FORWARD THINKING BACKUP

Data Protection for the Digital Business

VERITAS™

Businesses are undergoing a dramatic digital transformation that is forcing IT leaders to rethink what data protection means. Information is a double-edged sword with the power to propel you forward or hold you back. How you protect and manage your information will determine whether it becomes the fuel or freight of your business.

In this new digital age, data protection is more than just about making copies. You must figure out how to stay ahead of growth by achieving greater gains in productivity and efficiency. You must explore new ways to deliver services on-demand and better match technology investments to business priorities. You must make the right decisions more quickly enabling the business to reach new heights. With Veritas, you will be able to protect your information so that you can unlock its true value.

DIGITAL BUSINESS TRANSFORMATION

The exponential growth of data and the resources needed to store and manage it is one of the most pressing issues facing IT today. At the same time, this data is an invaluable business asset when leveraged properly. This is the great paradox of the information age.

Organizations are not only relying on more data than ever before, but are also creating more of it. It's called digitalization, and it presents a challenge: how to manage, control, leverage, and ultimately influence data to work for you, not the other way around. And it's not just the amount of data. It's where it lives and how it travels. The journey to the cloud now includes stopovers between private clouds, layovers on public clouds, and connections back to on-prem. Availability and insight become more vital, but incredibly more difficult to promise.

In the digital business, protecting data takes on new meaning. Data is on the move, migrating beyond the traditional data center to a more fragmented, hybrid cloud environment. Tech trends such as cloud computing and the software-defined data center (SDDC) are creating a commoditized infrastructure layer that can be repurposed on-demand. Business expectations for IT services have never been higher, leading to impatient users who increasingly turn to shadow IT as an alternative. Regulatory requirements continue to spiral upward, increasing anxiety and encouraging more data to be hoarded.
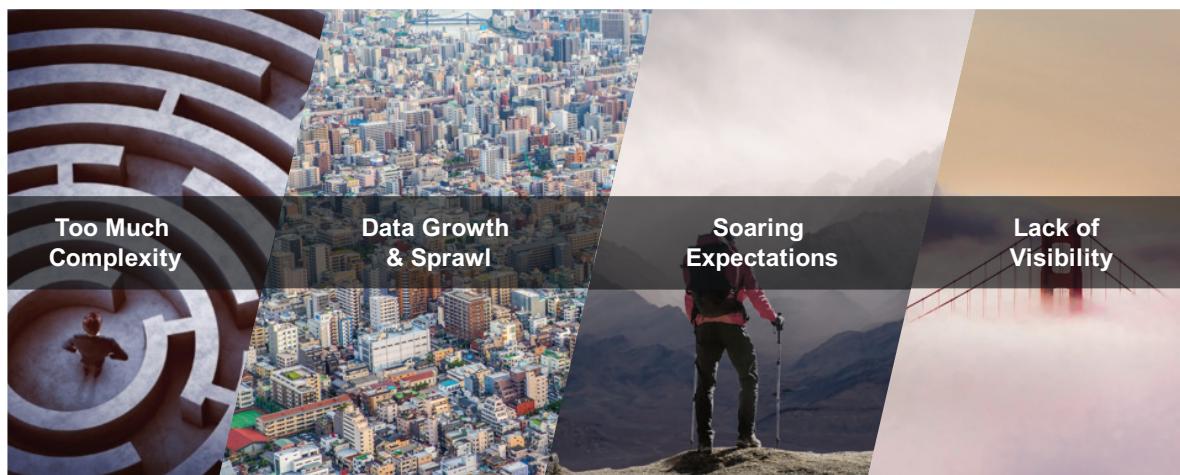

Too Much Complexity **Data Growth & Sprawl** **Soaring Expectations** **Lack of Visibility**

Figure 1: IT organizations face four challenges that increasingly frustrate their attempts to properly manage and protect data.

PROTECTING THE DIGITAL BUSINESS

The discipline of protecting data is as old as data itself. In ancient times it involved the painstaking transcription of scrolls and books, handwritten by small armies of scribes and monks, and stored on library shelves. Today, data is a lot smaller and moves a lot faster, and the volume of data is far beyond what anybody could have imagined in ancient times. A 2012 estimate of the volume of information collected by the U.S. Library of Congress placed the number at 235 terabytes.[1] By that estimate, most modern enterprises probably back up at least one Library of Congress every day.

