



# Calisti At A Glance

Cisco Emerging Technologies and Incubation

## Secure Application Connectivity and Management from Datacenter to Cloud - Simplified

Businesses are increasingly adopting Cloud Native microservice-based architectures, as these enable rapid application development with flexibility, stability, portability, and scale. However, to meet today's business and regulatory requirements, these microservice intercommunications need to be encrypted, observable and highly-available.

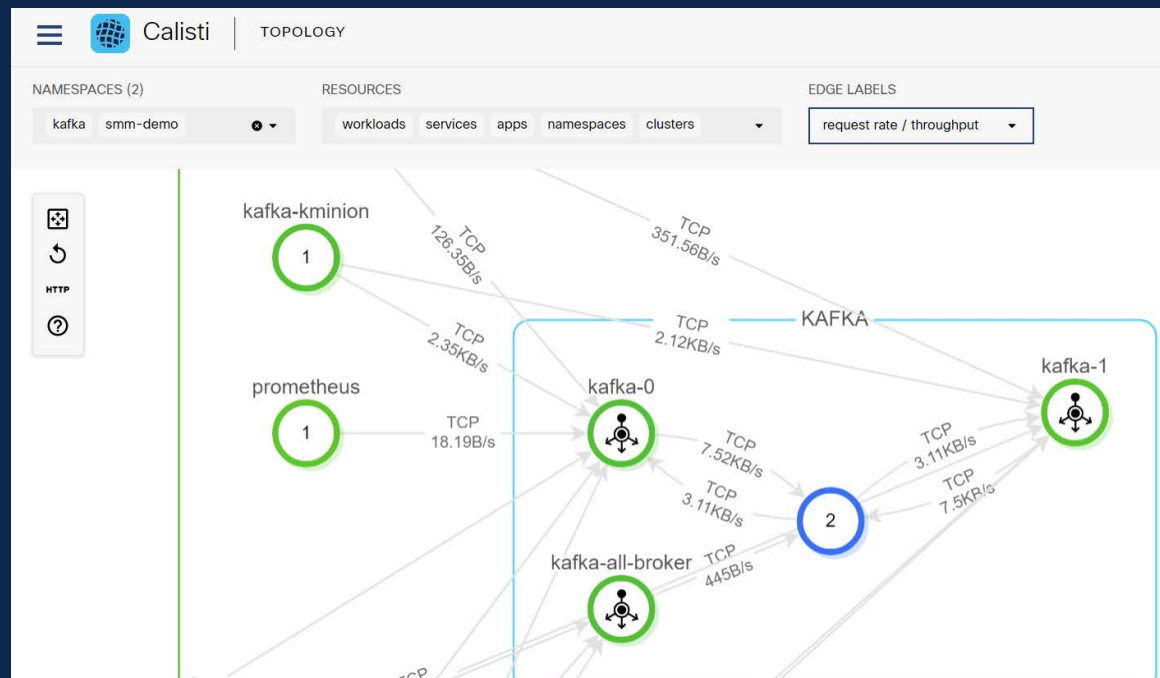
Let's say you, like 80% of the Fortune 100 companies, are running Apache Kafka®. To run Apache Kafka as a part of your cloud native infrastructure you would need to:

- **Encrypt communications** for all internal components
- **Manage encryption certificates** and rotation
- **Secure internal and external workload interactions**
- **Manage authorization and access** policies

Calisti provides all of this functionality and more with a simple turnkey solution. Specifically, Calisti also provides:

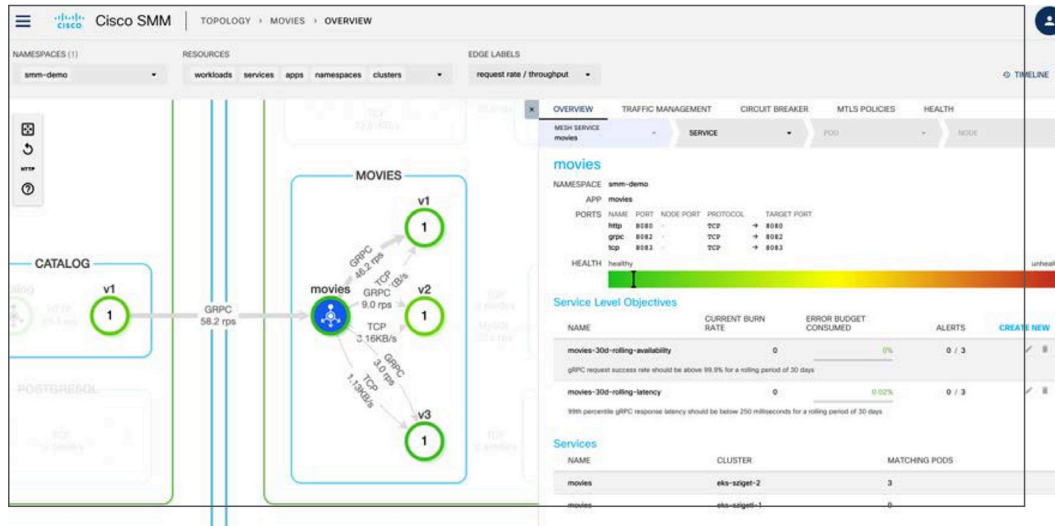
- **Automated operations**, providing graceful upscaling/downscaling, self-healing, alert-based storage expansion and smooth zero-downtime upgrades
- **Seamless and integrated security** via Kubernetes-native declarative Apache Kafka ACL management, as well as zero-config mTLS for client applications
- **High-Availability** with rack awareness, availability zones and cross-cluster replication
- **Disaster Recovery** via Kubernetes snapshots
- **Observability** via Prometheus rules and Grafana dashboards

