

# Go Examples

This is an example in Go, please modify it to fit your environment, be sure to change the video input and output paths as well as the API\_KEY and AWS\_ACCESS and AWS\_SECRET keys.

```
package main

import (
    "bytes"
    "encoding/json"
    "fmt"
    "io/ioutil"
    "net/http"
)

func main() {
    url := "https://streamengine.igolgi.com/api/v0/job"

    // Authentication credentials
    username := "INSERT_YOUR_API_KEY"
    password := "a"

    // Data to be sent in the POST request
    data := map[string]interface{}{
        "videoProfiles": []map[string]interface{}{
            {
                "output":      "s3://igolgi-se-out/go-testcwaudio3f.mp4",
                "width":      1920,
                "height":     1080,
                "video_bitrate_mode": "cbr",
                "video_bitrate": 2301,
                "video_format":  "progressive",
                "video_framerate": "1x",
                "audio_profiles": "1",
            },
        },
        "audioProfiles": []map[string]interface{}{
```

```

    {
      "audio_bitrate": 256,
      "audio_channels": 2,
      "audio_codec": "aac",
      "source_stream": 1,
    },
  ],
  "master_variant_mode": false,
  "output_container": "mp4",
  "video_codec": "h.264",
  "input": "s3://igolgi-se-in/GOPR8297-2.7K-30-fps.MP4",
  "auto_detelecine_flag": false,
  "cloud_credentials": map[string]interface{}{
    "input": map[string]string{
      "cloud_provider": "aws",
      "access_key": "INSERT_YOUR_AWS_ACCESS_KEY",
      "secret_key": "INSERT_YOUR_AWS_SECRET_KEY",
      "region": "us-east-2",
    },
    "output": map[string]string{
      "cloud_provider": "aws",
      "access_key": "INSERT_YOUR_AWS_ACCESS_KEY",
      "secret_key": "INSERT_YOUR_AWS_SECRET_KEY",
      "region": "us-east-2",
    },
  },
}

jsonData, err := json.Marshal(data)

if err != nil {
  fmt.Println("Error marshalling JSON:", err)
  return
}

req, err := http.NewRequest("POST", url, bytes.NewBuffer(jsonData))

if err != nil {
  fmt.Println("Error creating request:", err)
  return
}

```

```

req.Header.Set("Content-Type", "application/json")
req.SetBasicAuth(username, password)

client := &http.Client{}
resp, err := client.Do(req)
if err != nil {
    fmt.Println("Error sending request:", err)
    return
}

defer resp.Body.Close()

body, err := ioutil.ReadAll(resp.Body)
if err != nil {
    fmt.Println("Error reading response:", err)
    return
}

fmt.Println("Response:", string(body))
}

```

save the script above as se\_api\_aws.go or similar

run  
go run se\_api\_aws.go

it will give print something like:

Response: {"\_auto\_generated\_id\_":**13455**,"cloud":"aws" ....

Remember your job number above and use it with the following script to check the status.

```

package main

import (
    "encoding/base64"
    "encoding/json"
    "fmt"
    "io/ioutil"
    "net/http"
    "os"
)

```

```

func main() {
    if len(os.Args) < 2 {
        fmt.Println("Please provide a job ID as an argument.")
        os.Exit(1)
    }

    jobID := os.Args[1]
    url := fmt.Sprintf("https://streamengine.igolgi.com/api/v0/job/%s", jobID)
    apiKey := "INSERT_YOUR_API_KEY" // Replace with your actual API key

    req, err := http.NewRequest("GET", url, nil)
    if err != nil {
        fmt.Println("Error creating request:", err)
        return
    }

    // Set Authorization header
    authHeader := base64.StdEncoding.EncodeToString([]byte(apiKey + ":"))
    req.Header.Set("Authorization", "Basic "+authHeader)

    client := &http.Client{}
    resp, err := client.Do(req)
    if err != nil {
        fmt.Println("Error sending request:", err)
        return
    }
    defer resp.Body.Close()

    body, err := ioutil.ReadAll(resp.Body)
    if err != nil {
        fmt.Println("Error reading response:", err)
        return
    }

    if resp.StatusCode == 200 {
        var data map[string]interface{}
        err = json.Unmarshal(body, &data)
        if err != nil {
            fmt.Println("Error parsing JSON:", err)
            return
        }
    }
}

```

```

    }

    fmt.Println("Job Status:")
    fmt.Println("-----")
    status := data["status"].(map[string]interface{})
    fmt.Printf("Job ID: %s\n", status["job_id"])
    fmt.Printf("State: %s\n", status["state"])
    fmt.Println("Progress:")
    fmt.Printf("  Transcode: %v%%\n", status["tcode_progress"])
    fmt.Printf("  Transfer: %v%%\n", status["xfer_progress"])
    fmt.Println("Time:")
    fmt.Printf("  Transcode: %v seconds\n", status["tcode_time"])
    fmt.Printf("  Transfer: %v seconds\n", status["xfer_time"])
    fmt.Println("Speed:")
    fmt.Printf("  Transcode: %v x\n", status["tcode_speed"])
    fmt.Printf("  Transfer: %v MB/s\n", status["xfer_speed"])
    fmt.Printf("Job Completed: %v\n", status["job_completed"])

    fmt.Println("\nJob Config:")
    fmt.Println("-----")
    config, err := json.MarshalIndent(data["config"], "", " ")
    if err != nil {
        fmt.Println("Error formatting config:", err)
    } else {
        fmt.Println(string(config))
    }
} else {
    fmt.Printf("Failed to retrieve job. Status code: %d\n", resp.StatusCode)
    fmt.Printf("Response: %s\n", string(body))
}
}

```

Save the script above as `se-api-status.go` or similar.

Run

```
go run se-api-status.go 13455
```

You'll see a result similar to the one below. The job ID of status will be different than the submit job id. You can rerun the status until you see Job Completed: true.

Job Status:

-----

Job ID: 4920

State: ready

Progress:

Transcode: 0%

Transfer: 0%

Time:

Transcode: <nil> seconds

Transfer: 78460.45 seconds

Speed:

Transcode: -1 x

Transfer: -1.0 MB/s

Job Completed: false

Job Config:

-----

```
{
  "audioProfiles": [
    {
      "audio_bitrate": 256,
      "audio_channels": 2,
      "audio_codec": "aac",
      "source_stream": 1
    }
  ],
  "audio_volume": 100,
  "gop_length": 1,
  "h264_quality": "good",
  "input": "s3://igolgi-se-in/GOPR8297-2.7K-30-fps.MP4",
  "output_container": "mp4",
  "picture_transform": "none",
  "scte35_passthrough": false,
  "segmented_output_dash": false,
  "segmented_output_hls": false,
  "separate_audio": false,
  "videoProfiles": [
    {
      "audio_profiles": "1",
      "height": 1080,
```

```
"output": "s3://igolgi-se-out/go-testcwaudio3f.mp4",  
"video_bitrate": 2301,  
"video_bitrate_mode": "cbr",  
"video_framerate": "1x",  
"width": 1920  
}  
],  
"video_aspect_ratio": "passthrough",  
"video_codec": "h.264"  
}
```

On linux/Ubuntu if you have never used go.

You can run:

```
$ sudo apt update
```

```
$ sudo apt install golang-go
```

---

Revision #2

Created 16 July 2024 21:31:22 by Admin

Updated 25 July 2024 16:43:34 by Admin