Backup practices have always had to deal with ever-growing amounts of data and systems. But we are nearing a tipping point where data protection practices must become far easier and take on larger roles that go beyond just making copies for a rainy day:

- Data takes on many forms and lives in many places. *Why do you need different tools and processes to protect different kinds of data?*

- Infrastructure is becoming commoditized. *Why do you need to reinvent the wheel and build your own backup infrastructure?*

1. The McKinsey Report, "Big data: The next frontier for innovation, competition, and productivity on big data" (June, 2011)

- Setting backup policies and serving restore requests is a cumbersome routine. *Why not allow others to perform these tasks on-demand?*

- Backup copies are standing by in case of emergency. *Why do you have to wait for an emergency to use them?*

- Backups touch every bit of data you have. *Why can't they tell you more about how to manage that data?*

The new pressures of the digital business will increase risks to your data if you stand still. Risks of data loss will grow as systems within an elastic environment come and go without warning. Service levels will not be met if backup systems fall behind data growth and service quality expectations. One-size-fits-all policies will lead to data hoarding and over- or under-protection of assets. And ultimately IT will slow down the business rather than propel it forward.

RETHINK YOUR DATA PROTECTION STRATEGY

To meet the challenges of the digital business, you need to rethink your backup strategy and find ways to leverage backup to solve problems beyond just recovery. Use the following four key requirements as a guide for your data protection strategy to enable the digital business, not obstruct it.

| Simple | Scalable | Agile | Insightful |

Figure 2: To properly protect the digital business, your data protection strategy should satisfy these four requirements.

Simple

With too much complexity results can be unpredictable and costly. Therefore, you need a simple solution that is efficient to manage and affordable to maintain:

- **Leverage converged backup infrastructure** to gain efficiencies and accelerate time-to-value.

- **Reduce point products** to streamline administration and improve staff productivity.

- **Implement intelligent automation** to mitigate human error and adapt to changing conditions.

Scalable

Data grows a lot faster than your budget. It can be difficult to keep up with infrastructure needs and prevent business disruptions caused by longer backup windows. Therefore, you need a scalable solution that will meet future needs:

- **Maximize performance** with proven technologies.

- **Optimize capacity** using storage tiers and data reduction techniques.

- **Expand without limits** by leveraging cloud storage services with virtually infinite capacity.

Agile

With the inability to keep up with expectations, service levels are not met and IT becomes an impediment to the business. Therefore, you need an agile solution that enhances service quality and responsiveness:

- **Recover instantly** to quickly bypass data outages that impede the business.

- **Deliver self-service** to empower users and enhance user experience.

- **Integrate with hybrid cloud architectures** to allow cloud services to be utilized on-demand.

Insightful

Not having insight into your data leads to poor decision making, increased risk, and exposure to data loss. Therefore, you need an insightful solution that will illuminate dark data and reveal insights that show you how to best protect, manage, and retain your data:

- **Index your backups** to quickly find what you need and facilitate rapid file analysis.

- **Visualize your data** to understand what you have and how it is being managed.

- **Understand your risks** so you can take timely, corrective action.

WORLD-CLASS DATA MANAGEMENT FOR THE DIGITAL ENTERPRISE

With a track record spanning over two decades, Veritas stands as the brightest lighthouse, guiding customers through stormy seas to safer shores. Today, our technologies are used by 86% of the Fortune 500 and are widely recognized as some of the most trusted solutions on the market.

With Veritas, you can design your data protection strategy to address the constant pressures of complexity and scale while also incorporating the agility and insight demanded by the new digital business. Together, our solutions uniquely deliver:

- **Unified, converged platform**—a single unified platform to protect all your data, pre-configured for fast deployment, simple maintenance, and centralized management, based on the industry's most widely used enterprise backup and recovery software and the world's fastest-growing backup appliance.

- **Proven performance at enterprise scale**—superior performance combined with a scalable architecture protects petabytes of data and thousands of systems without straining the limits of budget, staff, or power/cooling.

- **Data on demand**—self-service capabilities, instant recovery, and automatic replication combine to quickly deliver data where it's needed and enhance the quality of service for DBAs, VM Admins, and other data users to a level far beyond what they usually expect.

- **Data visibility**—all data is indexed and searchable and can be visualized in a unique way to identify weak points in your data management approach without requiring a lengthy process to gather file metadata since it has already been gathered as part of regular backups.

- **Engineered for the Hybrid Cloud**—whether backing up to the cloud, protecting workloads within the cloud, or recovering from the cloud, Veritas integrates with a broad selection of cloud service providers to seamlessly unify data protection across the hybrid cloud.

NETBACKUP	NETBACKUP APPLIANCE	INFORMATION MAP

Figure 3: The technologies that comprise Forward Thinking Backup from Veritas.

Veritas NetBackup™ reduces the staggering complexity of enterprise data protection through comprehensive integration at every layer of the stack. NetBackup outpaces the relentless growth of the data center with innovative performance technologies, efficient storage techniques, and by providing fast, easy recovery for any data you need. NetBackup™ Copilot for Oracle revolutionizes backup and recovery of databases, combining NetBackup and NetBackup Appliances to deliver breakthrough performance within a self-service model.

Veritas NetBackup™ Appliance is an integrated, purpose-built backup appliance that takes your NetBackup investment to the next level to create a fully converged platform with streamlined infrastructure management. With expandable storage, trusted Veritas InfoScale™ and NetBackup software, and intelligent end-to-end deduplication for physical and virtual environments, NetBackup Appliance deduplicates on both the client and target. Pay once for deduplication and replicate securely to any number of targets.

