Solution Brief

virtana

Virtana Container Observability
Intelligent Observability for Modern Applications

Modern Applications Need Modern Observability

Digital business is driving a fundamental shift to cloud native applications running on Kubernetes container platforms. This means more complexity which leads to an explosion of performance-related event, log, and tracing data that constantly changes as loads change.

Observing cloud native applications presents these challenges:

- How to detect a condition that may impact a customer-facing service?
- Is the alert from an incident benign or a false positive?
- Does the alert indicate whether end users are being affected?
- How to ensure that Ops is fixing the root cause rather than addressing the symptoms that caused the alert?

Traditional monitoring tools don't work because they were born in the era of monolithic applications and static infrastructure. They are expensive, intrusive, siloed, and generate more noise than they are worth.

Disjointed, isolated monitoring of discrete aspects of the application means that while there is a lot of data, there is relatively poor insight into the application state, resulting in a mostly manual process to resolve problems.

Open source and cloud monitoring tools offer an excellent foundation but require highly skilled engineers to integrate, maintain, and analyze the collected data.

Ops teams need intelligence from their observability platform to automatically provide real-time visibility, problem detection without guessing, and a reduction in the manual work required to isolate root cause.

Actionable Observability for Modern Applications Running on Kubernetes

Virtana Container Observability is a modern, open cloud native observability platform that increases the stability and performance of workloads running on Kubernetes.

With Virtana Container Observability, organizations gain deeper visibility into every layer of their Kubernetes environments, to reduce troubleshooting time and confidently resolve performance issues.

Virtana Container Observability enables Ops and Apps teams to troubleshoot their application components in context with configurations, connections, metrics, logs, traces, and changes.

Virtana Container Observability brings everything into one platform, meaning app teams no longer need to swivel across multiple tools to understand and analyze the state of their applications.

A "time travel" feature addresses temporal blind spots to let DevOps look back to see changes that are often the source of problems.

How Virtana Container Observability Works

Virtana Container Observability collects information from the application, the container platform, and the infrastructure layer by tapping into the monitoring and configuration environment with lightweight gateway Pods that are added to the Kubernetes cluster.

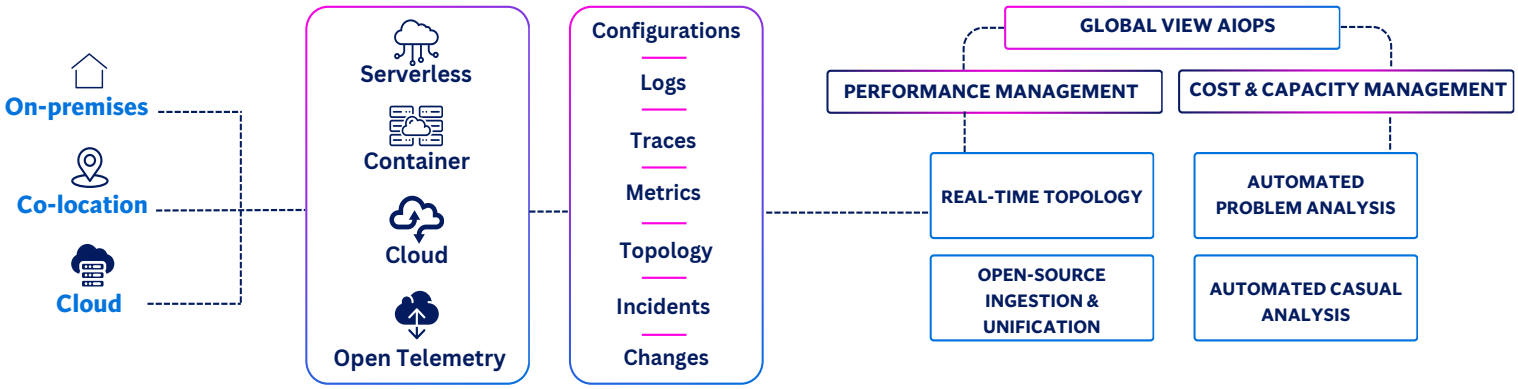
The gateway pods communicate with the Kubernetes platform, cloud metrics, and logs, and send information in secure messages to the Software-as-a-Service backend. The user accesses the platform using a standard browser. All connections are outbound and use SSL/TLS.

Alerts are sent to popular services like email, PagerDuty, Slack, and ServiceNow.

Leverages agentless telemetry and configuration ingestion using open standards and tools like Prometheus, Loki or ELK, Jaeger, Kubernetes, eBPF, and Istio.

What Virtana Container Observability Delivers

- Best-in-class contextual Kubernetes with zero-touch configuration and automatic discovery and monitoring of workloads
- Predictive behavior modeling that leverages AI/ML of the application's behavior to surface problems across components and the supporting infrastructure.
- Automated causal analysis that proactively links unexpected behavior changes within the application and ties it to SLO breaches.



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