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

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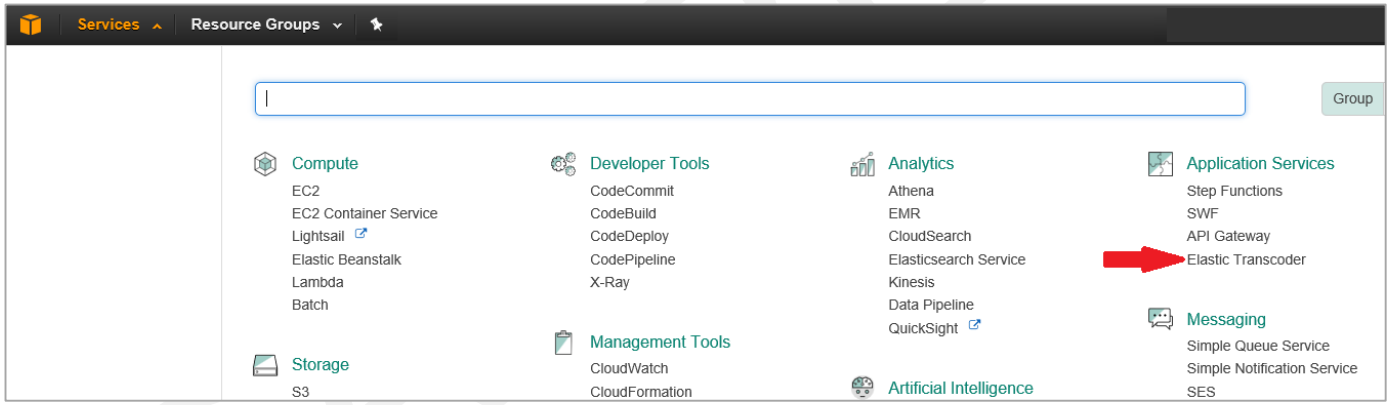
STEP 1

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

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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

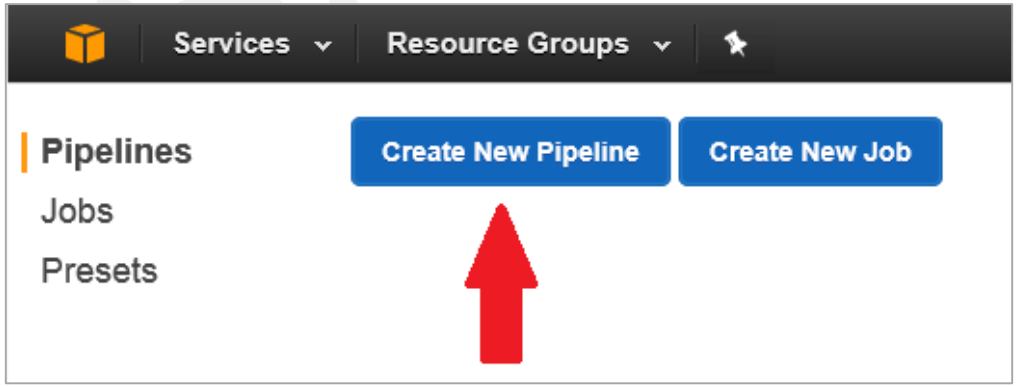
Create a Pipeline

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:

