

# Transcoder REST API v1 documentation

## Service endpoint

To get service endpoint ssh to the staging server and run  
**kubectrl -n transcode svc**

EXTERNAL-IP of api-server is the service endpoint

## Authentication

All https requests must use basic authentication

User: "RestApiUser"

Password: "Tr@nsc0de!"

## REST Reference

### Get a List of Projects

GET <https://<transcoder-api-endpoint>/v1/projects>

Request body: must be empty

Response body: if successful it contains data with the following structure

```
{
  "data": [
    {
      "id": 5,
      "input_bucket": "p5_input_images",
      "input_bucket_PAR": "https://objectstorage.us-ashburn-1.oraclecloud.com/p/...../n/ocisateam/b/p10_input_images/o/",
      "name": "project10",
      "output_bucket": "p5_output_images",
      "output_bucket_PAR": "https://objectstorage.us-ashburn-1.oraclecloud.com/p/...../n/ocisateam/b/p10_output_images/o/",
      "state": "active"
    },
    {
      "id": 6,
      "input_bucket": "p6_input_images",
      "input_bucket_PAR": "https://objectstorage.us-ashburn-1.oraclecloud.com/p/...../n/ocisateam/b/input_images/o/",
      "name": "project11",
      "output_bucket": "p6_output_images",
      "output_bucket_PAR": "https://objectstorage.us-ashburn-1.oraclecloud.com/p/...../n/ocisateam/b/output_images/o/",
      "state": "active"
    }
  ]
}
```

## Get Project Details

GET [https://<transcoder-api-endpoint>/v1/projects/<project\\_id>](https://<transcoder-api-endpoint>/v1/projects/<project_id>)

Request body must be empty

Response body: if successful it contains JSON data with the following structure

GET <https://<transcoder-api-endpoint>/v1/projects/5>

```
{
  "data": {
    "id": 5,
    "input_bucket": "p10_input_images",
    "input_bucket_PAR": "https://objectstorage.us-ashburn-1.oraclecloud.com/p/...../n/ocisateam/b/p10_input_images/o/",
    "name": "project10",
    "output_bucket": "p10_output_images",
    "output_bucket_PAR": "https://objectstorage.us-ashburn-1.oraclecloud.com/p/...../n/ocisateam/b/p10_output_images/o/",
    "state": "active"
  }
}
```

## Get Project Configuration

GET [https://<transcoder-api-endpoint>/v1/projects/<project\\_id>/configuration](https://<transcoder-api-endpoint>/v1/projects/<project_id>/configuration)

Request body must be empty

Response body: if successful it contains JSON data with the following structure

GET <https://<transcoder-api-endpoint>/v1/projects/5/configuration>

```
{
  "data": {
    "TC_DB_HOST": "10.0.2.241",
    "TC_DB_NAME": "tc",
    "TC_DB_USER": "tc",
    "TC_DST_BUCKET": "p5_output_images",
    "TC_FFmpeg_CONFIG": " -map v:0 -s:0 1920x1080 -b:v:0 5M -maxrate 5M -minrate 5M -bufsize 10M -map v:0
-s:1 1280x720 -b:v:1 3M -maxrate 3M -minrate 3M -bufsize 3M -map v:0 -s:2 640x360 -b:v:2 1M -maxrate 1M -
minrate 1M -bufsize 1M -map a:0 -map a:0 -map a:0 -c:a aac -b:a 128k -ac 1 -ar 44100 -g 48 -sc_threshold 0 -c:v
libx264 -f hls -hls_time 5 -hls_playlist_type vod -hls_segment_filename stream_%v_%03d.ts -master_pl_name
master.m3u8 ",
    "TC_FFmpeg_HLS_BASE_URL": "",
    "TC_FFmpeg_STREAM_MAP": "v:0,a:0 v:1,a:1 v:2,a:2",
    "TC_IMAGE_LABEL": "1.1",
    "TC_IMAGE_LABTC_CPU_REQUEST_PER_JOB": "1.5",
    "TC_OCIR_REPO": "iad.ocir.io/ocisateam/mikep",
    "TC_OKE_NODEPOOL": "tc-nodepool",
    "TC_OS_NAMESPACE": "ocisateam",
    "TC_PROJECT_NAME": "project5",
    "TC_SRC_BUCKET": "p10_input_images",
    "TC_STREAM_ENDPOINT": "https://cell-1.streaming.us-ashburn-1.oci.oraclecloud.com",
    "TC_STREAM_OCID": "ocidl.stream.ocl.iad.amaaaaaaxkh5s6iazz3pmitf3lx2lqumthz2a4xk3xyr7kbcyumeiz53ia3a"
  }
}
```

