An accelerated number of workloads are moving to the cloud as remote working structures become prevalent and employers look to empower their employees with new technologies and collaboration tools.

It is true that most enterprises today have either started their cloud journeys or are leveraging cloud-native tools. However, the journey is as important as the final destination when it comes to cloud.

Understanding this journey and regularly assessing cloud readiness will lead to successful transitions, but there are things to consider. According to research by Vanson Bourne, 94 percent of enterprises now have a multi-cloud strategy—and 80 percent have accelerated these strategies due to the global COVID-19 pandemic. But in today's multi-cloud environments, data is scattered from the core to the edge, across different cloud providers, and accessed by an ever-increasing number of applications.

Suppose organizations simplify and automate disaster recovery (DR) in the cloud. In that case, ensuring that backup data is optimized while in transit to the cloud and enabling quick recovery of data from the cloud are vital to their success. In addition, data protection for multi-cloud environments can pose a variety of challenges ranging from optimizing total cost of ownership (TCO) to ensuring regulatory compliance. In general, most organizations are wrestling with how to reduce cost and complexity, manage business risks, prepare for the technologies of the future, and scale confidently. NetBackup 10.1.X delivers a four-pronged approach consisting of migration, protection, recovery, and optimization. Below, we explore each in more detail.

**Migrate: Comprehensive Workload Portability**

How do you ensure your data is managed correctly and you have enough copies to make it available and resilient? Our mission is to ensure that your data gets from where it is to where it needs to go.

NetBackup, powered by Cloud Scale Technology enables you to:

- Accelerate your adoption of cloud use cases (backup to the cloud, archive to the cloud, DR to the cloud, DR in the cloud) and new virtualization technologies (Docker containers, Red Hat Virtualization, OpenStack, fully agentless VMware)
- Move, copy, and restore data to or between clouds
- Automate and orchestrate application lift-and-shift and recovery
- Conduct backup snapshot orchestration and establish service level agreements (SLAs) for data movement
- Drive proactive data compliance and risk identification
Lower hardware and cloud storage costs with consolidated client-side deduplication with a single server and without data rehydration

Increase operational efficiencies through pre-built APIs

Improve security and compliance with role-based access control (RBAC) and storage, an external certificate authority, two-factor authentication, proactive smart metering licensing models, and Dynamic NAT

Ensure that containers are FIPS/STIG-compliant for Flex and Flex Scale appliances and ensure certificate portability with expiration alerts (NetBackup 10.1.1 and higher)

Transfer petabytes of data to the cloud with AWS Snowball

Save costs and optimize cloud storage space with Azure incremental snapshots

Optimize backup to the cloud and LTR with Azure Archive and AWS Glacier by using unified, end-to-end deduplication

And now with Veritas Alta™ Data Protection for NetBackup Cloud Workloads, you can achieve greater scale and protection of your cloud workloads with efficient and secure object storage.

Protect: Unified Protection and Recovery

Your data isn’t static, so how you protect it can’t be static either. You need a dynamic solution to protect and recover your data in a way that’s tailored to your business without having to micromanage siloed products. A single data protection platform allows you to define protection needs at a high level and then automate service-level objectives (SLOs) throughout your infrastructure.

NetBackup is now a SAP-certified data protection and recovery integration with SAP HANA. SAP HANA certification enables customers to deploy NetBackup with the confidence of certified compatibility for SAP and NetBackup. For more information, please visit: https://www.sap.com/dmc/exp/2013_09_adpd/enEN/#/solutions?id=s:474019e7-51b3-4190-9906-b7e1735b2dc5.

With NetBackup powered by Cloud Scale Technology, you benefit from:

- Strengthened isolated recovery environment (IRE) support by eliminating the need for additional infrastructure when isolating and protecting data
- Constant protection with Kubernetes cluster backup, deduplication, and image duplication for the tiering of backup storage (service lifecycle policies) and auto image replication (AIR)
- Instant Access to VM and PaaS workloads to achieve a near-zero recovery time objective
- Data intelligence and regulatory security-driven protection across traditional, IaaS, PaaS, SaaS, hybrid apps, and big data workloads
- Lower cost backup and DR by using the cloud as a DR target with NetBackup images
- Built-in anomaly detection with artificial intelligence and machine learning to catch suspicious behavior and take immediate action when ransomware strikes
- Up to a 100:1 storage cost reduction with agentless backup from snapshot and multi-tier replication for AWS, Azure, and Kubernetes environments
• Integration with Veritas Alta™ SaaS Protection (formerly known as NetBackup™ SaaS Protection) providing comprehensive protection and governance for business-critical data across multiple SaaS applications

• SOAR/XDR platform integration to pause or resume data protection activities based on security or maintenance events

• Optimize backup to the cloud and LTR with Azure and Google Cloud Platform (GCP) Archive and AWS Glacier by using unified, end-to-end deduplication

• Protection of backup data from malicious attacks with deduplication to immutable object storage on AWS S3, Azure Blob, Seagate Lyve Cloud, Veritas Access, Veritas Alta™ Recovery Vault (formerly known as NetBackup™ Recovery Vault), HCP, and more

