# Al Platform Pipelines documentation

### Beta

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Machine learning (ML) workflows include steps to prepare and analyze data, train and evaluate models, deploy trained models to production, track ML artifacts and understand their dependencies, etc. Managing these steps in an ad-hoc manner can be difficult and time-consuming.

*MLOps* is the practice of applying DevOps practices to help automate, manage, and audit ML workflows. AI Platform Pipelines helps you implement MLOps by providing a platform where you can orchestrate the steps in your workflow as a pipeline. ML pipelines are portable and reproducible definitions of ML workflows.

AI Platform Pipelines makes it easier to get started with MLOps by saving you the difficulty of setting up Kubeflow Pipelines with TensorFlow Extended (TFX). <u>Kubeflow Pipelines</u>

(https://www.kubeflow.org/docs/pipelines/overview/pipelines-overview/) is an open source platform for running, monitoring, auditing, and managing ML pipelines on Kubernetes. <u>TFX</u>

(https://www.tensorflow.org/tfx) is an open source project for building ML pipelines that orchestrate end-to-end ML workflows.

## Overview

### Introduction to AI Platform Pipelines

An overview of AI Platform Pipelines.

(/ai-platform/pipelines/docs/introduction)

# Getting started

#### **Getting started with AI Platform Pipelines**

Quickstart guide to setting up AI Platform Pipelines and running a pipeline. (/ai-platform/pipelines/docs/getting-started)

# How-to guides

### Setting up Al Platform Pipelines

Learn how to set up AI Platform Pipelines. (/ai-platform/pipelines/docs/setting-up)

#### Creating an ML pipeline

Learn how to orchestrate your ML process as a pipeline. (/ai-platform/pipelines/docs/create-pipeline)

### Running an ML pipeline

Learn how to access the Kubeflow Pipelines dashboard and run pipelines. (/ai-platform/pipelines/docs/run-pipeline)

### Connecting to Al Platform Pipelines using the Kubeflow Pipelines SDK Learn how to connect to your Al Platform Pipelines cluster using the Kubeflow Pipelines SDK. (/ai-platform/pipelines/docs/connecting-with-sdk)

Configuring your GKE cluster

Configure your Google Kubernetes Engine cluster to ensure that AI Platform Pipelines has sufficient computational resources and access to Google Cloud resources, such as Cloud Storage or BigQuery. (/ai-platform/pipelines/docs/configure-gke-cluster)

Support

Troubleshooting Troubleshooting common problems. (/ai-platform/pipelines/docs/troubleshooting)

Getting support Get assistance with AI Platform Pipelines issues. (/ai-platform/pipelines/docs/getting-support)

Billing questions Get answers to common billing questions. (/ai-platform/pipelines/docs/billing-questions)

## Resources

Pricing Learn about AI Platform Pipelines pricing. (/ai-platform/pipelines/pricing)

**Release notes** 

Learn about updates to AI Platform Pipelines. (/ai-platform/pipelines/docs/release-notes)

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