VERITAS The truth in information.

VERITAS NETBACKUP 8.2

Unified data protection for the cloud-ready enterprise.

ENTERPRISE-CLASS DATA PROTECTION

Long recognized as the market share leader in enterprise backup and recovery software, Veritas NetBackup[™] eliminates the cost and complexity of point products while keeping your data secure, compliant and available—no matter where it lives. It offers rapid recovery of business-critical data across hybrid, physical, virtual and multi-cloud environments while scaling to any size workload, and delivering breakthrough capabilities for virtualized and cloud-based deployments that go well beyond what traditional backup practices can achieve.

From ransomware to unplanned downtime, NetBackup lets you protect your enterprise from the unforeseen and offers these key benefits:

 Reduce cost and complexity—As a single, unified solution to protect all your data assets, NetBackup provides support for virtually every popular server, storage, hypervisor, database, application and cloud platform used in the enterprise today¹.
 Featuring high performance, intelligent automation and centralized management, this unified data protection platform can protect any workload at scale, eliminating the need for disjointed point products. (See Figure 1.)

Manage business risks—With NetBackup, you get rapid recovery

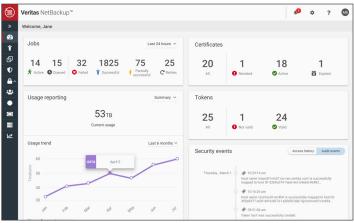


Figure 1. The NetBackup web UI dashboard conveniently displays a single, aggregated view of the most important information in one place.

from catastrophic business events, including everything from lost files and ransomware attacks to data center down. From backup appliances to cloud storage, NetBackup integrates at every point in the technology stack to improve reliability and performance.

- Trust that "it just works"—For over a decade, NetBackup has led the industry as the most popular enterprise data protection software by market share and is used by the largest enterprises on the planet. No backup software has won Best of VMworld as many times as NetBackup².
- Prepare for the future—With hundreds of patents awarded in areas including cloud, containers, backup, recovery, virtualization, deduplication and snapshot management, NetBackup continues the long Veritas tradition of bringing advanced technologies to market first.

PROTECT ANY WORKLOAD

One of the hallmarks of enterprise IT is its heterogeneity. The wide variety of platforms, applications and infrastructure often grows with the size of the enterprise. NetBackup supports a vast array of environments and integrates with every layer of the infrastructure stack to unify your entire data protection strategy.

- Operating systems—NetBackup integrates with dozens of server operating system (OS) versions, including Microsoft Windows[®], Linux[®] and UNIX[®] files.
- Virtual systems—NetBackup integrates with leading hypervisors including VMware vSphere[®], Microsoft[®] Hyper-V, Nutanix AHV, Red Hat Virtualization and OpenStack.

- Databases and applications—NetBackup integrates with leading relational database and application platforms, including IBM DB2[®], Microsoft[®] Exchange Server, Microsoft SQL Server[®], MySQL[™], Oracle[®], SAP[®] and others.
- Storage systems—NetBackup protects data at the storage system level by integrating with various snapshot, replication and NDMP facilities from Dell EMC[®], HP, Hitachi, IBM[®], NetApp[®] and others.
- Cloud platforms—NetBackup supports the backup and recovery of workloads within cloud environments by leveraging cloud snapshot technology.
- Big data systems—With NetBackup Parallel Streaming, you can protect large scale-out, multi-node systems such as Hadoop and HBase much more quickly by streaming data from every node simultaneously.

CHOOSE YOUR STORAGE

A lot has changed since the days of traditional tape backup. Enterprises now have many choices of where to store backups. NetBackup integrates this diverse collection of storage targets without compromising manageability.

- Cloud storage—NetBackup supports a growing list of third-party cloud storage providers such as AWS, Microsoft[®] Azure and Google that can be easily incorporated into NetBackup policies. And, with NetBackup CloudCatalyst, backup data is deduplicated before being quickly transferred and efficiently stored within the cloud.
- Purpose-Built Backup Appliances (PBBAs)—NetBackup uses its OpenStorage Technology interface to integrate with a wide range of PBBAs. (See Figure 2.)
- Disk—Ordinary disk volumes can be organized into disk pools under NetBackup control.



Figure 2. Veritas NetBackup[™] 5240 is an integrated enterprise backup appliance with expandable storage and intelligent deduplication.

