

# VERTEX AI PIPELINES

## SCREENSHOTS:

### CREATED A SIMPLE PIPELINE FIRST:

The screenshot displays the Google Cloud Platform (GCP) Vertex AI Pipelines interface. The browser address bar shows the URL: `console.cloud.google.com/vertex-ai/locations/us-central1/pipelines/runs/hello-world-pipeline-20211211074218?project=cmpe256nlp`. The interface includes a sidebar with navigation options: Dashboard, Datasets, Features, Labeling tasks, Workbench, Pipelines (selected), Training, Experiments, Models, Endpoints, Batch predictions, and Metadata. The main content area shows a pipeline run for 'hello-world-pi...'. The pipeline graph consists of three steps: 'emoji' (python3.7), 'product name' (python3.9), and 'build-sentence' (python3.7). The 'emoji' and 'product name' steps are connected to the 'build-sentence' step. The pipeline run is currently at 55% completion, with 3/3 steps completed. The right-hand panel displays the 'Pipeline run analysis' for the 'hello-world-pipeline-20211211074218' run. It includes a 'SUMMARY' tab and a 'NODE INFO' tab. The 'Basic info' section shows the following details:

Parameter	Type	Value
Duration		2 sec
Started		Dec 10, 2021, 11:42:21 PM
Completed		Dec 10, 2021, 11:42:23 PM
Run name		hello-world-pipeline-20211211074218
Pipeline name		hello-world
Runtime environment		Serverless
Region		us-central1
Service account		376556357571-compute@developer.gserviceaccount.com

The 'Debugging info' section provides a link to 'View pipeline proto'. The 'Run Parameters' section shows the pipeline parameter values used for this run:

Parameter	Type	Value
emoji_str	string	sparkles
text	string	Vertex Pipelines

The bottom of the interface shows a 'Logs' section with a scroll bar.

# VERTEX AI PIPELINES

The screenshot displays the Google Cloud Platform Vertex AI console. The left sidebar shows the navigation menu with 'Pipelines' selected. The main area shows a pipeline run analysis for 'hello-world-pipeline'. The pipeline graph consists of three steps: 'emoji' (python 3.7), 'build-sentence' (python 3.7), and 'product-name' (python 3.9). The 'build-sentence' step is highlighted. The right panel shows the 'Pipeline run analysis' with a 'SUMMARY' tab. The 'Execution Info' section shows the run is 'Cached'. The 'Input Parameters' table lists 'emojitext' (string, sparkles), 'emoji' (string, 🌟), and 'product' (string, Vertex Pipelines). The 'Output Parameters' table lists 'Output' (string, Vertex Pipelines is 🌟).

Vertex AI

Dashboard

Datasets

Features

Labeling tasks

Workbench

Pipelines

Training

Experiments

Models

Endpoints

Batch predictions

Metadata

Marketplace

hello-world-pi...

CLONE

STOP

DELETE

Runtime Graph

3/3 steps completed

Expand Artifacts

55%

Pipeline run analysis

SUMMARY

NODE INFO

Execution Info

Cached

VIEW JOB

VIEW LOGS

Display name

build-sentence

Name

build-sentence

Type

system.ContainerExecution

Duration

0 sec

Started

Dec 10, 2021, 11:42:23 PM

Completed

Dec 10, 2021, 11:42:23 PM

Input Parameters

Parameter	Type	Value
emojitext	string	sparkles
emoji	string	🌟
product	string	Vertex Pipelines

