	Description	Memo
editName	String	render environment custom name	

Return parameter: default

Example of request:

```
{
    "editName":"testRenderEnv"
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": null,
    "serverTime": 1536027063801
}
```

Obtain user render environment configuration

Interface path: */api/render/common/getRenderEnv*

Request parameter:

parameter	Type	Description	Memo
cgId	Integer	Render software ID	

Return parameter: List<RenderEnv>

parameter	Type	Description	Memo
cgId	Integer	Render software ID	
editName	String	render environment custom name	
cgName	String	Render software name	
cgVersion	String	Render software version	
osName	Integer	render environment system	0Linux, 1windows
renderLayerType	Integer		
isDefault	Integer	Check if it is the default configuration	0 Not default configuration 1 Is default configuration
respUserPluginInfoVos	List<**Plugin Version**>	render environment plugin list	

Example of request:

```
{
    "cgId":"2000"
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": [
        {
            "cgId": 2000,
            "editName": "testRenderEnv332",
            "cgName": "Maya",
            "cgVersion": "2020",
            "osName": 0,
            "renderLayerType": 0,
            "isDefault": 0,
            "respUserPluginInfoVos": [
                {
```

```
            "pluginId": 1166,
            "pluginName": "wobble",
            "pluginVersion": "wobble 0.9.5"
          }
        ]
      },
      {
        "cgId": 2000,
        "editName": "testRenderEnv222",
        "cgName": "Maya",
        "cgVersion": "2020",
        "osName": 0,
        "renderLayerType": 0,
        "isDefault": 0,
        "respUserPluginInfoVos": [
          {
            "pluginId": 1166,
            "pluginName": "wobble",
            "pluginVersion": "wobble 0.9.5"
          }
        ]
      }
    ],
    "serverTime": 1536028132519
}
```

Task Progress

Interface path: /api/render/task/loadTaskProcessImg

Request parameter:

parameter	Type	Description	Memo
taskId	Integer	Task ID	required
frameType	Integer	Frame type	2：photon, 5：picture Without transmission, the background will dynamically return the results according to the stage of the rendering task

Return parameter:

parameter	Type	Description	Memo

parameter	Type	Description	Memo
width	Integer	Image resolution width	
height	Integer	Image resolution height	
block	Integer	Block number	
isRenderPhoton	Boolean	Is render photon	True:task is render photon
currentTaskType	String	Task render stage	Render: render picture RenderPhoton: render photon
sceneName	String	Scene name+camera name	
startTime	String	Task start time	
endTime	String	Task end time	
grabInfo	List<List< Object>>	Block frame info	

Block frame info：grabInfo.Object

parameter	Type	Description	Memo
startTime	String	Start time	
endTime	String	End time	
frameStatus	String	Frame status	
isMaxPrice	String	Is max picture	
feeAmount	String	Fee amount	
couponFee	String	Coupon fee	

parameter	Type	Description	Memo
frameIndex	String	Frame number	
frameBlock	String	Block number	
framePercent	String	Frame render percent	
frameUsed	String	Frame render time consumed	
frameEst	String	Predicted Remaining Time for Frame Rendering	
renderInfo	String	Frame Rendering Progress Information	
grabUrl	String	Frame Rendering Schedule Connection Address	

Example of request:
```
{
    "taskId":389406
}
```

Example of return:

```
{
    "block":16,
    "currentTaskType":"Render",
    "grabInfo":[
       [
          {
             "couponFee":"0.00",
             "frameIndex":"0",
             "renderInfo":"",
             "frameBlock":"1",
             "frameEst":"0",
              "grabUrl":"/mnt/output/d20/small_pic/10001500/10001834/389406/Render_2018110900083_0_frame_0[_]bloc
             "feeAmount":"0.20",
             "frameUsed":"66",
             "frameStatus":"4",
             "framePercent":"100",
```

```
        "isMaxPrice":"0",
        "startTime":"2018-11-09 18:28:26",
        "endTime":"2018-11-09 18:29:32"
      }
    ]
  ],
  "height":1500,
  "sceneName":"3d66.com_589250.max-Camera007",
  "startTime":"2018-11-09 18:27:40",
  "width":2000
}
```

Task Setting Of Over Time Stop

Interface path: /api/render/task/setOverTimeStop

Request parameter:

parameter	Type	Description	Memo
taskIds	List<Integer>	Task ID	required
overTime	Long	Time of Task stop	Required,unit:second

Example of request:
```
{
    "taskIds":[485],
    "overTime":1800
}
```

Task thumbnail

Interface path: /api/render/task/loadingFrameThumbnail

Request parameter:

parameter	Type	Description	Memo
id	Integer	Yes	Frame ID
frameStatus	Integer	Yes	A value of 4 means complete, only thumbnails are available when completed

Example of request:
```
{
   "id":264,
   "frameStatus":4
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": [
        "small_pic\\100000\\100001\\138\\Render_264_renderbus_0008[-]jpg.jpg"   //Thumbnail path
    ],
    "serverTime": 1509009316712
}
```

Get Raysync transmission message

Interface path：api/render/task/getTransferServerMsg

Request method：POST

Request parameter：

parameter	Type	Description	Memo
zone	Byte	Yes	China: 1; other countries: 2

Example of request:

```
{
    "zone":1
}
```

Example of return:

```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "clientVersion": "3.2.8.2",
        "protocolVersion": "3.2.8.2",
        "raysyncTransfer": {
            "serverIp": "127.0.0.1",
            "serverPort": 2121,
            "proxyIp": "42.123.110.38",
            "proxyPort": 32001,
            "sslPort": 2443,
            "port": 2442
        }
    },
    "serverTime": 1565678980735,
    "requestId": "YenJW9-1565678980088"
```

}

Get Raysync authentication key

Interface path：/api/render/user/getRaySyncUserKey

Request method：POST

Request parameter：No

Example of return:
```
{
    "version": "1.0.0",
    "result": true,
    "message": "success",
    "code": 200,
    "data": {
        "channel": 2,
        "platform": 2,
        "signature": "rayvision2017",
        "version": "1.0.0",
        "userKey": "5394a44e890557d8d937b92086482dab",
        "id": 1868599,
        "userName": "wsh_12345",
        "zone": 1,
        "phone": "183160224171",
        "email": "testwangshunhui@rayvision",
        "loginTime": 1565682011157,
        "infoStatus": 0,
        "accountType": 2,
        "shareMainCapital": 0,
        "subDeleteTask": 0,
        "subDeleteCapital": 1,
        "useMainBalance": 0,
        "downloadDisable": 0,
        "raySyncUserKey": "40d59041f72809ffaa16146a36780595666c681e"
    },
    "serverTime": 1565682019430,
    "requestId": "4lkn0I-1565682010026"
}
```

Full speed rendering

Interface path：/api/render/task/fullSpeed

Request method：POST

Request parameter：

parameter	Type	Description	Memo
taskIds	List<Integer>	Yes	Task id

Example of request:
```
{
    "taskIds": [896587]
}
```

Example of return:
```
{
    "version":"1.0.0",
    "result":true,
    "message":"success",
    "code":200,
    "data":"success",
    "serverTime":1577953977797,
    "requestId":"T6ADVY-UHJlLVNlcnZpY2UwNA-1577953977699"
}
```