

SOLUTION BRIEF

The power of Commvault + Dell PowerProtect DD series appliances

Commvault continues to work with industry-leading partners on developing and delivering the most innovative solutions in the industry. This time with Dell Technologies.



OVERVIEW

Commvault and Dell Technologies have partnered to provide new and existing customers with an unparalleled data protection solution to simplify and reduce time to protect their data. The combined solution includes industry-leading backup appliances (Dell PowerProtect DD) and software (Commvault). Customers can now access the capabilities of both for enhanced resilience, performance and scale.

The new integration delivers:

- A simplified configuration through a DD Boost native API-based integration.
- Improved security, faster backups, reduced network utilization.
- DD Boost integration on the application client or Media Agent.

CHALLENGE

Previously, Commvault utilized PowerProtect DD systems as protection storage, but only through the use of CIFS / NFS or the BoostFS plug-in. In a time where cyber threats are becoming more pervasive, having a reliable and secure backup solution is key when it comes to protecting your business' data from these ongoing threats. While BoostFS was an improvement over CIFS / NFS, an even better solution is now available.

SOLUTION

Commvault and PowerProtect DD are now integrated with a simple native API-based DDBOOST solution that is more secure and provides superior performance. This solution eliminates the need for the BoostFS plug-in, thus reducing complexity and shortening the time it takes for customers to start safeguarding their data.

POWERPROTECT DD APPLIANCES

Commvault and Dell Technologies have partnered to provide new and existing customers with an unparalleled data protection solution to simplify and reduce time to protect their data. The combined solution includes industry-leading backup appliances (Dell PowerProtect DD) and software (Commvault). Customers can now access the capabilities of both for enhanced resilience, performance and scale.

- Sizes from 4 TB to 1.5 PB of usable capacity—up to 97.5 PB logical capacity with 65x deduplication.¹
- Software-defined version for ROBO, entry-level and cloud environments—starting at 1 TB.
- Cloud long-term retention and cloud DR-ready.
- Cyber recovery integration.

¹ Based on Dell internal testing and field telemetry data, January 2023. Actual results may vary.



PowerProtect DD #1 Purpose-built Backup Appliances²



Fast & Efficient

- Typically, 65:1 deduplication³
- Up to 38% faster backups⁴
- Up to 45% faster restores⁴



Sustainable

- Can cost as little as \$2.08 per day for power and cooling⁵



Secure & Resilient

- Data Invulnerability Architecture (DIA)
- PowerProtect Cyber Recovery ready



2 Based on revenue from the IDC 2Q23 Purpose-Built Backup Appliance (PBBA) Tracker.
 3 Based on Dell internal testing and field telemetry data, January 2023. Actual results may vary.
 4 Based on Dell internal testing compared to the previous generation, January 2023. Actual results may vary.
 5 Estimate based on Dell analysis for PowerProtect DD6400 at 32 TBu. Cost in US dollars calculated using thermal rating (\$16 Watts) and an average electricity price of \$.168 per KWH (source: Electricity per KWH in U.S. city average from U.S. Bureau of Labor Statistics, data accessed in February 2023). For estimation purposes only. Actual costs will vary depending on actual product configuration, usage, operating conditions, power management settings and other factors.

Figure 1 PowerProtect DD appliances

WHY DD BOOST?

As a DD Boost ecosystem partner, Commvault users get:



Advanced native integration with industry leading-leading DD appliances.



Efficient backup and replication, controlled by the application team.



Reduced network utilization, faster backups, improved security.



DD Boost library support on the Media Agent or the application client.

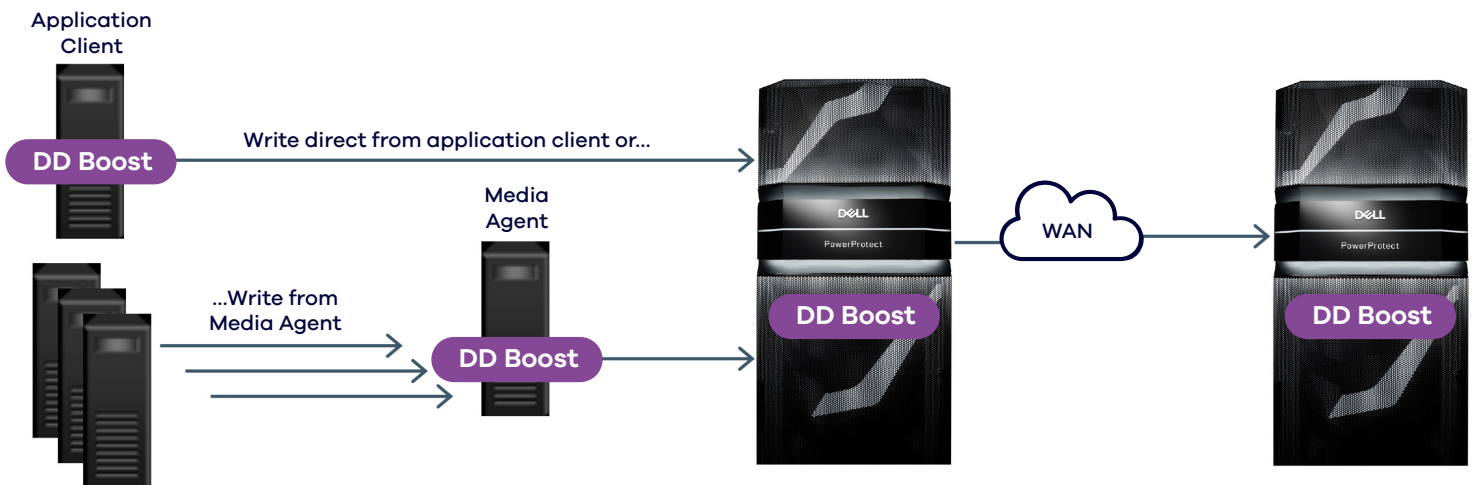
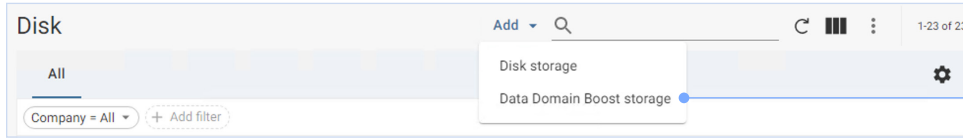


