

CONFLUENT PLATFORM

Flexible DevOps Automation

[Confluent Platform](#) provides flexible infrastructure-as-code tooling for DevOps and Platform teams to confidently deploy and manage Kafka clusters in your private infrastructure, as either a cloud-native service on Kubernetes or on bare metal and virtual machines.



Accelerate deployment to production



Operate Kafka as a private cloud service



Deploy on any platform with confidence

Why flexible DevOps automation?

Configuring, deploying, and operating Kafka clusters on-premises, whether on Kubernetes or any non-containerized environments, can be a manual and complex process. As a result, deploying to any environment, from development to production, can take a significant investment of time and personnel resources and risks delays due to manual configuration errors. Moreover, variations across each private cloud vendor create an inconsistent operational experience, making it difficult to maintain flexibility in deploying Kafka across your platform of choice.

[Confluent Platform](#) offers DevOps tooling to automate the deployment and key lifecycle operations of clusters on any infrastructure platform, reducing the operational burden of self-managing Kafka and accelerating time-to-value.

Features



Confluent for Kubernetes

Confluent for Kubernetes allows you to build your own private cloud Kafka service using a complete, declarative API to deploy and operate Confluent Platform. It leverages Kubernetes to enhance the platform's elasticity, ease of operations, and resiliency for enterprises operating at any scale.



Ansible Playbooks

Ansible Playbooks simplify running Confluent Platform in non-containerized environments on bare metal or virtual machines. It delivers tooling for both automated deployment of the platform and rolling upgrades as new versions of the software become available.

Solution

Accelerate deployment to production

Automated cluster configuration

Confluent for Kubernetes and Ansible Playbooks allow you to create fully configured, production-ready clusters available in a matter of minutes. Confluent for Kubernetes automates the deployment of Confluent Platform as a cloud-native system on Kubernetes, while Ansible Playbooks automates the deployment for non-containerized environments.

Complete platform for data in motion

Deploy a complete, ready-to-use platform to implement data in motion use cases end-to-end. Rather than spending development cycles on building, deploying, and maintaining complementary components for Apache Kafka, Confluent for Kubernetes and Ansible Playbooks make it easy to programmatically deploy clusters with security and disaster recovery features, connectors for other data systems, and SQL-based stream processing.

Operate Kafka as a private cloud service

Elastic scalability

Instantly scale clusters up and down using a single command. With Confluent for Kubernetes, you can operate Confluent Platform at any scale, from dev teams just getting started to central platform teams running an enterprise-wide shared service, to meet any data in motion workload.

Simplified day-to-day operations

Perform automated rolling upgrades after a Confluent Platform version, configuration, or resource update without impacting availability, significantly reducing the risk of missing SLAs on cluster uptime.

Automate the deployment of Confluent platform as a cloud-native system on Kubernetes or any non-containerized environments.



Streamlined recovery

Automatically recover after a failure in your brokers or underlying infrastructure with automated fault tolerance. With Confluent for Kubernetes, you get automated rack awareness to spread partition replicas across different racks, improving the availability and limiting the risk of data loss.

Deploy on any platform with confidence

Broad ecosystem of Kubernetes distributions

Confluent for Kubernetes provides you with a cloud-native, consistent operational experience for market-leading Kubernetes distributions:

- Red Hat OpenShift
- VMWare Tanzu Kubernetes Grid (TKG)
- Google GKE on Anthos
- Amazon EKS on AWS Outposts
- Azure AKS on Azure Stack
- Plus any Kubernetes distribution or managed service meeting the Cloud Native Computing Foundation's (CNCF) conformance standards

Proven, battle-tested architecture

Implement standardized, validated architecture designed by the world's foremost Kafka experts, allowing you to operate at scale with confidence. In particular, Confluent for Kubernetes operationalizes years of experience running Kafka on Kubernetes at massive scale as part of our managed service, Confluent Cloud.

Confluent Platform. Enterprise event streaming platform built by the original creators of Apache Kafka. For more information, please visit confluent.io. To contact us, visit confluent.io/contact. For detailed product specifications, please refer to our [documentation](#).