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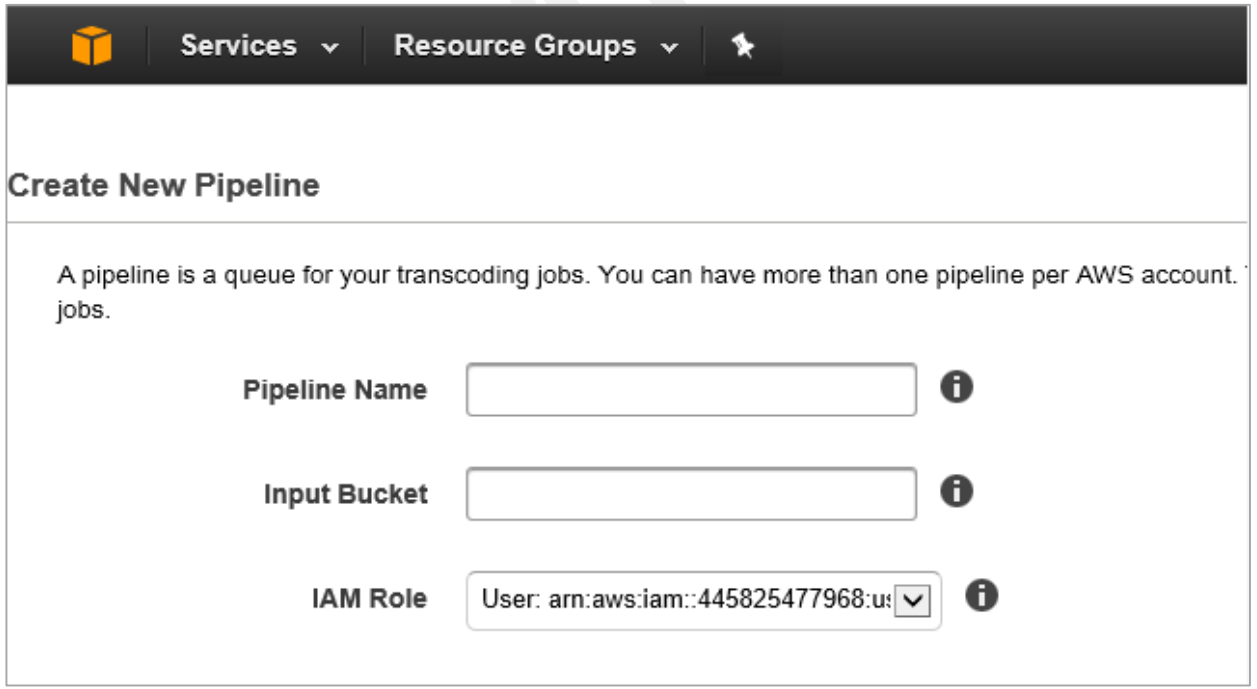
On the Create New Pipeline screen:

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.



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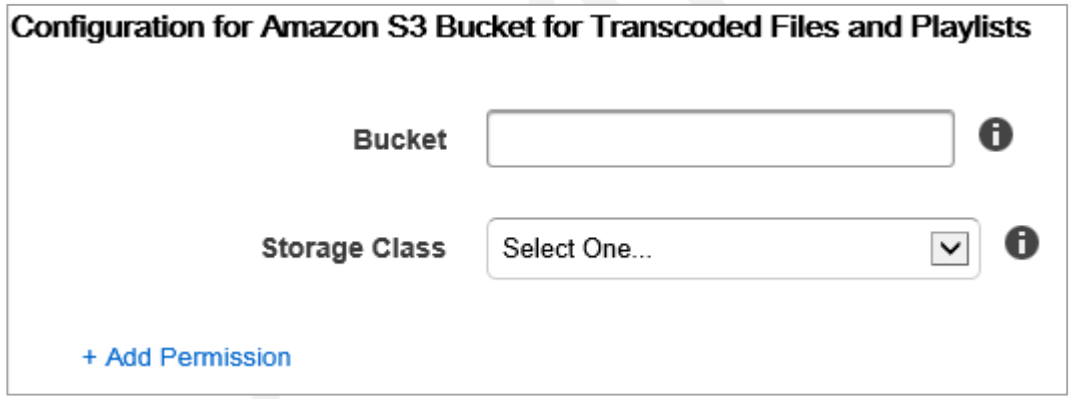
Enter Bucket name. This is the bucket you created for transcoded files. Follow the procedure in the lab *Creating Amazon S3 Bucket* to create an output bucket.

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.