- Storage system snapshots—NetBackup can orchestrate
 hardware snapshots using proprietary capabilities from vendors such as NetApp, Dell EMC, HDS, HPE and Pure Storage.
- **Tape**—NetBackup brings mainframe-class media management to a massive selection of supported tape drive and robotic hardware configurations.

BREAK THE BACKUP WINDOW

It's not uncommon for IT organizations to report data growth of 40-60 percent per year. To keep up, you need backups that run as fast as possible without disrupting production activity. NetBackup combines innovative design with the latest technical advancements to deliver impressive performance numbers with minimal impact.

- Parallel Streaming—Eliminate performance bottlenecks and optimize storage for big data environments. NetBackup Parallel Streaming provides agentless, API-based backup and restore of multi-node, scale-out clusters such as Hadoop.
- Accelerator—Eliminate full backups once and for all. With Veritas NetBackup Accelerator, only changed blocks are backed up each time. These blocks are combined with previous backups to synthesize a new full backup for quick recovery.
- Snapshots—Let the storage system run backups for you. With Veritas NetBackup Snapshot Management, snapshots are orchestrated, cataloged and replicated using storage technologies from vendors such as NetApp and Dell EMC.

RESCUE YOUR BUSINESS

The unthinkable happens. Services are down and the clock is ticking. There's no time to waste: it's time to recover from backup NetBackup is ready with fast, reliable recovery options to get your systems up and running as quickly as possible.

- Instant access—Mount and browse a VMware backup image using a simple, web-based user interface, accessible by any user that has been granted access.
- NetBackup Bare Metal Restore[™] Quickly prepare a physical system for restore, eliminating the need for manual reconfiguration.
- NetBackup Granular Recovery Technology (GRT)—NetBackup GRT indexes the contents of data sources, making it easy to restore specific items without endless trial-and-error restore attempts.

PREPARE FOR DISASTER RECOVERY

No business will survive if it keeps its data in one place. Protect your business from natural disasters and site outages by keeping a copy off-site or in the cloud. NetBackup can help you automate disaster recovery (DR) readiness regardless of what storage or transport method you use.

- NetBackup Auto Image Replication (AIR)—With NetBackup AIR, backup images and catalogs are automatically replicated over a network to other NetBackup domains on-premises or in the cloud, according to preset policies.
- Snapshot replication—Hardware snapshots created using NetBackup Snapshot Management can be automatically replicated to other storage systems at off-site locations, all under the control of NetBackup.
- Tape vaulting—Vault automatically ejects the proper tapes from a robotic library, tracks the movement of tapes to and from off-site storage facilities and prints daily reports to include with the daily shipment or email to your records management vendor.
- Integration with Verita Resiliency Platform—Meeting business uptime service-level objectives (SLAs) across hybrid clouds with multiple point products and different data sources can be complicated and costly. Resiliency Platform helps you proactively ensure resiliency for applications across your heterogeneous environments regardless of whether your data source is replication or a combination of replication and NetBackup data sources. (See Figure 3.)

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	Stop VMWare virtual machine	ENISHED	APP1	New York DC	Oct 14 2016 18:01:46	Oct 14 2016 18:04:48	1
	Unregister VMWare virtual machine	FINISHED	APP1	New York DC	Oct 14 2016 10:04:48	Oct 14 2016 10:07:49	
	* Restore VMWare virtual machine	FINISHED	APP1	New York DC	Oct 14 2016 18:07:49	Oct 14 2016 18:10:49	
	Restore VMWare virtual machine	FINISHED	rhel-64-sys5	New York DC	Oct 14 2016 18:07:49	Oct 14 2016 10:08:49	
	Restore VMWare virtual machine	FINISHED	mel-66-sys7	New York DC	Oct 14 2016 18:08:49	Ort 14 2016 18:09:49	
	Restore VMWare virtual machine	O FINISHED	mel-66-sys6	New York DC	Oct 14 2016 18:09:49	Oct 14 2016 18:10:49	
	Add network for VWWare virtual machine	FINISHED	APP1	New York DC	Oct 14 2016 18:10:50	Ort 14 2016 18:13:50	
	Start WWWare virtual machine	O FINISHED	APP1	New York DC	Oct 14 2016 18:13:50	Oct 14 2016 18:16:51	
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DEPLOY QUICKLY

Experienced IT professionals know how difficult it can be to deploy or upgrade backup systems. Not only do backup Figure 3. Veritas Resiliency Platform can orchestrate complex NetBackup site recovery operations with a single click.

servers and storage require their own care and feeding, but backups interact with just about every server, storage or network component. NetBackup eases this burden and offers a fully integrated, turnkey appliance that combines software with server and storage.

