

Convert Files Using Amazon Elastic Transcoder

TRAINING LAB

START LAB

Follow these steps:

- Log in to the Amazon Web Service Console
- Create a pipeline
- Modify system presets (optional)
- Create a transcoding job

Amazon Elastic Transcoder converts media files into formats required by smartphone, tablets and other playback devices. These media files are stored in Amazon S3 buckets in the cloud. Amazon Elastic Transcoder uses AWS Identity and Access Management (IAM) roles to enable you to securely control access to your media files.

During this lab you will learn how to convert media files using the Amazon Elastic Transcoder from the Amazon Management Console.

Note:

AWS CloudFormation does not currently support template creation for AWS Elastic Transcoder.

Prerequisites:

Before beginning this lab, you must perform the following tasks:

- ❑ Create three Amazon S3 buckets:
 - An input bucket to upload client files
 - An output bucket for transcoded files
 - A bucket to house file thumbnails
- ❑ Upload a media file to the input bucket you created.
- ❑ Create an IAM role that defines permissions for the media files residing in the buckets you created.

Please refer to the following labs to perform prerequisite tasks:

- ❑ Create Your First Amazon S3 bucket [\[LINK\]](#)
- ❑ Introduction to IAM [\[LINK\]](#)

Learning Objectives:

By the end of this lab you should be able to:

- ❑ Create a pipeline to manage transcoding from one file format to another format type
- ❑ Modify system presets (optional)
- ❑ Create a transcoding job

Follow these steps:

- Log in to the Amazon Web Service Console
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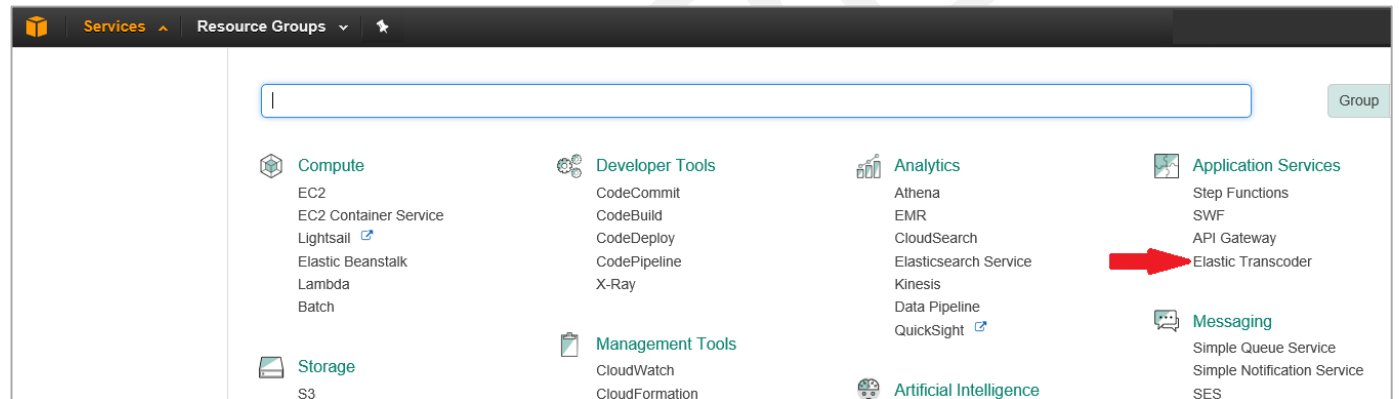
STEP 1

Log in to the Amazon Web Service Console

You will use the AWS Management Console to complete all the lab steps.

Select a region that is as close to you to optimize file upload speed.

Select Elastic Transcoder from the listed services.



NEXT

Follow these steps:



Log in to the Amazon Web Service Console

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There are three main components of Amazon Elastic Transcoder: Pipelines, Jobs and Presets. The first step is to create a pipeline.

STEP 2 Create a Pipeline

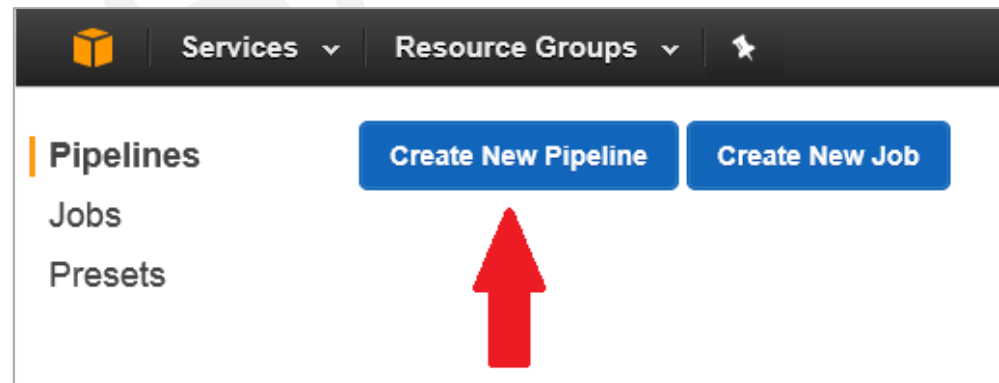
A pipeline manages your transcoding jobs. It is a workflow that connects the input bucket to the output bucket.

