

# Virtana Compute Observability for VMware vSphere

## Essentials

### Optimize vCenter Environments with Virtana Compute Observability

- Understand how application workloads stress compute, network, SAN and Storage
- Gain real-time and historical performance visibility from the guest OS, to the hypervisor and underlying infrastructure
- Forecast, balance and manage capacity utilization across applications, vSphere and vSAN clusters

### Assure the Performance of Mission-critical Application Workloads

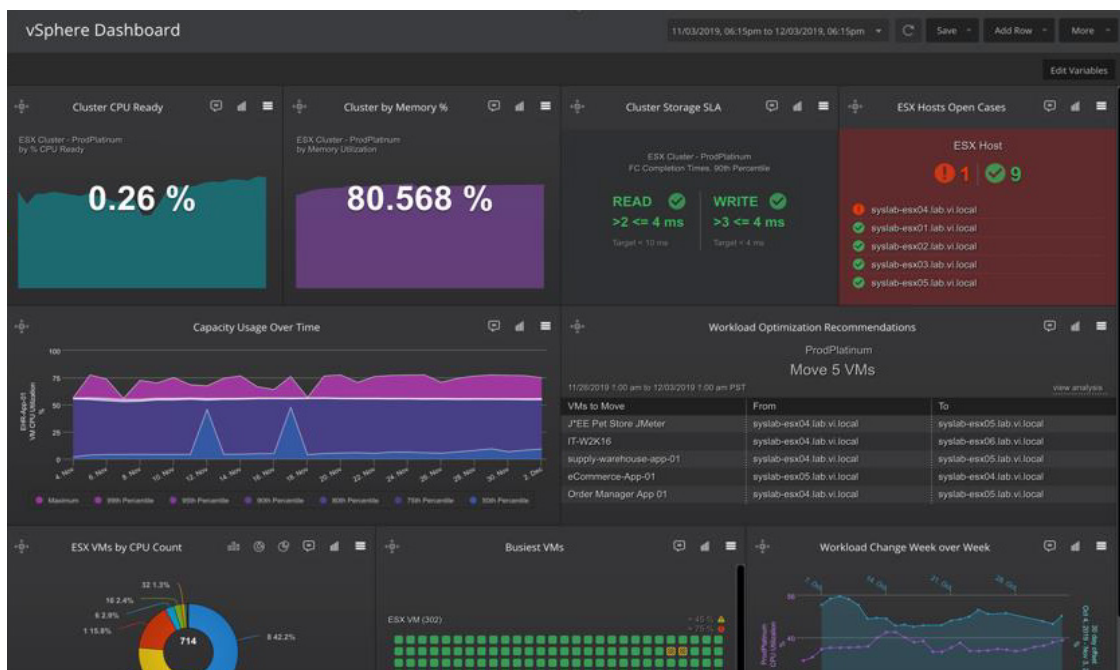
- Utilize best practice dashboards as a single pane of glass across software defined, cloud and physical infrastructure
- Auto-discover and map application dependencies on software defined infrastructure
- Predictive capacity management for virtual and physical infrastructure prevents capacity exhaustion
- Proactively manage application resource contention through workload balancing and right sizing according to the business value of applications
- Automate root-cause analysis through proactive problem resolution to dramatically reduce mean time to resolution (MTTR) of tough performance issues

## The Challenges of Managing Software-defined Data Centers

Infrastructure teams have evolved their digital infrastructures across the public and private clouds to deliver the on-demand scale, performance and capacity needed to support digital transformation and innovation. Virtualization and VMWare's Software-Defined-Data Center have key strategies to enable this evolution.

The Virtana Platform was designed from the ground up as a Lifecycle AIOps platform designed to map, monitor and manage mission critical workload performance and capacity at virtually unlimited scale.

A single intelligent platform that unifies, streamlines and automates IT operations with a unique, app-centric approach to hybrid infrastructure management that assures deep insights into application performance, consumption and service levels.



## Deep Observability for your Hybrid Infrastructure

Virtana starts by mapping applications and their supporting infrastructure at the cloud, virtual and physical level. This comprehensive understanding of the data supply chain provides the basis for rich dashboards that deliver service assurance, visibility and control to administrators, architects and executives.

**Assure performance:** The Virtana Platform monitors hundreds of vSphere and vSAN metrics in real-time and at virtually unlimited scale across any number of vCenter Instances. Combined with this information, network operational detail, operating system data for Linux and Windows, as well as metrics for storage arrays are combined by Virtana IM to create dynamic, best practice and custom alarms that assure performance and availability.

Proactively manage the digital infrastructure lifecycle: Virtana includes infrastructure level planning, optimization, and continuous problem resolution that ensures application uptime and availability. The solution automatically triages, diagnoses, and provides actionable resolution recommendations that prevent problems before they affect performance by:

- Identifying and reacting to workload behavior changes
- Identifying resource hogs, noisy neighbors and performance bottlenecks
- Rebalancing workloads, application resources, vSphere clusters, and the supporting underlying storage
- Resizing virtual resources based on dynamic application workload needs
- Modeling workloads and proactively planning and forecast future capacity needs

## Logical architecture to support VMWare Software-Defined Data Centers

- Automatically maps applications to virtual compute infrastructure
- Monitors application flows over the network
- Monitors client and storage node OS instances
- Delivers visibility, scale, and analytics to assure the performance, availability, and capacity of your VMware vSphere infrastructure

The Virtana Platform was built from the ground up as a machine learning-powered analytics platform that goes well beyond the capabilities of traditional AIOps platforms by providing a lifecycle approach to AIOps that assures, manages, and balances workloads across digital infrastructure.

Virtana provides full-stack end-to-end visibility into digital infrastructure performance and operation. This visibility extends across the applications, the digital infrastructure resources they rely on, and the network flows between them. These comprehensive views into the relationships and capabilities of digital resources, enable advanced correlation that makes identification and root cause analysis easy.