

ESG First Look

Fast and Efficient Data Protection Storage with the PowerProtect DD Series Appliances from Dell EMC

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Data Protection Challenges



The percentage of respondents who consider their IT environment to be **more or significantly more complex** today than it was two years ago.



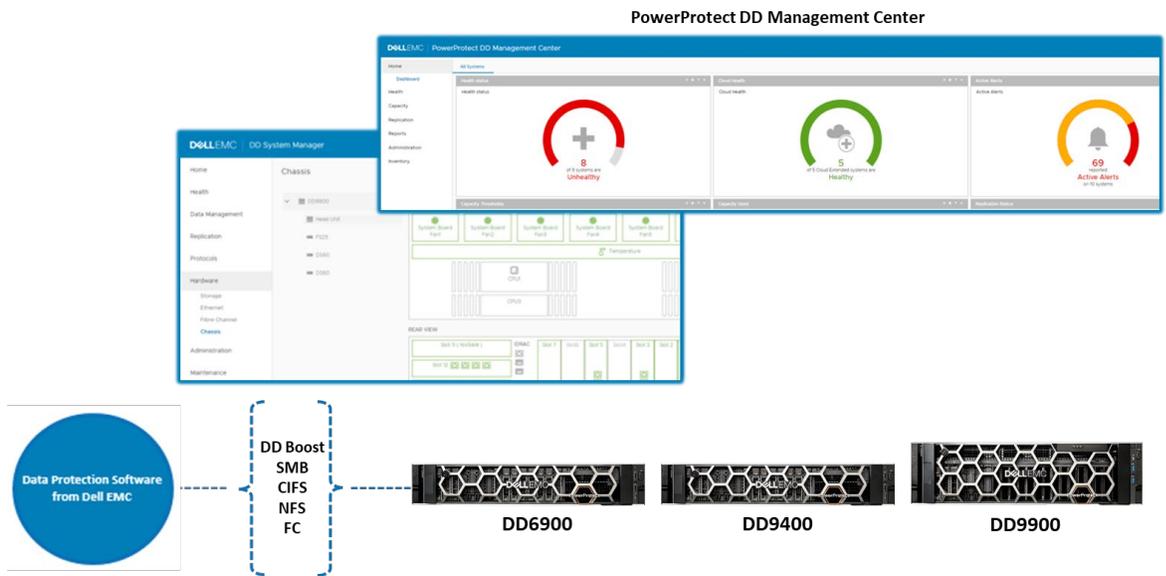
The percentage of organizations that believe **higher data volumes** are a reason their IT environments have become more complex.¹

According to ESG research, 66% of respondents report that their IT environment is either more or significantly more complex today than it was two years ago. And data protection is not immune to this perception of complexity despite being a longstanding IT discipline. In fact, increased complexity and capacity make it more difficult for IT to manage application uptime requirements and deliver business-level SLAs for recovery.

PowerProtect DD Series Appliances Overview

Dell EMC PowerProtect DD Series Appliances are the next generation of Data Domain, specifically architected to protect data on premises, in the cloud, and in hybrid environments. PowerProtect DD Series Appliances include PowerProtect DD9900, DD9400, DD6900, DD3300, and the software-defined DD Virtual Edition. PowerProtect DD can deliver usable capacity of up to 1.25PB in a single rack and improves logical capacity by up to 30% through hardware-assisted compression. This

reduces the overall data center foot print and lowers power and cooling costs. Backup performance can reach up to 94TB/hour, and instant access recovery performance can reach up to 60K IOPS for up to 64 VMs. PowerProtect DD also delivers the functionality that



existing Data Domain customers have access to today, including replication, data-at-rest encryption, cloud tiering, and cloud disaster recovery. PowerProtect DD provides an enhanced, simple-to-use system management UI for each appliance as well as a global dashboard for managing and monitoring multiple appliances simultaneously.

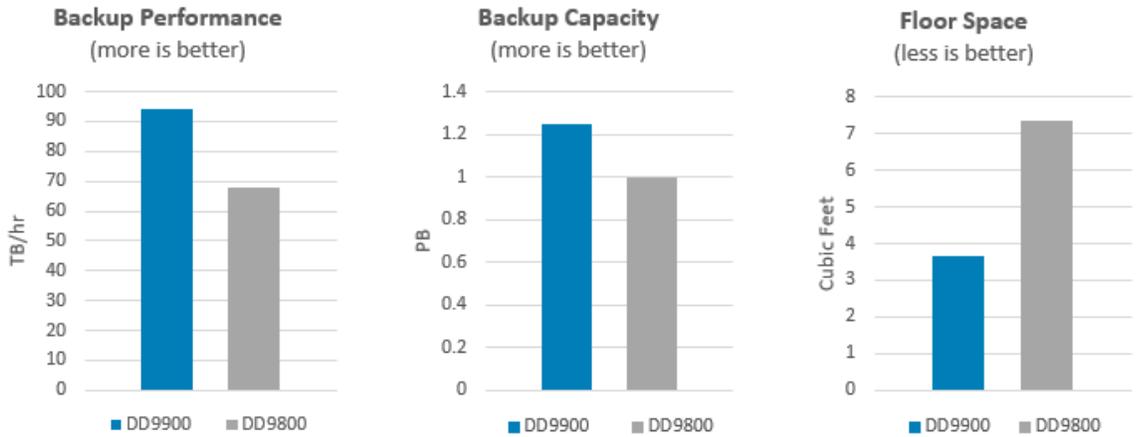
ESG Demo Highlights

ESG performed hands-on evaluation of PowerProtect DD from our corporate office in Milford, MA by leveraging multiple remote Dell EMC demo environments. We conducted a review of the platform's architecture, navigated the management interfaces, conducted deployment and administrator tasks, and audited performance and efficiency testing results.

¹ Source: ESG Master Survey Results, [2019 Technology Spending Intentions Survey](#), March 2019.

Next-generation Platform, Next-generation Results

- ESG started the evaluation process by exploring the new PowerProtect DD System Manager and the PowerProtect DD Management Center user interfaces. We used the DD System Manager to configure a DD9900 appliance. This configuration process included creating a DD file system on the initial active tier storage container. Once the storage was configured, ESG logged into a VM in the test environment that was running PowerProtect software and configured the DD9900 to be used as a target. Next, we created protection policies and conducted multiple VM restores that included an in-place VM recovery, file-level restores, and instant access recovery.
- Finally, ESG reviewed the performance and efficiency results of the new PowerProtect DD Series Appliances architecture. We validated the test environment infrastructure and procedures and audited the testing results. ESG confirmed that the new architecture delivers backup performance up to 94TB/hour, can scale up to 1.25PB of usable capacity, can reduce data center floor space requirements by up to 50%, and can deliver up to 60k IOPS for instant access recovery.



First Impressions

ESG research indicates that a major challenge for almost half of businesses is ensuring that their business-critical data is managed and protected in a manner that meets the business’s SLAs.² Increased complexity and capacity make it more difficult for IT to manage application uptime requirements and deliver business-level SLAs for recovery.

ESG’s first impression is that the new generation of data protection storage solutions from Dell EMC, PowerProtect DD Series Appliances, will significantly enhance a business’s ability to meet today’s data protection challenges, while equally preparing them for future growth. The intuitive interface allows new appliances to easily integrate into existing environments, and the new architecture delivers improved performance and higher storage capacities in a reduced footprint.

² Source: ESG Master Survey Results, [2018 Data Protection Landscape Survey](#), November 2018.

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