APEX

SOLUTION BRIEF

Dell APEX Navigator for Kubernetes

Unified user experience for multicloud, multisite Kubernetes management.



Streamline Kubernetes persistence management

- Centralize Kubernetes storage services management in the Dell APEX Console
- Automate cluster and Kubernetes resource discovery
- Unified user experience, designed for both new and mature operating models



Empower DevOps teams

- Deploy, operate, and manage Dell Container Storage Modules at scale
- Cross-environment application mobility, regardless of where they are deployed (on-premises, cloud)
- Frictionless experience for Kubernetes storage admins and DevOps teams



Govern and protect across environments

- Monitor all Kubernetes storage resources in one user friendly interface
- Utilize advanced data services, such as replication, authorization, and failure recovery
- Consistent policy enforcement across enterprise storage and DevOps environments

"Dell's Container Storage Modules are **industry-leading extensions** to CSI enabling advanced data services for Kubernetes-based environments. The effort and speed that Dell is putting into adding capabilities to its portfolio is notable."

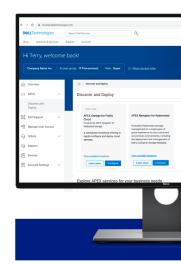
- 2022 GigaOm Radar Report for Enterprise Kubernetes Data Storage

Growing complexity for multicloud Kubernetes environments

Provisioning and managing Kubernetes at scale is complex, resulting in mounting deployment and management challenges as enterprises extend into multicloud. Fragmented user experiences based on manual processes are increasing administrative toil, and DevOps team members, as well as Kubernetes admins and engineers, need a way to automate their workflows while simplifying cross-environment management. Combining this streamlined Kubernetes management experience with easy access to advanced data services is pivotal, enabling team members to not only improve productivity, but also dedicate time toward innovation and operations.

Dell APEX Navigator for Kubernetes

Dell APEX Navigator for Kubernetes is a multicloud, multisite Kubernetes persistence management experience, available through the Dell APEX Console, that leverages Dell Container Storage Modules to drive simplicity and productivity. With Dell APEX Navigator for Kubernetes, Kubernetes storage admins and DevOps team members can easily deploy and manage Container Storage Modules at scale across their entire Kubernetes landscape, giving them access to advanced data services such as application mobility, replication, and more. As a result, enterprises streamline Kubernetes persistence management, empower their DevOps teams, and govern and protect across environments.



Bringing Kubernetes persistence management to Dell APEX

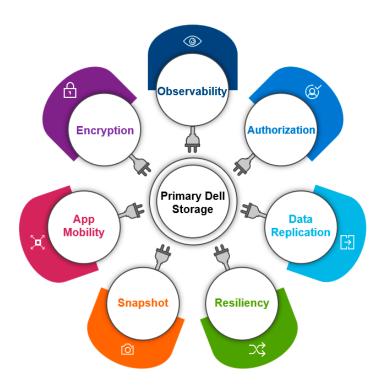
Designed for both new and mature operating models, Dell APEX Navigator for Kubernetes provides a frictionless experience that allows Kubernetes storage admins, Site Reliability engineers, and DevOps team members to easily:

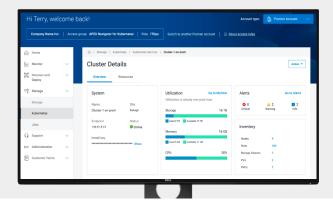
- Discover their clusters and key Kubernetes resource types
- Deploy Dell Container Storage Modules across their entire Kubernetes landscape
- Manage Kubernetes environments across cloud and on-premises
- Control their multicloud Kubernetes environments with intelligent, actionable insights

Integrated experience with Dell Container Storage Modules

Dell's <u>Container Storage Modules</u> are integrated into the Dell APEX Navigator for Kubernetes user experience, delivering advanced data serivces that allow organizations to realize easier adoption of cloud native workloads, improved productivity, and scalable operations. This includes:

- Replication: Easily extend data protection and DR planning to Kubernetes workloads with consistent policy enforcement
- Observability: Create a single pane management experience for your developers and Kubernetes admins
- Resiliency: Improve application up-time with automatic detection and recovery of node failures
- Authorization: Apply quota and RBAC rules that instantly and automatically restrict a cluster tenant's usage of storage resources
- App Mobility: Clone stateful application workloads and application data to other Kubernetes clusters (either on-premises or in the cloud) using a single command
- Encryption: Transparently add host side encryption to a volume (using familiar external key managers such as HashiCorp Vault)
- Snapshot: Build on CSI's point-in-time recovery with additional capabilities such as group/crash consistent snapshots with referential integrity





Detailed view of clusters and storage systems

Through automated discovery, Dell APEX Navigator for Kubernetes provides visibility into your entire Kubernetes landscape across on-premises and cloud environments. This allows end users to gain actionable insights into their storage, memory, and CPU utilization, as well as alerts regarding cluster status. Cluster details also provide a single view for all associated Kubernetes resources, such as PVs, PVCs, StorageClasses, namespaces, and more. With transparent operations for your storage infrastructure, you can leverage mature monitoring, alerting, and analytics capabilities that have a meaningful business impact.

Automate manual efforts to save time and effort

Dell APEX Navigator for Kubernetes delivers automated workflows that not only benefit DevOps team members, but also engineers (Site Reliability Engineers, Platform Engineers) and storage admins. The automation and unified user experience delivered as part of Dell APEX Navigator for Kubernetes enables all team members to expedite tasks that are manual, repetitive, and often have little to no long-term value, resulting in reduced administrative toil.

All of these team members in your organization play a major role in the success of Kubernetes implementations and operations. And, as multicluster, multicloud environments scale, Dell APEX Navigator for Kubernetes ensures alignment across these stakeholders by providing a clear and concise view into cross-environment operations.



<u>Learn more</u> about the Dell APEX Storage for Public Cloud portfolio



Contact a Dell Technologies Expert