• The ability to discover, protect, and recover all application components across any Kubernetes distribution, on-premises or in the cloud

• Supercharged OpenStack protection, delivering cloud-native, API-driven, dynamic, and automated protection with rapid, granular recovery from edge to core to cloud

With Veritas Alta Data Protection for NetBackup Cloud Workloads, you also benefit from:

• Full backup and recovery support for PaaS workloads across all major cloud providers

• Support for more than 1,400 storage targets, more than 800 data sources, and more than 60 clouds

• Cloud intelligent policies that back up snapshots with filesystems with multiple shares anywhere, utilizing the same protection policies on-premises and in the cloud (supported with AWS, Azure, Azure Stack, and Google Cloud Platform)

• Elastic cloud resource autoscaling that automates the provisioning of additional target cloud capacity as needed (supported on Azure and AWS) to ensure that backups do not fail due to insufficient storage

Recover: Reliable Data Resiliency

To be resilient, you need to be able to recover from any real scenario—environmental issues, human failure, and security incidents such as ransomware. NetBackup provides a simple, non-disruptive way of validating your resiliency plan for assurance and compliance through automated recovery and rehearsal of business-critical applications. Moving data and spinning up applications when and where you need to without risking data loss requires business-level resiliency. It’s not your data that goes down, it’s your business.

With NetBackup, you benefit from:

• Recovery of last-known-good backup at scale with malware scanning and flexible recovery workflows

• Multiple recovery time objectives (RTOs) and recovery point objectives (RPOs) to support business service recovery to, in, and across clouds

Optimized Costs and Resources:

• 28 percent reduction in consumed IT resources

• 24 percent reduction in consumed storage

• 5 percent reduction in consumed compute resources

• 90 percent reduction in IT management software costs

60% of CIOs say that optimizing cloud spend is a top initiative for their organization.
(Source: Accenture)
- Scaled, automated, orchestrated recovery and instant rollback based on malware scan
- Granular recovery through continuous data protection
- The ability to reuse replicated data for testing and development in the cloud as well as a DR target
- High-speed NetBackup instant rollback for VMware to bulk recover VMs in seconds
- Support for immutable storage for Amazon S3 Object Lock, Azure, Seagate Lyve Cloud, and more, to ensure compliance and prevent your data from being compromised
- Recovery of what you want to wherever you want—to the same cluster, a different one, or an entirely different Kubernetes distribution—for Kubernetes environments

Optimize: Data Visibility and Control

As cloud data continues to grow in size and importance, efficiently managing it becomes more important than ever. With NetBackup IT Analytics, enterprises gain the visibility essential to identify underutilized, misconfigured, or unindexed IT resources that they can repurpose to achieve significant cost savings.

By deploying NetBackup IT Analytics, you benefit from:

- 20 percent savings in cloud costs by right-sizing before moving workloads to the cloud
- Analysis and reporting on performance across NetBackup, media servers, and appliances
- Identification of hosts with no recent backups, to ensure their recoverability
- Detection and location of ransomware-affected files
- Actionable insights about data on-premises and in the cloud
- Recommended classification, protection, and recovery actions to mitigate risks
- Hybrid cloud IT and data business analytics
- Public sector compliance with Federal Information Processing Standards (FIPS) and two-factor authentication (2FA)
- Chargeback that enables IT to operate as a service provider by capacity or performance
Why Veritas for Multi-Cloud Environments?

Veritas is trusted to provide enterprise data management to organizations of all sizes, including 87 percent of Global Fortune 500 companies. Veritas NetBackup and Veritas Alta Data Protection for NetBackup Cloud Workloads, powered by Cloud Scale Technology, provides your organization with containerized services, machine learning and artificial intelligence, and dynamic features that ensure the optimization and security of your multi-cloud environment. It is a software-based, vendor-agnostic platform that is uniquely focused on the value of information rather than the underlying environment. Organizations today need to manage data as a critical asset, and need to ensure rapid recovery of critical data during catastrophic events such as lost files, security attacks, or unexpected business disruptions. As the #1 solution in data protection with the most exabytes under management, NetBackup can protect any size workload at a petabyte-level scale, eliminating the need for disjointed point products. NetBackup helps ensure resiliency and on-demand access from anywhere, and reduces the risks and costs of storing ever-increasing amounts of data throughout the globe.

The always-on nature of digital business also demands the removal of artificial barriers between frequently siloed capabilities to reduce complexity, streamline operations, and deliver benefits from synergies that otherwise aren’t achievable. By providing deep integrations with freedom of choice from an extensive list of leading cloud service providers, Veritas helps you accelerate your digital transformation with all the advantages of unified enterprise data protection. The result is seamless, automated data lifecycle management and governance that protects your data and applications in the data center, virtually, and in the cloud.

For more information, visit [www.veritas.com/netbackup](http://www.veritas.com/netbackup)

For more information on Veritas Alta Data Protection, visit [www.veritas.com/alta](http://www.veritas.com/alta)