

# Dell PowerScale vs. Qumulo Core

## Dell PowerScale

### Scale-out up to 252 nodes and 186PB<sup>1</sup> capacity

Up to 2.5x greater node scale-out and up to 5x greater raw capacity scale-out to support massive unstructured data growth and infrastructure consolidation.



### Adaptable data resiliency

Data protection levels across the cluster can be custom-tailored to workloads and data lifecycle to help improve data efficiency.



### Uptime tolerance for up to four node failures

Tolerance of up to four simultaneous node failures enables robust availability as clusters scale to multi-PB range.



### Comprehensive in-line data reduction

Capabilities for zero block removal, in-line deduplication, and in-line compression result in smaller storage footprint, which can reduce power and cooling requirements and lower overall per-TB storage cost. Also, by reducing the amount of physical data written to storage devices, in-line data reduction helps to reduce flash-drive wear rates and extend the life of solid-state media.



### API-integrated cyber-security

Ransomware Defender offers real-time event processing with user behavior analytics and automated actions to help to detect and halt ransomware attacks. Integrated operational airgap cyber-vault capabilities help to isolate recovery data from attackers.



### Automated tiering of cold or infrequently accessed data to cloud archival repositories

Policy-driven tiering extends PowerScale namespace to any S3-compatible cloud archival repositories, enabling a single, intelligent framework for managing both active and inactive data. Archive data in the cloud is still visible and retrievable from within PowerScale OneFS.



### Flexible incremental cluster scaling

Capability to non-disruptively add or remove nodes as well as retire and re-purpose nodes. Ability to seamlessly mix node types and generations within a cluster.



### Adaptable, multi-level data resiliency within a cluster

Data protection levels can be custom-tailored to workloads and policy-managed to adapt to data lifecycle so data resiliency and data efficiency can be concurrently optimized within a cluster.



## Qumulo Core

### Scale-out to up to 100 nodes and 36PB capacity

Limited scale constrains ability to support growth and infrastructure consolidation.

### Unchangeable data resiliency

Fixed and homogeneous data protection levels across the cluster can decrease data efficiency.

### Uptime tolerance for just one node failure

Tolerance of only one node failure results in less robust availability as clusters scale.

### No data reduction

No capabilities for zero block removal, deduplication, or compression.

### No API-integrated cyber-security

Reliance on outside software providers for cyber-security can add complexity and cost.

### Manual copy of cold or infrequently accessed data to cloud archival repositories

No policy-based capability to tier inactive data to cloud S3 archival repositories. Manually copying data to S3 archival storage (only AWS is supported) can be labor-intensive at scale. Archival data copied to cloud S3 repositories is not visible or retrievable from within Qumulo Core.

### Limited cluster scaling flexibility

No software capability to non-disruptively remove nodes or retire and re-purpose nodes.

### Homogeneous data resiliency level within a cluster

Just one data protection level can be enabled in a cluster, which can force compromise between data resiliency and data efficiency.

<sup>1</sup> Capacity available in PowerScale F900. Maximum cluster capacity varies by model.

Comparison based on publicly available information, July 2022.

Copyright © 2022 Dell Inc. or its subsidiaries. All Rights Reserved. Dell Technologies, Dell, EMC, Dell EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.