

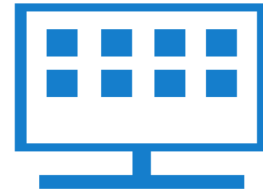
Are you paying a complexity tax with your file storage ecosystem?

By Jon Siegal, Vice President Product Marketing | April 2022



Look across your current file storage infrastructure. Focus on your software ecosystem. Does it include an assortment of different vendors' software? Are you using home-grown scripts, different GUIs, different operations, different training, different purchase and support contracts? If you are, you may be working harder than necessary to meet essential business objectives.

Dell Technologies is #1 in the unstructured data market, which includes file and block storage*. Dell Technologies' PowerScale OneFS is complemented by an exclusive software ecosystem that contrasts sharply with the disjointed, multi-vendor software ecosystems from other scale-out NAS vendors. If you look across the PowerScale software ecosystem, you will see a tightly integrated suite of tools, all accessible from a single pane of glass with role-based access controls. What's more, you will have exclusive capabilities that enable you to efficiently and effectively meet business objectives. You will be able to address uptime, regulatory compliance, service-level management, data security, backup/archival/recovery, and content insights with a level of excellence and efficiency that can be game-changing for your business. In fact, a recent Forrester Total Economic Impact™ study found that PowerScale's management efficiency played a significant role in helping companies realize millions of dollars in economic benefits and get 374% return on investment over a period of 3 years.¹



Voice of the customer¹

"If we had stayed with and grew our multi-vendor storage environment, we would have needed five FTE's: two storage engineers and three operations staff to perform tasks. With PowerScale we are able to manage the whole environment with about three-fourths of an FTE."

* Based on Dell analysis of published available data, June 2021.

¹ Forrester Total Economic Impact Study, commissioned by Dell Technologies: [Cost Savings and Business Benefits Enabled by Deploying Dell EMC PowerScale Storage](#), May 2021.

Take a short complexity tax quiz

1. Does your file storage integrate ransomware detection with automated lockout and recovery?



Most file system stack solutions don't have integrated ransomware capabilities. Unfortunately, ransomware horror stories are getting more common. You may have heard some of those recovery stories involving scripting, file system and snapshot walking, and painstaking manual file replacements. What would happen if you experienced an attack? How painful would that be for you?

PowerScale with Ransomware Defender is an easy button for hardening OneFS against ransomware attackers.

PowerScale with Ransomware Defender brings real-time event processing and behavior analytics to detect a ransomware attack. It has a customizable rules engine with self-learning features to halt the attack. It can also create a snapshot of the affected paths/shares when an attack is detected to facilitate quick recovery. Ransomware Defender also integrates air gap automation that maintains a secure offline vault copy of your data and keeps the vault closed if your data is under threat.

2. Does your file storage have one-button disaster recovery (DR) failover and failback?



A lot of DR solutions provide the ability to flip an active file system over to a DR system, but that's just one of about ten critical things that need to happen to keep users active and working after a cutover. Can your DR solution handle authentication issues with Active Directory? Does it ensure that DNS systems properly resolve to the failover datacenter? Does your solution apply all the configuration settings at the failover site? What about failover speed?

PowerScale with DR Edition automatically performs all the failover and failback steps with just one click of a button.

If you are keying in command line sequences or maintaining scripts to effect failover and failback, your DR solution is unnecessarily complex and your data could be at heightened risk. PowerScale with DR Edition can dramatically simplify your operations and lower your risk.

3. Does your file storage prove to you every day that you are ready to failover and failback successfully?

Most DR solutions don't. PowerScale with DR Edition non-disruptively self-tests failover and failback on test data every day and alerts you if there's a problem. If you are using a runbook and manually testing your DR environment, your DR failover plan could be at risk. DR Edition takes that risk off the table and gives you confidence that you are prepared for any disaster.

4. Does your file storage have integrated content-aware indexing?

It isn't easy to find a search and analytics solution that can scale to very large file systems. It's even more difficult to find one that is both highly scalable and content-aware. Because of this, many customers have not deployed a solution for index and search. If your storage vendor can't help you understand all the data you own, your data's value is reduced. What's more, if you can't determine whether credit card data or HR data or any other private, protected data is littering your file system, then you could have compliance exposure.

Search and Recover integrates PowerScale OneFS file system analytics with content awareness to help you gain insight into the vast data resources that your company owns. And because security matters, search results are returned only to end users who have permission to view them.

5. Can your file storage identify the root cause of performance bottlenecks in just one click?



File system stack solutions commonly provide some level of feedback on performance. Some performance auditing solutions have impressive dashboards and real-time reporting capabilities. A common challenge with performance analytics solutions is that their filtering functions don't immediately pinpoint root causes. That's because they lack user and application awareness. Without these elements, your performance data doesn't offer much value.

PowerScale with Performance Auditor takes you straight to the root cause. It identifies performance issues in real-time by creating relationships between users, files path, subnets, and cluster node information.

The Performance Auditor dashboard allows you to interact with any performance aspect and immediately visualize cause and effect on the relationship between users, files, applications, subnets, and storage nodes. You are only ever just one click away from the root cause of performance bottlenecks.

6. Can your file storage handle the age-old question of “Where did my folder go?” in real-time?



Your file data is probably the most complex and ubiquitous dataset your organization has. And it’s likely the fastest-growing dataset, as well. Many auditing functions struggle with massive scale. They cannot work efficiently in real-time at billions of files and tens of thousands of users.

The active auditing function of PowerScale with Easy Auditor provides comprehensive, sortable, real-time information at massive scale within and across PowerScale clusters.

PowerScale with Easy Auditor quickly locates moved data by users, plus enables one-click recovery. A virtual wiretap feature identifies who did what, when, and from where. With Easy Auditor, PowerScale also has mass delete and data loss preventions. Additionally, it creates different kinds of email reports and sends them to appropriate recipients. PowerScale with Easy Auditor significantly reduces the workload related to file system monitoring and reporting.

7. Does your file storage have scale-out-aware file-to-object backup/archive with one-click restore?

How cool would it be if you could store a fully consistent—and fully accessible—copy of your file system, including the directory structure, file permissions, etc., on an S3-compatible target, either in-house or in the cloud? Traditional backup products require you to perform a restore from within the backup application, but PowerScale with Golden Copy lets admins directly access a backup copy of files

and folders using standard S3 API calls. They don't even need OneFS to access the data. This functionality is helpful for long-term retention or third copies.

How did your file storage score?

The PowerScale software ecosystem can help you address complex business challenges associated with your unstructured data more efficiently and cost-effectively than the multi-vendor ecosystems surrounding other scale-out file solutions.

The PowerScale software ecosystem gives you a tightly integrated suite of tools for meeting stringent business objectives surrounding uptime, data protection, regulatory compliance, service-level management, cybersecurity, and content insights.

The PowerScale ecosystem is accessible in a single pane of glass with role-based access controls. It exploits the PowerScale OneFS API library to benefit from underlying file system synergies. It runs outside the cluster so it doesn't subtract CPU, memory, and I/O from workloads. The PowerScale ecosystem has a decisive competitive advantage in efficiently and effectively solving essential business objectives surrounding your file storage.

About the author: Jon Siegal is Vice President of ISG Products & Solutions Marketing for Dell Technologies. This includes Dell Technologies' industry-leading HCI, servers, storage, and data protection, as well as award-winning networking and solutions.