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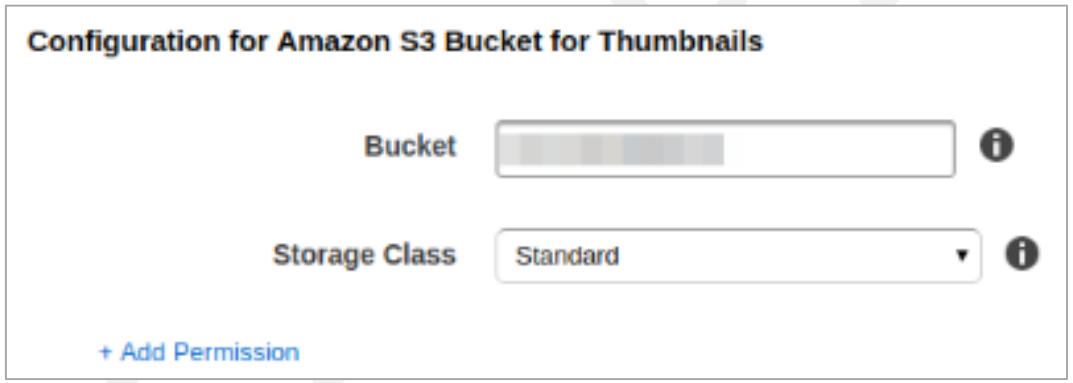
The Transcoder creates a preview thumbnail for the media file.
Enter Bucket name for the thumbnail. Follow the procedure in the lab *Creating Amazon S3 Bucket* to create a bucket for thumbnails.

Select **Standard** for Storage Class.

To modify permissions for the thumbnail bucket, click + Add Permission



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

NEXT

Follow these steps:

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- ➢ Create a transcoding job

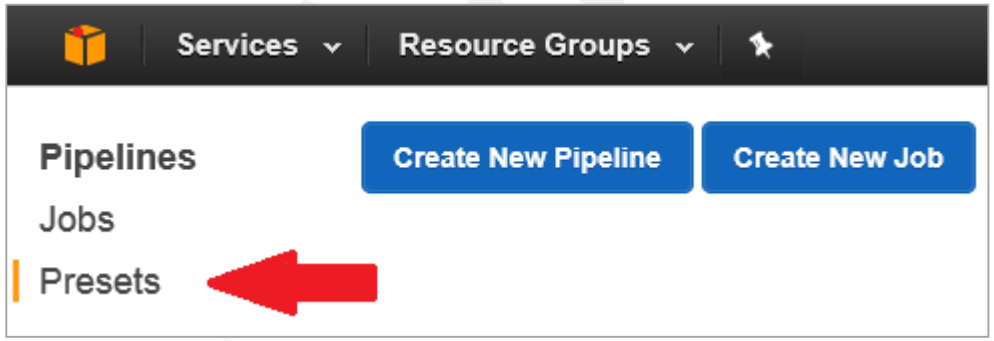
STEP 3 Modify System Presets (optional)

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**.



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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

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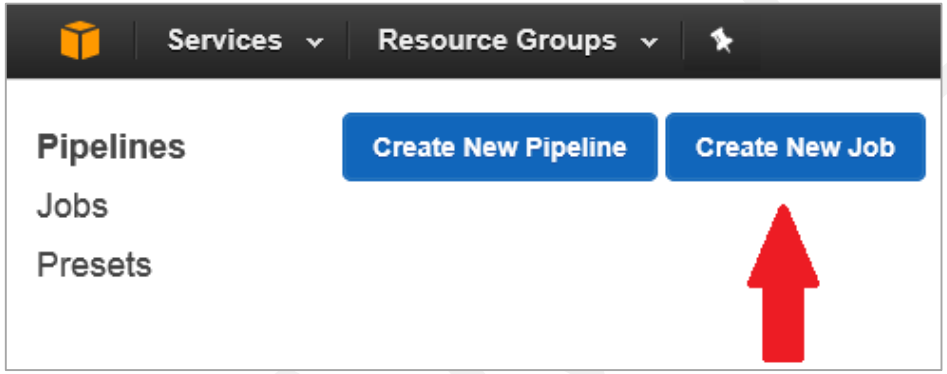
STEP 4 Create a Transcoding Job

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:

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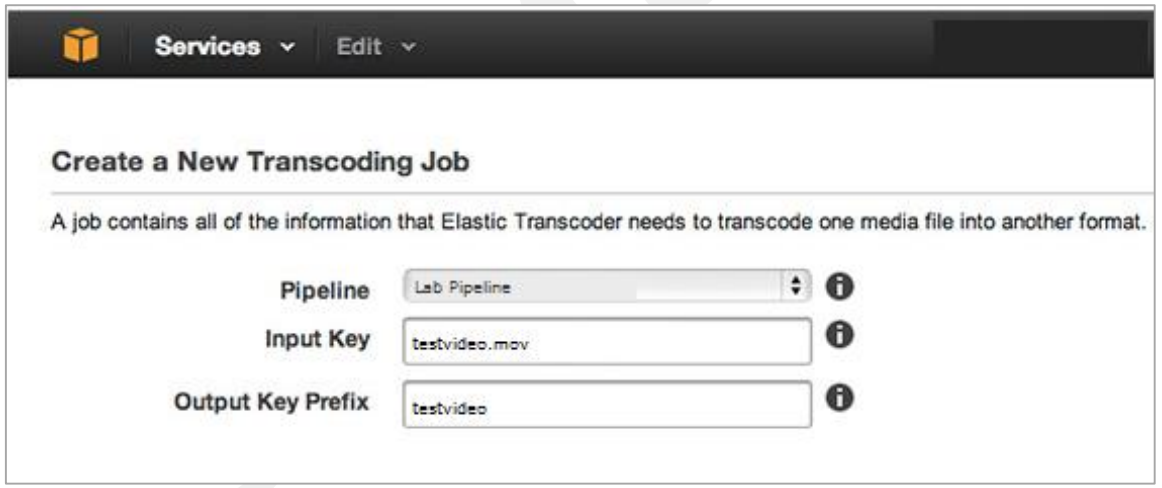
- ✓ Create a pipeline
- ✓ Modify system presets (optional)
- ➢ Create a transcoding job

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.



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- ➢ Create a transcoding job

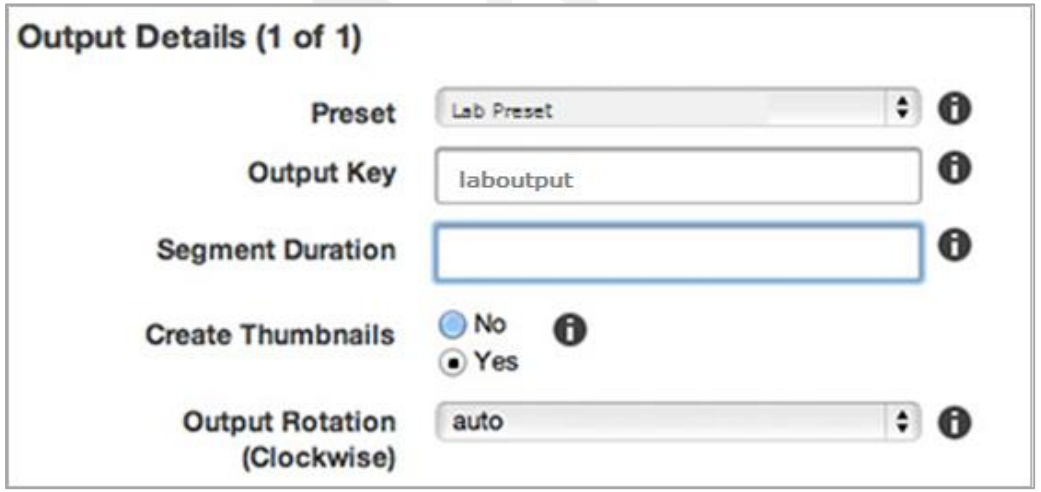
If you created **Lab Preset** (in optional Step 3) select that as your preset. If not, select one of the system presets listed.

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**.



