D2iQ Kommander 2.0

Enterprise Kubernetes Cluster Governance and Control

Overview

Kommander 2.0 is a federated management plane that delivers centralized observability, control, and governance and federated management of disparate Kubernetes clusters from a single, central point of control, while ensuring lifecycle management for both infrastructure (through CAPI) and applications (through FluxCD), unified policy, and better operational insights.

Kommander provides a full complement of services, training, and end-to-end support for the complete stack of operational technologies being leveraged for production operations. Rather than dealing with multiple vendors, you have a single partner to help keep everything running smoothly at every stage of your Kubernetes journey.

Why Use Kommander 2.0?

Manage Applications and Infrastructure Declaratively

The move to Cluster API (CAPI), simplifies declarative infrastructure management using GitOps, automating many of the formerly manual processes required to keep systems running and scaling. Kommander also integrates FluxCD to enable GitOps for both applications and infrastructure, supporting canary deployments and A/B rollouts. Embracing a declarative approach to Kubernetes makes deploying, managing, and scaling Kubernetes workloads more auditable and repeatable and less error-prone.

Provide Real-Time Cost Management

Kommander's out-of-the-box Kubecost integration provides cost granularity in real-time using tools that have awareness of Kubernetes. This deep awareness allows you to attribute costs to the right departments, applications, projects, or other organizational groups, for reduced waste, better forecasting, and lower TCO.

Enable Centralized Observability

Kommander provides enhanced visibility and control from the same central point of control, with integrated logging, monitoring, and alerting across all clusters. This capability allows you to centrally review the health and performance of each cluster by region, availability zone, or cloud provider, so that monitored threats are detected and issues can be resolved before they escalate, thereby saving valuable time.

What's New In Kommander 2.0

Cluster API

The move to CAPI simplifies declarative infrastructure management using GitOps, automating many of the formerly manual processes required to keep systems running and scaling.

FluxCD

The adoption of FluxCD enables cloud-native GitOps for both application and infrastructure lifecycle management, supporting canary deployments and A/B roll outs. Rapidly build, test, and deploy applications at scale, without requiring configuration changes.

Multi-Cluster Platform Application Management

All platform applications for Day 2 readiness, including, logging, monitoring, networking, and more, are now deployed and managed through Kommander. Multi-cluster support means these critical Day 2 applications can be deployed in any Kubernetes managed or self-attached clusters on prem, in the cloud, and air-gapped scenarios.

Multi-tenant and Workspace-level Logging

DKP 2.0 adds the ability to manage logs by tenant or workspace, for more granular control and simpler troubleshooting of problems.
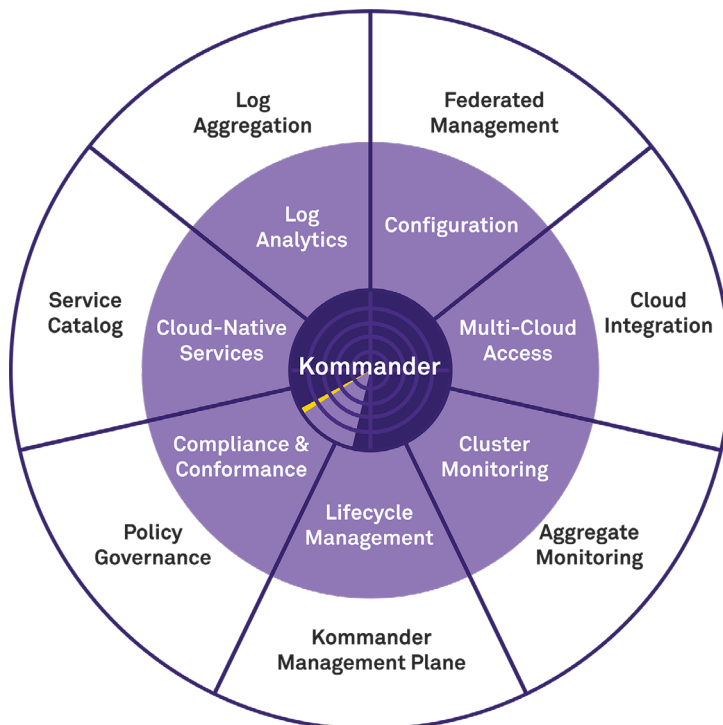
Deliver Federated Management

Kommander provides single sign-on and federated role-based policy across all organizational clusters. This capability helps ensure that as services are being provisioned, organizations can delegate management and operational responsibilities at various levels to those who require them. Kommander 2.0 adds the ability to manage logs by tenant or workspace, for more granular control and simpler troubleshooting of problems.