You can establish different pipelines for different types of formatting jobs. For example, you can set up one pipeline for large content files and a second pipeline for small content files.

Note:

The number of pipelines per AWS account is limited. For each region, four (4) pipelines are allotted per AWS account.

From the Elastic Transcoder dashboard, select **Create New Pipeline** button.



Follow these steps:



Log in to the Amazon Web Service Console



Create a pipeline



Modify system presets (optional)



Create a transcoding job

On the Create New Pipeline screen:

For Pipeline Name, enter **Lab Pipeline**.

Enter Input Bucket name. This is the bucket you created to upload files to AWS. A media file should currently reside in this bucket. Follow the procedure in the lab *Creating Amazon S3 Bucket* to create an input bucket.

Select IAM Role that you created to manage the transcoding of media files. Follow the procedure *Introduction to IAM* lab to set up the role.

Create New Pipeline

A pipeline is a queue for your transcoding jobs. You can have more than one pipeline per AWS account. jobs.

Pipeline Name ⓘ

Input Bucket ⓘ

IAM Role ⓘ

Follow these steps:



Log in to the Amazon Web Service Console



Create a pipeline



Modify system presets (optional)



Create a transcoding job

Enter Bucket name. This is the bucket you created for transcoded files. Follow the procedure in the lab *Creating Amazon S3 Bucket* to create an output bucket.

Select **Standard** for Storage Class.

To modify permissions for the output files, click [+ Add Permission](#). For example, Amazon Elastic Transcoder makes transcoded files private by default. For this lab, we will keep that setting. If you wanted to make the output public, you would modify the output permissions.

Configuration for Amazon S3 Bucket for Transcoded Files and Playlists

Bucket



Storage Class

Select One...



[+ Add Permission](#)

Follow these steps:



Log in to the Amazon Web Service Console

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The Transcoder creates a preview thumbnail for the media file. Enter Bucket name for the thumbnail. Follow the procedure in the lab *Creating Amazon S3 Bucket* to create a bucket for thumbnails.

Select **Standard** for Storage Class.

To modify permissions for the thumbnail bucket, click [+ Add Permission](#)

Configuration for Amazon S3 Bucket for Thumbnails

Bucket



Storage Class

Standard



[+ Add Permission](#)

Click **Save New Pipeline** to save the pipeline you created.

NEXT

Follow these steps:



Log in to the Amazon Web Service Console



Create a pipeline



Modify system presets (optional)



Create a transcoding job

STEP 3

Modify System Presets (optional)

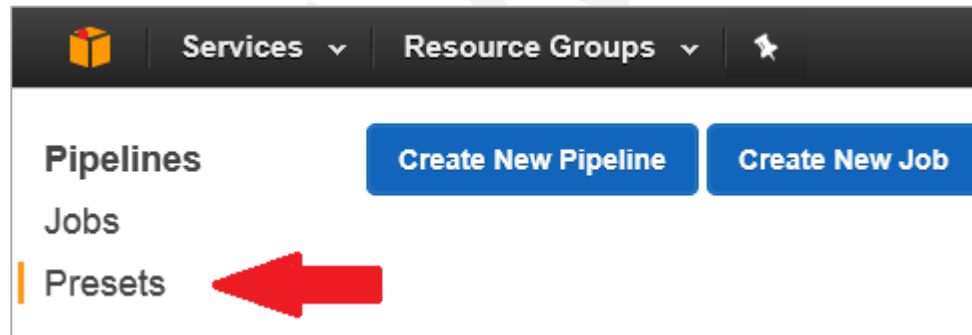
Amazon Elastic Transcoder provides system presets that define the format of the output file. For example, the resolution of the video file or the container (mpg, mp4, etc.) for the file. For this lab, you will customize a preset.

Note:

You cannot update an existing preset. However, you can create presets for additional formats.

The easiest way to accomplish this task is to copy a similar preset, modify the settings, and save the preset with a new name.