Output Parameters

Parameter	Type	Value
Output	string	Vertex Pipelines is 🌟

Logs

## CREATED AN END-TO-END PIPELINE:

The screenshot displays the Google Cloud Platform Vertex AI console. The left sidebar shows the navigation menu with 'Pipelines' selected. The main area shows a pipeline run analysis for 'automl-tab-beans-training'. The pipeline graph consists of five steps: 'tabulardataset-create' (google-aiplatform tabulardataset-create), 'automltabulartrainingjob' (google-aiplatform automltabulartrainingjob), 'classification-model-eval' (google-aiplatform classification-model-eval), 'condition-deploy-decision-tree' (google-aiplatform condition-deploy-decision-tree), and 'condition-deploy-decision-tree' (google-aiplatform condition-deploy-decision-tree). The 'automltabulartrainingjob' step is highlighted. The right panel shows the 'Pipeline run analysis' with a 'SUMMARY' tab. The 'Basic info' section shows the run is 'Completed'. The 'Run Parameters' table lists 'api\_endpoint' (string, us-central1-aiplatform.googleapis.com), 'gcp\_region' (string, us-central1), 'thresholds\_dict\_str' (string, {'auRoc': 0.95}), 'display\_name' (string, automl-beans1639208542), 'project' (string, cmpe256nlp), and 'bq\_source' (string, bq://aju-dev-demos.beans.beans1).

Vertex AI

Dashboard

Datasets

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Labeling tasks

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Metadata

Marketplace

automl-tab-be...

CLONE

STOP

DELETE

Runtime Graph

1/6 steps completed

Expand Artifacts

65%

Pipeline run analysis

SUMMARY

NODE INFO

Basic info

Duration

11 min 56 sec

Started

Dec 10, 2021, 11:42:26 PM

Completed

Run name

automl-tab-beans-training-v2-20211211074224

Pipeline name

automl-tab-beans-training-v2

Runtime environment

Serverless

Region

us-central1

Service account

376556357571-compute@developer.gserviceaccount.com

Debugging info

View pipeline proto

Run Parameters

Pipeline parameter values used for this run

Parameter	Type	Value
api_endpoint	string	us-central1-aiplatform.googleapis.com
gcp_region	string	us-central1
thresholds_dict_str	string	{'auRoc': 0.95}
display_name	string	automl-beans1639208542
project	string	cmpe256nlp
bq_source	string	bq://aju-dev-demos.beans.beans1

Logs

# VERTEX AI PIPELINES

## EXPANDED ARTIFACTS:

The screenshot displays the Google Cloud Platform Vertex AI console interface. The top navigation bar shows the Google Cloud Platform logo and the project name 'CMPE256NLP'. The left sidebar contains a menu with options: Vertex AI, Dashboard, Datasets, Features, Labeling tasks, Workbench, Pipelines (selected), Training, Experiments, Models, Endpoints, Batch predictions, and Metadata. The main content area is titled 'automi-tab-be...' and shows a pipeline run analysis. The pipeline graph consists of several steps: 'tabulardataset-create', 'dataset', 'automltabulartrainingjob', 'model', 'classification-model-eval...', 'condition-deploy-decision...', 'metrics', and 'metrics'. The 'Expand Artifacts' button is active, showing a list of artifacts. The 'Pipeline run analysis' panel on the right provides details about the run, including basic info, debugging info, and run parameters.

**Pipeline run analysis**

**SUMMARY** **NODE INFO**

**Basic info**

Duration	15 min 9 sec
Started	Dec 10, 2021, 11:42:26 PM
Completed	
Run name	automi-tab-beans-training-v2-20211211074224
Pipeline name	automi-tab-beans-training-v2
Runtime environment	Serverless
Region	us-central1
Service account	376556357571-compute@developer.gserviceaccount.com
Debugging info	<a href="#">View pipeline proto</a>

**Run Parameters**

Pipeline parameter values used for this run

Parameter	Type	Value
api_endpoint	string	us-central1-aiplatform.googleapis.com
gcp_region	string	us-central1
thresholds_dict_str	string	('auRoc': 0.95)
display_name	string	automi-beans1639208542
project	string	cmpe256nlp
bq_source	string	bq://aiu-dev-demos.beans.beans1

**Logs**

VERTEX\_AI\_SCR...docx VERTEX\_AI\_SCR...pdf VERTEX\_AI\_SCR...docx VertexAI.ipynb

Show All