Figure 2 DD Boost library support on Media Agent or application client

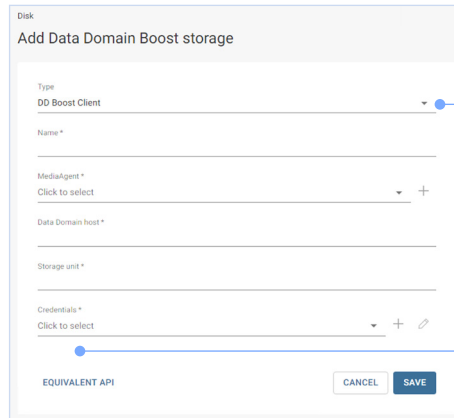
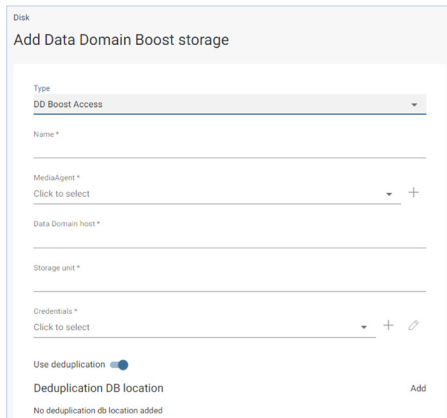


DD integration type	Features	Who should use this?
<p>DD Boost on Media Agent</p>	<ul style="list-style-type: none"> ✓ Direct communication with DD via Boost SDK <ul style="list-style-type: none"> - Eliminates need to use mount points network shares thus reducing a potential place for bad actors to corrupt ✓ Data is written in native Commvault format <ul style="list-style-type: none"> - CV deduplication and compression ✓ Supports WORM (DD Retention Lock Governance and Compliance modes) ✓ DD client-side encryption ✓ SELinux enabled workflow 	<ul style="list-style-type: none"> • Existing Commvault customers using a PowerProtect DD <ul style="list-style-type: none"> - Can convert from NFS/SMB or Boost FS - Does not require a new baseline of data (uses same format)
<p>DD Boost Client</p>	<ul style="list-style-type: none"> ✓ Direct communication on client with DD using Boost SDK <ul style="list-style-type: none"> - Reduced load on Media Agent and eliminates the need to use mount points or network shares thus increasing performance and reducing security vulnerabilities. ✓ Data is written in native Dell DD format <ul style="list-style-type: none"> - Client-side superior native Data Domain deduplication through SDK ✓ Supports WORM (DD Retention Lock Governance and Compliance modes) ✓ DD client-side encryption ✓ SELinux enabled workflow Optimized Synthetic full back-ups and aux copies ✓ Native File Copy API used to move between PowerProtect DD's 	<ul style="list-style-type: none"> • New or existing Commvault customers who want all of the advantages of DD Boost on the Client <ul style="list-style-type: none"> - Existing customers will re-baseline all data as the format has changed from Commvault to PowerProtect DD native

DELL POWERPROTECT DD BOOST INTEGRATION: A QUICK VIEW OF THE DD BOOST INTEGRATION FROM THE COMMVAULT UI



New option when adding disk storage for **Data Domain Boost Storage** type



The Type dropdown gives two options:
 1. DD Boost Access
 2. DD Boost Client

Note there is no Deduplication option here. This uses the DD native deduplication instead.

THE BIG PICTURE

This integration enables users to leverage native DD Boost capabilities. Some of the benefits include:

- Better user experience.
- Enhanced security—client-side encryption, immutability support, SELinux enabled workflow no mount points or network shares required.
- Faster backup and recoveries using the DD Boost Client, leading to improved Recovery Time Objectives (RTO).
 - Superior native Data Domain deduplication on the client—less data is transferred to the PowerProtect DD appliance.
 - Synthetic Full backups—only changed data is transferred to the PowerProtect DD appliance.
- Reduced load on Media Agents with DD Boost Client.

Flexible options for existing and new customers

Existing customers already using PowerProtect DD can utilize DD Boost on the Media Agent, providing increased security and immutability. Additionally, data remains in the Commvault format, meaning conversions are straightforward and won't affect storage allocation.

New customers or existing customers can use DD Boost on the Client, which will leverage native capabilities to unlock the full power of the PowerProtect DD platform creating an unapparelled joint solution for our customers. Data will be written in DD native format.

Other resources

[Blog](#)

[Commvault / Dell Partner Page](#)

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