JFrog Pipelines

Overview

JFrog Pipelines offers JFrog Platform customers three vital capabilities: end-to-end automation (CI/CD), workflow and tool orchestration, and the optimization of the JFrog toolset functionality in use. Consistent with JFrog’s customer-centric product philosophy, Pipelines is enterprise-ready and universal.

Workflow Automation

A pipeline is an event-driven automated workflow for executing a set of DevOps activities (CI, deployments, infrastructure provisioning, etc). It is composed of a sequence of interdependent steps which execute discrete functions. Steps act on resources, which hold the information needed to execute (files, key-value pairs, etc).

Developers can create pipelines easily with a simple declarative YAML-based language. While each step in a pipeline executes in a stateless runtime environment, Pipelines provides facilities to manage state and step outputs across the workflow so that all dependent steps can access the information they need from upstream steps in order to execute. This helps coordinate activities centrally across diverse DevOps tools and teams without custom DIY scripts.

Workflows can be configured for a variety of scenarios, including:

- Continuous Integration for your applications
- Continuous Delivery workflows that connect all your CI/CD and DevOps activities across tools and functional silos
- Automate IT Ops workflows like infrastructure provisioning, security patching, and image building

Features

Pipelines as Code

Define your automated workflow through code, using a domain specific language in a YAML file of key-value pairs that you can create and maintain with your favorite text editor.

Real Time Visibility

JFrog Pipelines renders your pipeline definition as an interactive diagram, helping you to see the flow of tasks and their inter-dependencies, as well as view the success record of any runs that were performed.

Universal
Connect your pipeline automation to your source code repositories in a version control system (such as GitHub or BitBucket) to automatically trigger execution on any new submission (commit) of a code change. Connect to other popular tools through your credentials for storage, issue-tracking, notification, orchestration and more through a library of integrations.

Native Integration with Artifactory

JFrog Pipelines is designed to be used with Artifactory, with built-in directives for pushing artifacts, performing builds, pushing build information, image scanning, and build promotion.

Integration with JFrog Platform

JFrog Pipelines is designed as an integral part of the JFrog platform, including scanning artifacts/builds through Xray, the creation and delivery of release bundles through JFrog Distribution, for a complete end-to-end SDLC pipeline from commit to production runtime.

Security First

Fine-grained permissions and access control limit who can access workflows. Centralized, encrypted storage of credentials and keys help ensure secrets stay safe.

Enterprise-Ready

Manage multiple execution nodes using a single installation of Pipelines and automatically distribute Pipeline execution across them for scale and speed.

Watch the Screencast