Follow these steps:

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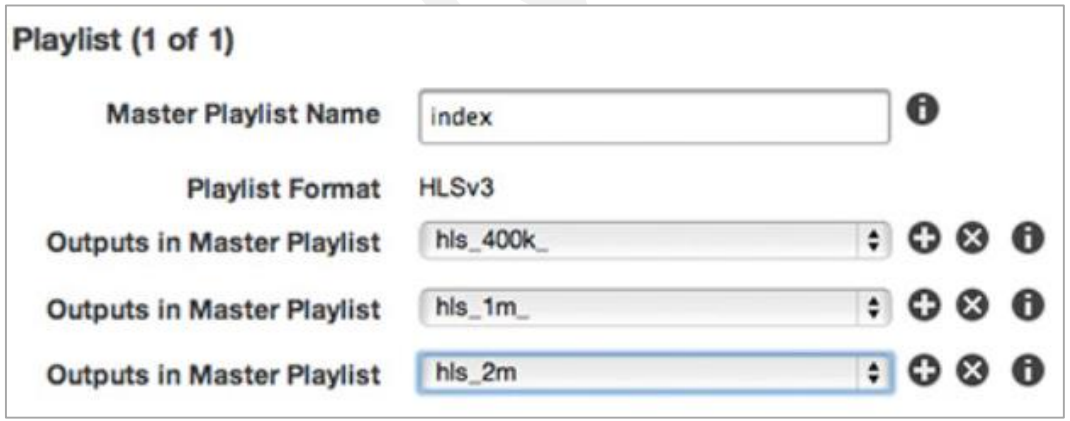
You can create multiple versions of the same content in one job from the Playlist section of the screen.

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.



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

NEXT

Follow these steps:

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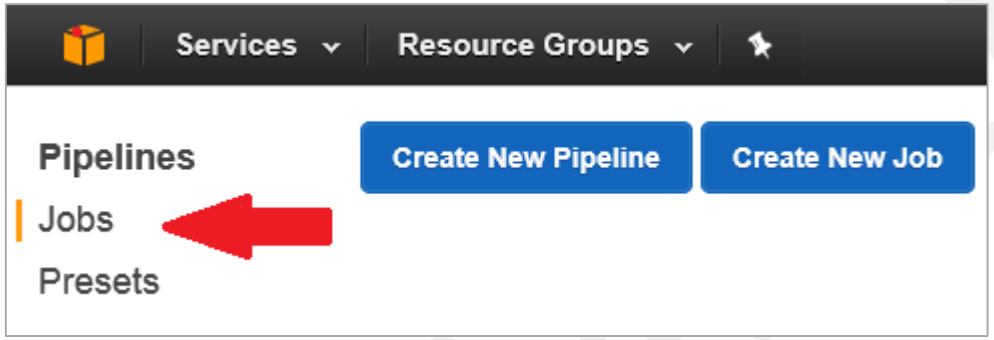
- ➢ Create a transcoding job

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.



Follow these steps:

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- ✓ Create a pipeline
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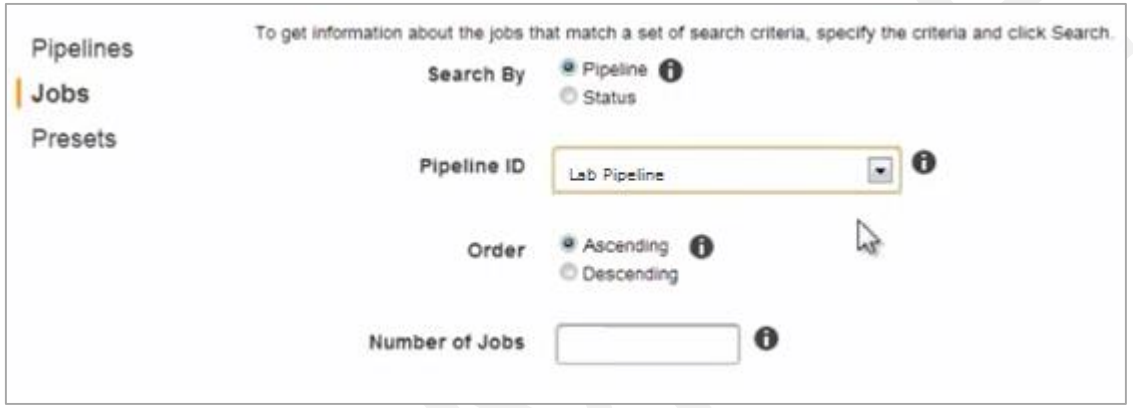
- ➢ Create a transcoding job

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

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
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Congratulations!
You have successfully completed this lab.

LAB END