Designing a Cloud Native Organization that Provides Data Protection for Kubernetes and DevOps Synergies

GET STARTED

DELL Technologies
DevOps Decision Makers

**BUSINESS OWNER**
driving a digital initiative of building a new mobile application

**DEVELOPER**
is building the software with Kubernetes applications speedily to get to market

**QA ENGINEER**
wants to test the developers’ work and do it against a production environment to catch any bugs before release

**IT ADMIN**
wants to be able to assure the business owner, developer and QA team that their work is backed up and quickly restorable!
Classic IT Conundrum

“I need to find faster ways to market with our software products but development cycles are slow and many times our releases go out with too many bugs when we rush.” – Business Owner

“Our biggest challenge is that we don’t have enough resources to test, testing in production is near impossible, so we miss a lot of those defects and take that risk.” – Developer

“The reason we have so many defects is we have 100s of developers working at once and when we merge our code streams, they sometimes create more challenges and require more QA time.” – QA Engineer

“We need to be backing up more of our software builds and restoring them quickly in case of defects, we are always behind the clock and our support teams are inundated but at the same time, customers are complaining that they want new software all the time; we just cannot win!” – IT Admin
Business Demands Increase Container Adoption

Containers provide a very simple way for development and operations teams to consistently execute and increase productivity. The surge in popularity of containers has skyrocketed since release to the open-source community.

“Kubernetes orchestration has enabled me to run applications between computing platforms.”
– Developer

“It is making it faster for my development teams to deploy software!”
– Developer
Modern Day Applications

Business Demands are Increasing Container Adoption

IT professionals believe that — on average — **39%** of their organization’s production workloads will run on containers in **24 months**

“We need a fully reliable solution for all DevOps!”
– IT Admin

ESG Container Report 2020 for Dell EMC:
Modern Data Applications Change DevOps

“Since we adopted containers, it has allowed me to develop new features through automation, test, and release processes; as well as enabled me to run virtually anywhere…” – Developer

“…and fast defect resolution which speeds up release cycles.” – QA Engineer
“IT professionals report a gap between their organizations’ recovery point objective (22 minutes) and the actual mean recovery time (2 hours) they are realizing. However, there are still challenges and we have to be able to reliably backup and restore these disparate modern applications in a singular way!” — IT Admin

ESG Container Report 2020 for Dell EMC:
Introducing Dell Technologies Solution for the IT Admin

The Data Protection portfolio provides a single platform from client to storage that enables central management, efficiency, design with Kubernetes in mind and choice of consumption.

PowerProtect Data Manager provides our end users with next-generation data management platform that delivers the direct protection of their Kubernetes clusters to PowerProtect DD Series Appliances and other traditional backup storage targets available.

“So Dell Technologies can provide me with both an Enterprise-grade solution for protection, backup, and restore of our workloads without compromising the developers and daily testing?”
– IT Admin

WATCH THIS VIDEO:
Protect Kubernetes Containers and Dev/Test Workloads
Build Your Cloud Native Organization Now

Cloud native technologies empower organizations to build and run scalable applications in modern, dynamic environments such as public, private, and hybrid clouds. (CNCF Cloud Native Definition v1.0)

Dell Technologies data protection solutions enable customers to realize scalable, flexible and reliable cloud native organizations with proven Enterprise-grade backup storage and modern management tools.

WATCH OVERALL SOLUTION VIDEO:
Dell EMC Data Protection Solutions for Kubernetes
Feature-Rich Software

- DevOps Self-Service
- Application Consistencies
- Restores Across Clusters
- Spanning Cloud Boundaries
In-Cloud Protection

Deploy PowerProtect Data Manager in-cloud on available supported hyper-scalers allowing to protect Kubernetes workloads for even more reliable QA/Test capabilities with self-service backup and restores.
"I feel much better knowing that our operations can run without impacting release to market with PowerProtect Data Manager."

– Business Owner

### Resources

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