

ESG SHOWCASE

Improving Data Protection Operational Efficiency with NetBackup Flex Scale from Veritas

Date: November 2021 Authors: Vinny Choinski, Senior Analyst; and Monya Keane, Senior Research Analyst

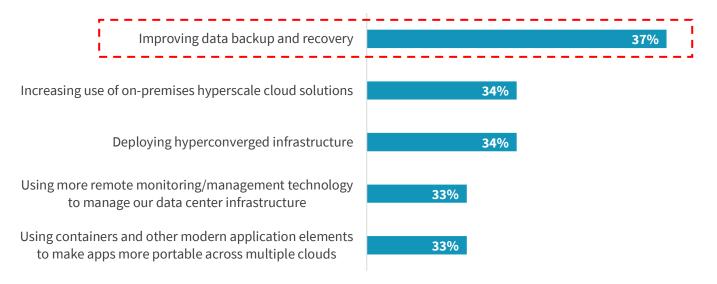
ABSTRACT: While technology innovations are transforming IT in positive ways, organizations continue to struggle as IT becomes more complex. Further complicating IT is the trend toward having more generalists on the IT staff handling a range of tasks, rather than experts dedicated to specific areas such as data protection.

Market Landscape

Improving data protection has re-emerged as a top data center modernization priority for many organizations (see Figure 1). A lot of that renewed interest has been due to the rising need to mitigate ransomware attacks. Additional factors behind the interest in improving data protection relate to data-growth concerns and data protection workload-distribution challenges—today's organizations are challenged to figure out where all their secondary data needs to reside: on-prem, in a hybrid or multi-cloud environment, etc.

Figure 1. Top Five Data Center Modernization Investment Areas

In which of the following areas of data center modernization will your organization make the most significant investments over the next 12-18 months? (Percent of respondents, N=664, five responses accepted)



Source: Enterprise Strategy Group

¹ Source: ESG Research Report, <u>2021 Technology Spending Intentions Survey</u>, January 2021. All ESG research references and charts in this showcase have been taken from this research report.



The current emphasis on improving backup and recovery is also an indicator that IT, overall, has become more complex. A combined 75% of organizations surveyed by ESG this year reported that they believe their IT environments are now either more complex or significantly more complex than they were two years ago.

To overcome the complexity challenge, today's IT organizations often are leveraging a cloud paradigm, even for their on-prem solutions. In regard to pricing, for example, more organizations now prefer a cloud-like "pay-as-you-go" approach versus spending CapEx upfront. This year, 48% of respondents favored a consumption-based model in which data center infrastructure is pay-per-use (e.g., a variable monthly subscription based on hardware consumption). Last year, that percentage was 42%.

The bottom line, as Figure 2 shows, is that these organizations are looking to digital transformation, including in the realm of backup, as a way to boost the operational efficiency of their highly complex IT environments.

Figure 2. Top Five Digital Transformation Initiative Objectives



Source: Enterprise Strategy Group

Specifically, when it comes to data protection, they need to look for a solution that leverages modern IT advancements such as **hyperconverged IT** and **containerization**. This solution should be hardware agnostic, able to operate on the hardware of your choice. It should also be containerized—essentially serving as a cloud delivery as-a-service mechanism to support greater operational efficiency.

Ideally, it would be possible to spin up instances of NetBackup in this type of infrastructure, knowing that the solution will automatically handle tasks such as load balancing (so you don't have to be an infrastructure expert yourself). It should build the containers for you, so you don't have to worry about that operation as you scale out your environment. In fact, because the solution would be delivered as a service, you shouldn't have to worry about babysitting the infrastructure at all.



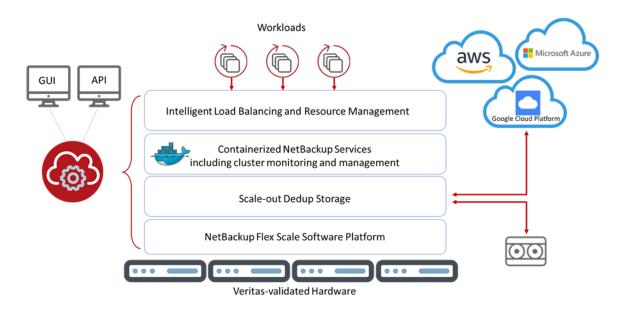
Data Protection Can Be a Daunting Process to Successfully Manage, Particularly at Enterprise Scale

Data protection is a long-standing IT discipline, probably as old as IT itself, and being successful at it requires the right combination of people, process, and technology. However, as environments scale and the data volumes continue to grow, there must be a high level of orchestration automation in a data protection ecosystem in order for an organization to achieve better operational efficiency.