Ensure Organizational Governance

Kommander provides centralized governance and policy administration across cluster deployment, manageability, accessibility, and security updates so you can create standardization around how new clusters are configured and used, while meeting compliance requirements for regulatory, IP, and other unique organization needs. Kommander 2.0 is FIPS validated, for even greater confidence around security.

Key Benefits

Centralized Observability
Provide enhanced visibility and control at the enterprise level, with comprehensive logging and monitoring across all clusters.

Federated Management
Ensure roles and responsibilities can be separated to deliver policy-driven control and secure provisioning of services—even on shared, multi-tenant infrastructure.

Organizational Governance
Empower the organization to govern Kubernetes usage to assist with compliance for regulatory, IP and other unique organizational needs.

Integrated Cost Control
Lower TCO with out-of-the-box Kubecost integration, which allows attribution of costs to departments, applications, projects, or other groups in real time.

Universal Enterprise Grade Kubernetes
Provide any Kubernetes distribution with D2iQ's production ready add-on stack and make it ready for Day 2.

Integrated cloud native GitOps with FluxCD
Enable GitOps for both applications and infrastructure, supporting canary deployments and A/B rollouts.

Distributed Computing Is In Our DNA

The founders of D2iQ are some of the earliest innovative minds in the world of sophisticated distributed computing environments. Their innovations are a driving factor in the success of the largest application deployments in the world.

This experience and insight into the complexities of managing and operating expansive cloud native application services at massive scale are foundational to the development of D2iQ's Kommander. By applying this unique experience to the world of Kubernetes, D2iQ ensures that your organization is able to swiftly move towards a successful Day 2 outcome.

Features and Benefits

Features	Benefits
Operations Dashboard	Provides instant visibility and operational efficiency into the Kubernetes cluster landscape from a single, central point of control.
Centralized Observability	Provide enhanced visibility and control at the enterprise level, with comprehensive logging and monitoring across all clusters.
Multi-Tenant and Workspace-Level Logging	Manage logs by tenant or workspace, for more granular control and simpler troubleshooting of problems.
Service Catalog	Quickly and easily deploy applications and complex data services from a customizable service catalog to specific or multiple clusters, with governance.
Service Mesh Integration	Add advanced networking capabilities, such as multi-cluster and cross-cluster service discovery, load balancing, and security, across hybrid cloud, multi-cloud, and multi-cluster environments.
Granular Cost Control	Out-of-the-box Kubecost integration provides real-time cost management and attribution of costs to the right departments, applications, projects, or other organizational groups, for reduced waste, better forecasting, and lower TCO.
Service Version Control	Ensures conformance to sanctioned service versions of both Kubernetes and its supporting platform services to help reduce security exposure and provide simplified supportability of services.
Integration with KUDO	Run and manage complex and stateful applications for use with persistent storage on Kubernetes clusters.
Governance and Policy Administration	Assert centralized delegated Role-Based Access Control (RBAC) and cluster policy to govern clusters, associated services, geographic limitations and to create lines-of-separation across various project initiatives.
Centralized Authentication	Leverage existing authentication and directory services for secure access and single sign-on to broad cluster based resources.
Built in GitOps Capabilities	Extend Kommander's declarative approach to application deployment with enhanced cloud-native GitOps functionality.
Multi-Cluster Platform Application Management	Centrally manage and deploy all Day 2 platform applications, such as logging, monitoring, networking, and more, to any Kubernetes cluster or group of clusters on any infrastructure.

To learn more about about how D2iQ can be your partner in the cloud native journey, go to **www.D2iQ.com**.