## Update Project Configuration

PUT [https://<transcoder-api-endpoint>/v1/projects/<project\\_id>/configuration](https://<transcoder-api-endpoint>/v1/projects/<project_id>/configuration)

See below examples of request body JSON data.

Example1: update input and output bucket names:

```
{
  "TC_SRC_BUCKET": "new_input_images",
  "TC_DST_BUCKET": "new_output_images",
}
```

Example2: update FFMPEG transcoding parameters:

```
{
  "TC_FFMPEG_CONFIG": " -map v:0 -s:0 1920x1080 -b:v:0 5M -maxrate 5M -minrate 5M -bufsize 10M -map v:0 -s:1 1280x720 -b:v:1 3M -maxrate 3M -minrate 3M -bufsize 3M -map v:0 -s:2 640x360 -b:v:2 2M -maxrate 2M -minrate 2M -bufsize 1M -map a:0 -map a:0 -map a:0 -c:a aac -b:a 128k -ac 1 -ar 44100 -g 48 -sc_threshold 0 -c:v libx264 -f hls -hls_time 5 -hls_playlist_type vod -hls_segment_filename stream_%v_%03d.ts -master_pl_name master.m3u8 ",
  "TC_FFMPEG_STREAM_MAP": "v:0,a:0 v:1,a:1 v:2,a:2"
}
```

If successful, the response body is empty

## Create Project

POST <https://<transcoder-api-endpoint>/v1/projects>

See below examples of request body JSON data

Example1:

```
{
  "TC_PROJECT_NAME": "project20",
  "TC_SRC_BUCKET": "p20_input_images",
  "TC_DST_BUCKET": "p20_output_images",
}
```

Example2:

```
{
  "TC_PROJECT_NAME": "project20",
  "TC_SRC_BUCKET": "p20_input_images",
  "TC_DST_BUCKET": "p20_output_images",
  "TC_FFMPEG_CONFIG": " -map v:0 -s:0 1920x1080 -b:v:0 5M -maxrate 5M -minrate 5M -bufsize 10M -map v:0 -s:1 1280x720 -b:v:1 3M -maxrate 3M -minrate 3M -bufsize 3M -map v:0 -s:2 640x360 -b:v:2 2M -maxrate 2M -minrate 2M -bufsize 1M -map a:0 -map a:0 -map a:0 -c:a aac -b:a 128k -ac 1 -ar 44100 -g 48 -sc_threshold 0 -c:v libx264 -f hls -hls_time 5 -hls_playlist_type vod -hls_segment_filename stream_%v_%03d.ts -master_pl_name master.m3u8 ",
  "TC_FFMPEG_STREAM_MAP": "v:0,a:0 v:1,a:1 v:2,a:2"
}
```

Variables that are not set in the request body will be set to the default values.

Response body: if successful it contains JSON data of the created project in the following format:

```
{
  "data": {
    "id": 18,
    "input_bucket": "p21_input_images",
    "name": "project21",
    "output_bucket": "p21_output_images",
    "state": "active"
  }
}
```

## Update Project State

PUT [https://<transcoder-api-endpoint>/v1/projects/<project\\_id>](https://<transcoder-api-endpoint>/v1/projects/<project_id>)

Request body must contain JSON with project state value.

To deactivate a project:

```
{
  "state": "inactive"
}
```

To activate a project:

```
{
  "state": "active"
}
```

If successful, the response body is empty

## Get Project Jobs

GET [https://<transcoder-api-endpoint>/v1/projects/<project\\_id>/jobs](https://<transcoder-api-endpoint>/v1/projects/<project_id>/jobs)

Request body: must be empty.

