

# Dell EMC VPLEX Solution Brief

**Virtana's Dell EMC VPLEX** integration extends VirtualWisdom data collection to Dell EMC VPLEX storage. Dell EMC 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 Dell EMC 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 Dell EMC VPLEX server via https, and the DELL EMC REST API using read only access. Data is collected at specified polling intervals and is imported into VirtualWisdom for use in inventory, topology, alerting, analytics, and reports.

VirtualWisdom 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 Dell EMC VPLEX integration

See Dell 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. With Virtana topology for VPLEX storage, you can filter the infrastructure view to show applications using VPLEX storage and compare trends in resource utilization and performance.

VirtualWisdom's rich alerting 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 Event Advisor and Trend Matcher to identify and troubleshoot anomalous events that occur in VPLEX storage infrastructure.

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