- Agentless backup—NetBackup, makes agents within VMs unnecessary for backups, greatly simplifying the deployment and maintenance of backup software across a virtual environment.
- NetBackup appliance family—For the fastest deployments, consider deploying NetBackup appliances. NetBackup appliances come preinstalled with all necessary hardware and software components and can be set up in minutes.
- Automatic client updates—For systems that use client or agent software, NetBackup can automate the deployment of this software using built-in or third-party software distribution tools.

STREAMLINE OPERATIONS

With constant pressures of relentless data growth and escalating service requests, IT is always challenged to do more with less. NetBackup helps you maximize staff productivity so you can invest more in your core business.

- Centralized, policy-based management—All NetBackup policies are configured from a single management console enforced by the NetBackup master server.
- Role-based access—Grant limited access privileges to other people in your organization based on role. Users can only manage workloads they have been assigned and can only perform the range of tasks you authorize.
- Console plug-ins for Hyper-V and vSphere—Plug-ins for the VMware vSphere[®] web client and Microsoft[®] System Center Virtual Machine Manager (SCVMM) give VM admins direct control over backup and restore operations.
- Extensive API library—Leverage NetBackup RESTful APIs to customize the user experience and integrate with third-party operations platforms such as ServiceNow® to achieve a much greater level of automation.
- Self-service—NetBackup offers business users a single "store front" to perform self-service backups and restores using customdesigned interfaces. A single instance can register multiple tenants to allow secure separation. SLA measurement, notification and reporting make it easy to manage.

PLAN FOR THE FUTURE

No successful organization stands still. There are always improvements to make, processes to optimize, and costs to reduce. NetBackup provides extensive reporting and analytics to help understand past results and clarify the road ahead.

- Point-and-click operational reporting—APTARE IT Analytics[™] quickly identifies tape drive utilization, success rates and unprotected areas across NetBackup, and provides contextual reporting based on line-of-business, geography or application across a heterogeneous environment.
- Long-term trending and analysis—Better predict backup storage consumption by tracking growth rates over time, including pre- and post-deduplication, for easier ROI tracking, and deduplication rates.
- Integration with Veritas[™] Information Studio— Information Studio renders your information environment in visual context and guides users towards unbiased, information-governance decision making. Using the Information Studio's dynamic navigation, customers can identify areas of risk, areas of value and areas of waste across their storage environment and make decisions that help reduce information risk and optimize information storage. (See Figure 4.)



Figure 4. Veritas Information Studio renders your information environment in visual context and guides users towards unbiased, information-governance decision making.

UNIFIED DATA PROTECTION FOR THE CLOUD-READY ENTERPRISE

Veritas NetBackup[™] 8.2 reduces the staggering complexity of enterprise data protection through a unified solution built on converged infrastructure, scales with relentless growth through best-in-class performance at petabyte-level capacity and paves the way to IT as a service through convenient, self-service operation. It lays the foundation for universal data management, enabling rapid visualization of data and accelerating cloud adoption with minimal risk. As IT transforms from cost center to business enabler, NetBackup is engineered to solve the diverse challenges of today and tomorrow, and ultimately give organizations the confidence to move faster and take bigger risks, trusting their information will be safe.

ABOUT VERITAS TECHNOLOGIES LLC

Veritas Technologies is a global leader in enterprise data management. Over fifty thousand enterprises—including 90% of the Fortune 500—rely on us to abstract IT complexity and simplify data management. Our Enterprise Data Services Platform automates the protection and orchestrates the recovery of data everywhere it lives, ensures 24/7 availability of business critical applications, and provides enterprises with the insights they need to comply with evolving data regulations. With a reputation for reliability at scale and a deployment model to fit any need, Veritas supports more than 500 data sources and over 150 storage targets, including 50 clouds. Learn more veritas.com. Follow us on Twitter at @veritastechllc.

¹ For more information, please refer to the NetBackup Master Compatibility List.
 ² Best of VMworld, Business Continuity and Data Protection category: 2007, 2008, 2010, 2012.

Veritas Technologies LLC 2625 Augustine Drive Santa Clara, CA 95052 USA +1 (866) 837 4827 veritas.com For specific country offices and contact numbers, please visit our website. veritas.com/about/contact **VERITAS**^{**} The truth in information.

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