Response body: if successful it contains data with the following structure

<https://<transcoder-api-endpoint>/v1/projects/5/jobs>

```
{
  "data": [
    {
      "end_time": "Mon, 18 Oct 2021 22:52:31 GMT",
      "id": 3,
      "input_bucket": "p10_input_images",
      "input_file": "video1.mov",
      "output_bucket": "p10_output_images",
      "project_id": 5,
      "start_time": "Mon, 18 Oct 2021 22:28:53 GMT",
      "status": "COMPLETED",
      "transcoded_path": "video1.mov/master.m3u8"
    }
  ]
}
```

```
]
}
```

## Get Job Details

GET [https://<transcoder-api-endpoint>/v1/jobs/<job\\_id>](https://<transcoder-api-endpoint>/v1/jobs/<job_id>)

Request body: must be empty

Request response: if successful it contains data with the following structure

<https://<transcoder-api-endpoint>/v1/jobs/3>

```
{
  "data": [
    {
      "end_time": "Mon, 18 Oct 2021 22:52:31 GMT",
      "id": 3,
      "input_bucket": "p10_input_images",
      "input_file": "video1.mov",
      "output_bucket": "p10_output_images",
      "project_id": 5,
      "start_time": "Mon, 18 Oct 2021 22:28:53 GMT",
      "status": "COMPLETED",
      "transcoded_path": "video1.mov/master.m3u8"
    }
  ]
}
```

Get Job Details call accepts <job\_id> set to the wild card:

[https://<transcoder-api-endpoint>/v1/jobs/\\*](https://<transcoder-api-endpoint>/v1/jobs/*)

If set it returns all jobs from all projects.

## Get Project Transcoded Files

[https://<transcoder-api-endpoint>/v1/project/<project\\_id>/objects](https://<transcoder-api-endpoint>/v1/project/<project_id>/objects)

Request body: must be empty

Request response: if successful it contains data with the following structure

<https://<transcoder-api-endpoint>/v1/project/7/objects>

```
{
  "data": [
    {
      "bucket": "output_images",
      "create_time": "Tue, 19 Oct 2021 15:03:46 GMT",
      "id": 7,
      "job_id": 16,
      "name": "video2.mov",
      "object": "video2.mov/master.m3u8",
      "thumbnail": "thumbnails/video2.mov_thumb.png",
      "url": ""
    }
  ],
}
```

```

{
  "bucket": "output_images",
  "create_time": "Wed, 20 Oct 2021 16:04:40 GMT",
  "id": 9,
  "job_id": 17,
  "name": "video1.mov",
  "object": "video1.mov/master.m3u8",
  "thumbnail": "thumbnails/video1.mov_thumb.png",
  "url": ""
}
]
}

```

Get Project Transcoded Files call accepts <project\_id> set to the wild card:  
[https://<transcoder-api-endpoint>/v1/jobs/\\*](https://<transcoder-api-endpoint>/v1/jobs/*)

If set it returns all transcoded files from all projects.

## Get Bucket Objects

GET <https://<transcoder-api-endpoint>/v1/objects>

Request body must contain JSON with project bucket name:

```

{
  "bucket": "input_images"
}

```

Request response: if successful it contains a list of objects in the bucket:

```

{
  "data": [
    {
      "bucket": "output_images",
      "create_time": "Fri, 12 Nov 2021 16:08:10 GMT",
      "id": 1,
      "job_id": 1,
      "name": "video1.mov",
      "object": "video1.mov/master.m3u8",
      "thumbnail": "thumbnails/video1.mov_thumb.png",
      "url": ""
    },
    {
      "bucket": "output_images",
      "create_time": "Fri, 12 Nov 2021 16:08:10 GMT",
      "id": 2,
      "job_id": 2,
      "name": "video2.mov",
      "object": "video2.mov/master.m3u8",
      "thumbnail": "thumbnails/video2.mov_thumb.png",

```

```

        "url": ""
    }
]
}

```

## Get Statistics

<https://<transcoder-api-endpoint>/v1/statistics>

Request body: must be empty

Request response: if successful it contains statistics about COMPLETED/RUNNING/ERROR jobs and total number of transcoded files for all projects

```

{
  "data": {
    "jobs": [
      {
        "count": 2,
        "status": "COMPLETED"
      },
      {
        "count": 1,
        "status": "RUNNING"
      },
      {
        "count": 1,
        "status": "ERROR"
      }
    ],
    "transcoded_files": 2
  }
}

```