

Virtana Storage Observability for Dell Technologies VPLEX

Virtana's VPLEX integration extends storage observability to Dell Technologies' VPLEX storage. VPLEX is a virtualized, continuous high availability storage product that scales to the I/O throughput required for front-end applications and back-end storage. VPLEX's value is in enabling data to easily move across arrays and data centers.

The integration provides singular visibility into the health, utilization, performance, and capacity of VPLEX storage, and correlates VPLEX storage metrics with data collected from related compute and network components in the infrastructure, and to the applications running on that infrastructure.

Use Cases

Our VPLEX storage integration supports a wide range of storage monitoring use cases across health, utilization, performance, capacity, and other domains:

- View how much storage an application consumes.
- See which initiator consumes the most resources on an array.
- Show the data path from a host, through a switch, to a storage port, and to volumes associated with the host.
- View latency metrics at the host, volume, and application level.
- Determine if a host has multiple paths to its storage.
- See when storage capacity will run out.
- View firmware versions on arrays and array components.
- Tag arrays with custom properties.

Value of the Integration

- Ensures optimal performance and availability of VPLEX storage for business-critical applications and workloads.
- Provides predictive capacity forecasting to forecast time to needed expansion or refresh.
- Optimizes VPLEX storage resources by monitoring workload metrics and resource usage to arrive at the ideal configuration for your workloads.

Discovery and Data Collection

The integration connects to the VPLEX server via https, and the REST API using read only access. Data is collected at specified polling intervals and is imported into the Virtana Platform for use in inventory, dependency mapping, event intelligence, analytics, and reports.

Virtana discovers and collects data from VPLEX clusters, directors, director CPUs, initiators, ports, storage volumes, and virtual volumes.

Over 50 unique metrics related to VPLEX health, utilization, and performance are collected from VPLEX components, including the following:

- Average read and write IOPS.
- Read and write average byte rate.
- Total read and write bytes transferred.
- Average read and write ECT.
- System and total CPU time.
- Total cache hits and misses.



Capabilities powered by the VPLEX integration

With Virtana discovery and dependency mapping see VPLEX storage in the context of its relationships to business-critical applications and other infrastructure components. View relationships and easily traverse hierarchies to expose active alarms in a data path. You can filter the infrastructure view to show applications using VPLEX storage and compare trends in resource utilization and performance.

Virtana's rich event correlation capabilities let you monitor VPLEX storage infrastructure and reveal cyclical trends in workloads over weeks and months. Our Capacity Forecast alerting warns you when VPLEX storage is approaching capacity, so you can avoid the impact that comes from running out of capacity unexpectedly.

Our flexible alerting also lets you create alerts on any monitored VPLEX storage component and metric.

Use the Capacity Forecast analytic to predict time-to-zero for capacity based on historical capacity data, and the embedded correlation analytics to identify and troubleshoot anomalous events that occur in VPLEX storage infrastructure.

Standard report templates are provided so you can quickly start using Virtana to monitor VPLEX storage utilization and performance.

