Google Cloud

Upgrading Apigee hybrid

Considerations

This document provides additional information to consider when upgrading Apigee hybrid.

Upgrading from previous versions

Apigee hybrid supports upgrades from certain previous versions only. For example, if you are currently running Apigee hybrid 1.9.x, you can directly upgrade to version 1.10.x. If you are running earlier versions of Apigee hybrid, for example 1.8 or earlier, you must first upgrade to version 1.9 before upgrading to 1.10.x.

The Apigee hybrid release documentation provides instructions on how to upgrade from a previous version to the most current released version.

Upgrading Kubernetes

Upgrading Apigee hybrid may require an upgrade to your underlying Kubernetes platform. For example, to upgrade Apigee hybrid to 1.10.x on Google Kubernetes Engine, you must run GKE 1.24.x. If you are running Apigee hybrid on-premises, you must upgrade your GKE on-prem Anthos platform to 1.13.x.

Make sure to follow the upgrade requirements for your underlying Kubernetes platform as documented in the Apigee hybrid release notes. Use the platform-specific documentation to upgrade your Kubernetes platform.

Downtime

Upgrading to Apigee hybrid version 1.10.x may require downtime. When upgrading the Apigee controller to version 1.10.3, all Apigee deployments undergo a rolling restart. To minimize downtime in production hybrid environments during a rolling restart, make sure you are running at least two clusters (in the same or different region/data center). Divert all production traffic to a single cluster and take the cluster you are about to upgrade offline, and then proceed with the upgrade process. Repeat the process for each cluster.

Apigee recommends that you upgrade all clusters as soon as possible to reduce the chances of production impact. There is no time limit on when all remaining clusters must be upgraded

after the first one is upgraded. However, until all remaining clusters are upgraded the following operations will be impacted:

- Cassandra backup and restore cannot work with mixed versions. For example, a backup from Hybrid 1.9 cannot be used to restore a Hybrid 1.10 instance.
- Cassandra data streaming will not work between mixed Hybrid versions. Therefore, your Cassandra clusters cannot scale horizontally.
- Region expansion and decommissioning will be impacted, because these operations depend on Cassandra data streaming

Upgrading Apigee hybrid runtime components

When you apply the Apigee hybrid software upgrade to the runtime plane, all Apigee deployments undergo a rolling update. In Kubernetes, rolling updates allow deployments to be updated by incrementally updating pod instances with new ones. New pods are scheduled on nodes with available resources. Using rolling updates, the hybrid runtime resources are upgraded using updated container images.