### Calisti Providing Encryption, Observability and Traffic Management for Apache Kafka



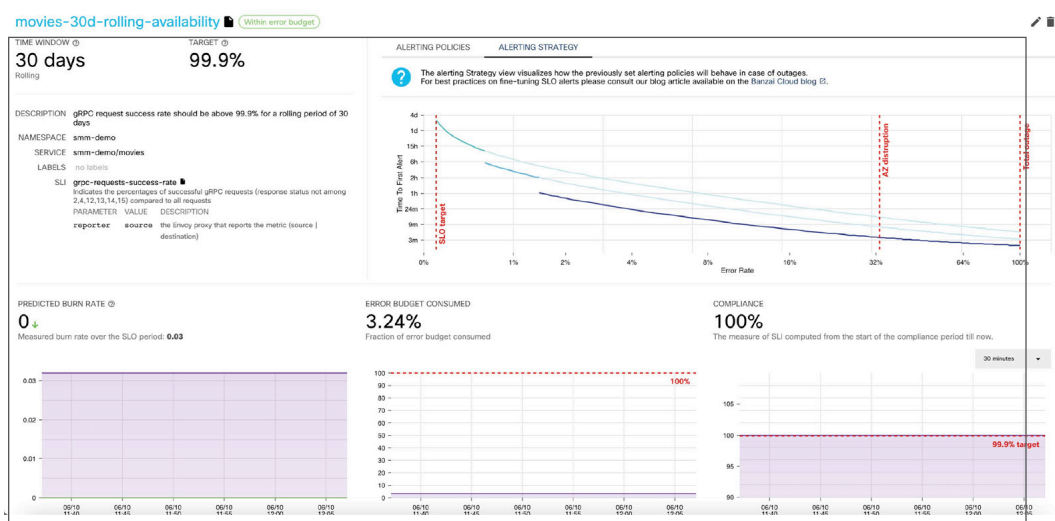
Another key value proposition of Calisti is that it provides **Integrated Observability**. Unlike open source solutions that require one tool for metrics, another for topology, and yet another for tracing, Calisti integrates observability into a single pane of glass to accelerate root cause analysis and remediation.

### Calisti Integrated Topology and Metrics View



Calisti can also set, track, and ensure compliance with Service Level Objectives.

### Calisti Service Level Objective Burn Rates and Alerting Strategy View



Calisti provides the following features to connect, encrypt, observe and manage cloud native application microservices.

#### Apache Kafka Turnkey Solution Features:

- Automatic mTLS encryption for all components
- Extended observability to event driven messaging applications
- Graceful upscaling/downscaling
- Self-healing
- Alert-based storage expansion
- Automated authentication
- Automated data migration from brownfield Apache Kafka deployments

#### Integrated Service Observability Features:

- Provide actionable insights to operators; not just metrics
- Detect outliers that affect service and workload health
- Generate alerts to maintain application service level objectives
- Speed up root cause analysis of issues with timelines and topology
- Dive deep into encrypted communications with Traffic Tap
- Visualize communications in context with distributed tracing

#### Mesh Management Features:

- Automate Istio management to remove toil and risk from installs and updates
- Validate configurations prior to deployment to maximize availability
- Customize and scale deployments with integrated YAML editor
- Migrate virtual machines to your mesh to support evolving business needs
- Add workloads flexibly to a mesh to support evolving business needs
- Support complex multi-mesh architectures with ease
- Integrate external services to provide additional features and functions
- De-risk upgrades with canary deployments
- Provide superior levels of application experience with circuit breakers

Additionally: Calisti is Red Hat OpenShift Certified (for v4.11)

With these powerful cloud native features, Calisti enables you to standardize microservice security, observability, and traffic management, freeing your developers to focus on rapid application development to drive business transformation and growth.