On the Elastic Transcoder dashboard, select **Presets**.



Follow these steps:



Log in to the Amazon Web Service Console



Create a pipeline



Modify system presets (optional)



Create a transcoding job

On the Presets screen:

Select the preset that you wish to customize and press the **Copy** button.

The values from the selected preset are copied into the fields for the new preset and the Preset Editor opens.

[SHOW PRESET EDITOR SCREEN]

Enter the Name **Lab Preset** for the new preset.

Locate the setting(s) you wish to modify and customize accordingly.

Click **Create Preset** button. The custom preset will now display on the Presets screen.

[SHOW PRESET SCREEN WITH ARROW POINTING TO NEW "Lab Preset"]

You have now created a transcoder pipeline with presets. You are ready to create a transcoding job.

NEXT

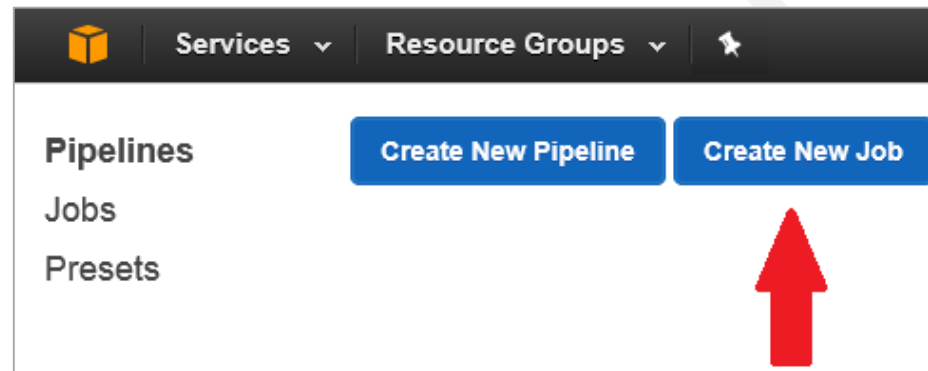
Follow these steps:

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STEP 4 Create a Transcoding Job

Once you have uploaded a media file to your input bucket and created a pipeline, you are ready to set up a transcoding job.

On the Elastic Transcoder dashboard, select **Create New Job** button.



Follow these steps:



Log in to the Amazon Web Service Console



Create a pipeline



Modify system presets (optional)



Create a transcoding job

On the Create New Transcoding Job screen:

Select **Lab Pipeline**. This is the pipeline that you created in Step 2.

For Input Key, enter the name of the media file that you uploaded to the input bucket to be converted.

For Output Key Prefix, enter a unique identifier for the media file for Amazon S3 file management. For this lab, enter **testvideo**.

The screenshot shows the 'Create a New Transcoding Job' interface in the AWS Management Console. At the top, there's a dark header bar with the AWS logo, 'Services' with a dropdown arrow, and 'Edit' with a dropdown arrow. Below the header, the title 'Create a New Transcoding Job' is displayed, followed by a descriptive sentence: 'A job contains all of the information that Elastic Transcoder needs to transcode one media file into another format.' The form contains three labeled fields: 'Pipeline' with a dropdown menu showing 'Lab Pipeline', 'Input Key' with a text box containing 'testvideo.mov', and 'Output Key Prefix' with a text box containing 'testvideo'. Each field has a small information icon (i) to its right.

Follow these steps:



Log in to the Amazon Web Service Console



Create a pipeline



Modify system presets (optional)



Create a transcoding job

If you created **Lab Preset** (in optional Step 3) select that as your preset. If not, select one of the system presets listed.

For Output Key, enter the name **Lab Output** for the converted file.

For Segment Duration enter **10**. This indicates the number of seconds included in each segment output.

Select **Yes** to Create Thumbnails. This will generate a thumbnail preview of the file once it has been converted.

Set Output Rotation to **auto**.

Output Details (1 of 1)

Preset	Lab Preset	i
Output Key	laboutput	i
Segment Duration		i
Create Thumbnails	<input type="radio"/> No <input checked="" type="radio"/> Yes	i
Output Rotation (Clockwise)	auto	i

Follow these steps:



Log in to the Amazon Web Service Console



Create a pipeline



Modify system presets (optional)



Create a transcoding job

You can create multiple versions of the same content in one job from the Playlist section of the screen.

Enter **index** as the Master Playlist Name.

This is the name of the container for your multiple output types.

Next, you will select all the types of Outputs in Master Playlist you wish to generate from the media file. For this lab, select the following outputs:

his_400k_

his_1m_

his_2m_

Note:

You can add additional output types as required.

