

Integration Solution Brief

Kubernetes On-Premises deployment of Virtana Platform

Summary:

Virtana Platform now offers the flexibility to deploy as a containerized, on-premises solution alongside its SaaS model, enabling greater scalability, optimized resource efficiency, and faster, more secure deployments

Key Modules:

- **Global View** – Provides event intelligence and AIOps capabilities for proactive issue resolution.
- **Container Observability** – Monitors Kubernetes and cloud infrastructure, ensuring optimal resource usage and performance.
- **Infrastructure Observability** – Supports traditional IT environments, including storage arrays, virtual machines (VMs), and networks.

Challenges with Traditional Deployments:

- **Limited Scalability** – VM-based deployments lack automatic scaling, leading to inefficient resource allocation.
- **Connectivity Constraints** – SaaS solutions require internet access, which is unavailable in air-gapped environments.
- **Security & Compliance Concerns** – Many organizations prefer on-premises solutions to meet strict data

Advantages of Kubernetes-Based Deployment:

- **Automatic Scaling** – Dynamically adjusts resources based on demand, ensuring optimal efficiency.
- **CI/CD & Automation** – Enables seamless deployments, rollbacks, and DevOps integration, streamlining operational workflows.
- **Enhanced Security** – Keeps all data within on-premises environments, eliminating external security risks.

Key Features:

- **Multi-Tenancy Support** – Ensures secure data isolation across multiple teams and applications.
- **Scalability** – Kubernetes efficiently manages containerized applications, automatically scaling resources as needed.
- **Faster Upgrade Cycles** – Enables rapid adoption of new features, improved security, and enhanced performance while minimizing downtime.

Choice of Kubernetes - On-Premises or Cloud



Data Collection across hybrid Workloads