Data Protection at Enterprise Scale

NetBackup Flex Scale is the latest of several options for deploying NetBackup, supporting the same 800+ workloads as other NetBackup deployments. NetBackup Flex Scale is a hyperconverged, scale-out solution that comes pre-installed with the NetBackup Flex Scale Software Platform on Veritas-validated commodity hardware. All backup and recovery elements are abstracted with containers as data protection services. No external hardware components are involved. NetBackup Flex Scale offers simplicity, automation, scalability, and high performance; management is simple with the same NetBackup user interface (UI) to which customers are accustomed or with easy-to-integrate APIs. NetBackup Flex Scale also supports multiple clouds and tape.

Figure 3. Veritas NetBackup Flex Scale Overview



Source: Enterprise Strategy Group

Automated Data Protection Infrastructure Orchestration

With Flex Scale, NetBackup customers have no learning curve to delay time to value, just an automated, scale-out, containerized architecture underneath what they already know. Automation and orchestration features include:

• Intelligent load balancing and resource management. NetBackup Flex Scale has an intelligent, containerized load balancer that knows the load on each node and distributes tasks intelligently. When additional resources are needed, new nodes are added, and NetBackup Flex Scale automatically spins up new containers and services. Administrators have no need to even know if they need more services; they are just created automatically. When nodes are added or replaced, the new nodes are automatically added to the resource pool. All of this happens non-disruptively.



- Containerized NetBackup services. The NetBackup application and all other data management and media management services are containerized using Docker. They are created automatically during the initial configuration and distributed across all nodes. There is no need for a direct connection to specific services; all clients connect to an alias for services, eliminating any client-side impacts for policy or hardware changes. Container snapshots make rolling upgrades simple and fast, and container management is built into NetBackup Flex Scale using the embedded Veritas InfoScale functionality.
- Scale-out, deduplicated storage. At initial configuration, all hard disk drives (HDDs) are aggregated into a single storage pool. Efficient data storage is guaranteed with NetBackup's built-in Dedup Storage Pool. As nodes are added, new HDDs are included in the pool.

NetBackup Flex Scale, with its containerized, hyperconverged, scale-out architecture, offers simple, automated deployment; easy management; and the scalability needed to handle enterprise-level data protection workloads.

Veritas Overview

Globally recognized, Veritas Technologies LLC is a US-based data management company headquartered in Santa Clara, California. Customers using the Veritas platform can accelerate their digital transformation and solve pressing IT and business challenges, including multi-cloud data management, data protection, storage optimization, compliance readiness, and workload portability.

The Bigger Truth

Growing data volumes and management complexity complicate data protection, often resulting in data vulnerability. Veritas NetBackup has a long history of not only delivering rock-solid data protection, but also implementing changes along the way to optimally serve customers. With more than 800 workloads supported, NetBackup is a leader in the industry. The latest incarnation of NetBackup is NetBackup Flex Scale, a scale-out, hyperconverged appliance with all NetBackup services containerized using Docker. It is focused on simplicity and automation for all tasks, including backup, restore, and scale.

ESG validated that NetBackup Flex Scale, with its containerized, hyperconverged, scale-out architecture, offers simple, automated deployment and scalability. Using the easy set-up wizard, deployment took less than five minutes of administrator time, after which NetBackup Flex Scale completed the installation on its own. Adding nodes to the cluster was equally easy, requiring just a few clicks. NetBackup Flex Scale automatically added the nodes, scaled the clustered file system, and rebalanced data across the expanded cluster, with no changes to policies or clients.

All trademark names are property of their respective companies. Information contained in this publication has been obtained by sources The Enterprise Strategy Group (ESG) considers to be reliable but is not warranted by ESG. This publication may contain opinions of ESG, which are subject to change. This publication is copyrighted by The Enterprise Strategy Group, Inc. Any reproduction or redistribution of this publication, in whole or in part, whether in hard-copy format, electronically, or otherwise to persons not authorized to receive it, without the express consent of The Enterprise Strategy Group, Inc., is in violation of U.S. copyright law and will be subject to an action for civil



Enterprise Strategy Group is an IT analyst, research, validation, and strategy firm that provides market intelligence and actionable insight to the global IT community.





contact@esg-global.com



508.482.0188