Playlist (1 of 1)

Master Playlist Name	<input type="text" value="index"/>	
Playlist Format	HLSv3	
Outputs in Master Playlist	<input type="text" value="his_400k_"/>	
Outputs in Master Playlist	<input type="text" value="his_1m_"/>	
Outputs in Master Playlist	<input type="text" value="his_2m"/>	

Click the **Create New Job** button. The transcoding process will begin.

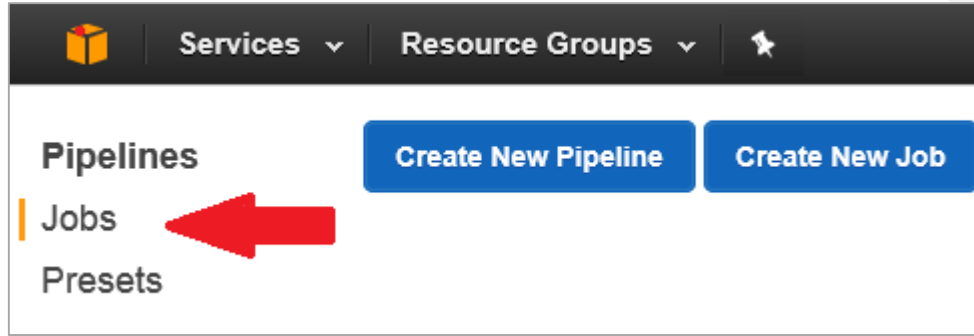
NEXT

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Once the job has completed successfully, the output files will be located in the output bucket.

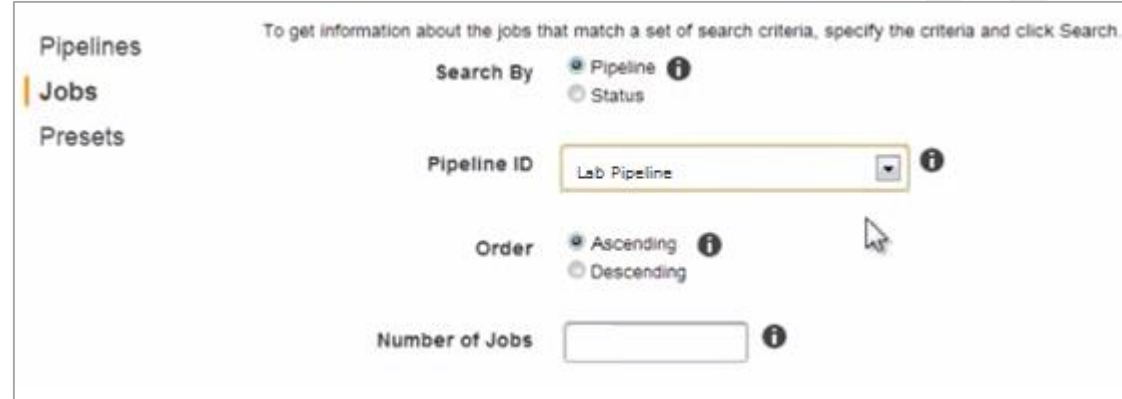
You can check the status of the job, by clicking **Jobs** on the Elastic Transcoder dashboard.



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You have the option to search by pipeline or status. Search by **Pipeline**.
Next, select **Lab Pipeline** as the Pipeline ID.
Click the **Search** button.



The screenshot shows the 'Jobs' section of the AWS console. On the left, there are tabs for 'Pipelines', 'Jobs' (which is selected), and 'Presets'. The main area contains search criteria: 'Search By' with radio buttons for 'Pipeline' (selected) and 'Status'; 'Pipeline ID' with a dropdown menu showing 'Lab Pipeline'; 'Order' with radio buttons for 'Ascending' (selected) and 'Descending'; and 'Number of Jobs' with an empty input field. Information icons (i) are present next to the 'Search By', 'Pipeline ID', 'Order', and 'Number of Jobs' labels. A note at the top says: 'To get information about the jobs that match a set of search criteria, specify the criteria and click Search.'

The search results display at the bottom of the **Jobs** screen.





Filter:

	ID	Pipeline ID	Input Key	Output Key	Status
 ▶	1360709279414-ba460b	1360708601176-ed7e78	testvideo.mo	laboutput.mp4	Complete

As you can see the status of your job is **Complete**.

NEXT

Completed steps:

-  Log in to the Amazon Web Service Console
-  Create a pipeline
-  Modify system presets (optional)
-  Create a transcoding job

Congratulations!
You have successfully completed this lab.

LAB END