Veritas NetBackup 10.1.X
Powered by Cloud Scale Technology.

Organizations are moving an increasing number of workloads to the cloud as they empower teams with new technologies and collaboration tools.

The journey itself is as important as your destination when it comes to cloud. Understanding this journey and regularly assessing cloud readiness can lead to successful transitions. But there are many factors to consider. According to research by Vanson Bourne, 94% of enterprises now have a multi-cloud strategy. But in multi-cloud environments, data is scattered from the core to the edge and across different cloud providers. Plus, it’s accessed by an ever-increasing number of applications.

Suppose you simplify and automate disaster recovery in the cloud. It's vital to ensure optimization of your backup data while in transit to the cloud and enable quick recovery from the cloud. Data protection for multi-cloud environments can pose a variety of challenges from optimizing total cost of ownership to ensuring regulatory compliance.

In general, most organizations are looking for ways to reduce cost and complexity, manage business risks, prepare for future technologies, and scale confidently. NetBackup 10.1.X delivers a four-pronged approach consisting of migration, protection, recovery, and optimization.

Migrate: Comprehensive Workload Portability

How do you ensure that your data is managed correctly? And that 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:

Data Management

- 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
- Transfer petabytes of data to the cloud with AWS Snowball
- Accelerate adoption of cloud use cases (backup to the cloud, archive to the cloud, data recovery in and to the cloud)
- Implement new virtualization technologies such as Docker containers, Red Hat Virtualization, OpenStack, and fully agentless VMware

94% of enterprises now have a multi-cloud strategy. 
(Source: Vanson Bourne)
**Data Protection and Compliance**

- 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
- Improve security and compliance with role-based access control 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

**Efficiency Improvement and Cost Reduction**

- Lower hardware and cloud storage costs with consolidated client-side deduplication with a single server and without data rehydration
- Save costs and optimize cloud storage space with Azure incremental snapshots
- Increase operational efficiencies through pre-built APIs
- Optimize backup to the cloud and LTR with Azure Archive and AWS Glacier using unified, end-to-end deduplication

Achieve greater scale and protection of your cloud workloads with efficient and secure object storage with Veritas Alta Data Protection.

**Protect: Unified Protection and Recovery**

Your data isn't static. You need a dynamic solution to protect and recover your data. One that's tailored to your business and doesn't make you micromanage siloed products. With a single data protection platform, you can define protection needs at a high level and automate service-level objectives throughout your infrastructure.

NetBackup is a SAP-certified data protection and recovery integration with SAP HANA. Deploy NetBackup with the confidence of certified compatibility for SAP and NetBackup.

Advantages of NetBackup protection and recovery include:

**Data Protection**

- Constant protection with Kubernetes cluster backup, deduplication, and image duplication for tiering backup storage (service lifecycle policies) and auto-image replication
- Multi-factor authentication across all product interfaces (GUI, CLI, SSH)
- Multi-person authorization for critical operations to prevent unauthorized data deletions and other malicious actions, plus a new internal tracking and ticketing system
• Instant access to VM and PaaS workloads for a near-zero recovery time objective (RTO)
• Data intelligence and regulatory security-driven protection across traditional, IaaS, PaaS, SaaS, hybrid apps, and big data workloads

Backup and Recovery
• Optimization of backup to the cloud and LTR with Azure and Google Cloud Platform (GCP) Archive and AWS Glacier 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 NetBackup™ Recovery Vault), HCP, and more
• Strengthened isolated recovery environment (IRE) support by eliminating the need for additional infrastructure when isolating and protecting data

Anomaly Detection
• Built-in anomaly detection with AI and ML to catch suspicious behavior and take immediate action when ransomware strikes
• System-level and user behavior anomaly detection using ML and audit trails

Efficiency Improvement and Cost Reduction
• Up to a 100:1 storage cost reduction with agentless backup from snapshot and multi-tier replication for AWS, Azure, and Kubernetes environments
• Lower cost backup and data recovery using the cloud as a recovery target with NetBackup images

Integrations
• Veritas Alta™ SaaS Protection (formerly NetBackup™ SaaS Protection) integration for 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
• Supercharged OpenStack protection delivers cloud-native, API-driven, dynamic, and automated protection with rapid, granular recovery from edge to core to cloud

Data Management
• The ability to discover, protect, and recover all application components across any Kubernetes distribution, on-premises or in the cloud
• FIPS compliance for Kubernetes workloads

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 and more than 800 data sources
• 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 provisioning of additional target cloud capacity as needed to ensure that backups do not fail due to insufficient storage (supported on Azure and AWS)
Recover: Reliable Data Resiliency

Resilience requires the ability to recover from any real scenario, whether it's environmental issues, human failure, or security incidents such as ransomware. NetBackup provides a simple, non-disruptive way to validate your resiliency plan for assurance and compliance using automated recovery and rehearsal of business-critical applications. Moving data and spinning up applications when and where you need them 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:

**Recover Securely**

- Recovery of last-known-good backup at scale with malware scanning and flexible recovery workflows
- Scaled, automated, orchestrated recovery and instant rollback based on malware scans
- Integrated inline malware scanning during a restore, including configurable options for handling infected files
- Granular recovery through continuous data protection
- Immutable storage support for Amazon S3 Object Lock, Azure, Seagate Lyve Cloud, and others, to ensure compliance and prevent compromise of your data

**Recover Efficiently**

- Multiple RTOs and recovery point objectives (RPOs) to support business-service recovery to, in, and across clouds
- CSI-based snapshot support for block-based and file-based storage in the same namespace allowing parallel stream recovery and up to 200% faster restore speeds
- The ability to reuse replicated data for testing and development in the cloud as well as a data recovery target
- High-speed NetBackup instant rollback for VMware to bulk recover VMs in seconds
- Recovery of what you want to wherever you want for Kubernetes environments—to the same cluster, a different one, or an entirely different distribution

![Image](attachment://figure_2.png)

*Figure 2: NetBackup instant rollback for VMware anomaly detection, and malware scanning to ensure data is secure and recoverable*
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:

Analytics
- Analysis and reporting on performance across NetBackup, media servers, and appliances
- Actionable insights about data on-premises and in the cloud
- Recommended classification, protection, and recovery actions
- Hybrid cloud IT and data business analytics

Cost and Optimization
- 20% savings in cloud costs by right-sizing before moving workloads to the cloud
- Enhanced media server elasticity and intelligence, providing for optimized resource utilization and cost savings
- Chargeback that enables IT to operate as a service provider by capacity or performance
- Risk Mitigation
- Identification of hosts that have no recent backups, to ensure their recoverability
- Detection and location of ransomware-affected files
- Public sector compliance with FIPS and two-factor authentication

Why Veritas for Multi-Cloud Environments?

Veritas NetBackup and Veritas Alta Data Protection for NetBackup Cloud Workloads, powered by Cloud Scale Technology provide your organization with containerized services, machine learning and artificial intelligence, and dynamic features that ensure the optimization and security of your multi-cloud environment.
A software-based, vendor-agnostic platform, it's uniquely focused on the value of information rather than the underlying environment. Today's environments require you to manage data as a critical asset. And to ensure rapid recovery of critical data during catastrophic events such as lost files, security attacks, or unexpected business disruptions. As the No. 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 it reduces the risks and costs of storing ever-increasing amounts of data throughout the globe.

The always-on nature of digital business 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. Deep integrations give you freedom of choice from leading cloud service providers. 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.

Learn more about NetBackup and Veritas Alta Data Protection.