Veritas™ Information Map renders your information environment in visual context and guides users towards unbiased, information-governance decision making. Using file metadata already collected by NetBackup, customers can identify areas of risk, areas of value, and areas of waste across their storage environment in as little as 24 hours.

BECOME A BUSINESS ENABLER

With Veritas, your data protection strategy delivers the business outcomes needed today and tomorrow.

Operate more efficiently and cost effectively. You face staggering complexity in the modern data center, as exemplified by the diverse collection of hardware, operating system, virtualization, database, application, and storage technologies. NetBackup is a single solution for your entire enterprise, built on a converged platform, enabling you to train for one set of skills, invest in one infrastructure, and work with one data protection partner. This lowers costs and requires minimal administration in even the largest, most dynamic environments.

- **Modernize infrastructure with a converged hardware and software platform.** With NetBackup installed on the NetBackup integrated appliance, all integration, test, and maintenance work is dramatically simplified, and the entire system is managed as a single component.

- **Reduce or eliminate point products with a single, fully integrated solution.** NetBackup integrates at every layer of the stack so all aspects of data protection can be managed with a single solution. Gain peace-of-mind knowing that you will have a comprehensive backup strategy ready for future workloads as they come online. Recently, only NetBackup introduced support for VMware vSphere® 6 and Microsoft® Exchange 2016 on the first day of general availability.

- **Improve staff productivity through efficient, centralized administration and policy-based automation.** NetBackup interfaces provide a single pane of glass to manage all aspects of data protection from one point, while policy-based management help automate data protection goals to reduce the need for manual intervention.

Grow your business without overprovisioning or overpaying. The relentless growth of data compounded by the growth of virtual machines risks outrunning the data protection capabilities of the enterprise and causing escalating costs as hardware is thrown at the problem. NetBackup has repeatedly proven itself as the most scalable backup solution in the industry, incorporating cutting edge technologies for data reduction and bandwidth efficiency while providing extensive indexing and search capabilities.[2]

- **Protect data without disrupting the business, within allowable backup windows.** NetBackup provides best-in-class performance to dramatically reduce backup times, from NetBackup Accelerator that identifies and protects changed blocks to NetBackup Replication Director that orchestrates hardware snapshots.

- **Maximize capacity through storage tiering, deduplication, and other efficiencies.** To keep storage costs down, NetBackup provides intelligent deduplication to reduce storage requirements by as much as 99%. Data retained for long periods of time can be automatically moved to cheaper storage using storage lifecycle policies.

- **When you're ready, confidently embrace the cloud and scale to virtually unlimited capacity.** Move data to cloud storage services up to 30 times faster than previous versions without the need for dedicated cloud gateway hardware. Choose from a growing list of certified cloud storage service providers, and Veritas self-certification program will continue to expand your choice. Easily manage data across the entire life cycle, from on-premises to cloud, with robust NetBackup policy-based management.

Enable new innovations safely and quickly. NetBackup speeds recovery, helps IT expand into the cloud, and embraces more as-a-service modes of operation than others, helping drive down costs, increase agility, and improve quality of service.

- **Recover information fast to get back in business quickly.** Gain access to data in a matter of minutes with NetBackup Instant Recovery. Only NetBackup can accelerate disaster recovery by pre-staging both data and indexes off-site.

- **Improve quality of service by providing self-service to users where possible.** NetBackup greatly expands your self service capabilities, allowing both IT and non-IT users to independently manage and control certain aspects of backup and recovery using intuitive interfaces and native tools.

- **Facilitate IT staff collaboration to achieve business results.** NetBackup Copilot combines industry leading NetBackup software with NetBackup appliance hardware to deliver breakthrough performance within a self-service operating model.

- **Safely expand into public clouds to take advantage of cost efficiencies and operational agility.** Protect data and workloads within and across multiple clouds using a proven, world-class solution. Deliver the same levels of service across all clouds and data centers and track all your data in one place. Automatically synchronize data between data centers and clouds to diversify risk and avoid vendor lock-in.

Make better business decisions. Illuminate "dark data" and gain critical intelligence and insights into your data infrastructure to make better informed decisions about the retention, deletion, and backup of your environment.

- **Immediately visualize the composition of your backup data, identifying opportunities to optimize your storage environment, its recovery, and use.** Only with Veritas Information Map and its direct integration with NetBackup can you visualize petabytes of backup data in as little as 24 hours.

- **Visually explore your entire environment to identify anomalies, opportunities, and risks.** Leveraging dynamic navigation within Information Map, users immerse themselves in their data, easily separating orphaned, stale and non-business data via granular filters for age, size and item type.

- **Adjust policies based on the actual composition of your environment, not assumptions.** Only when you have clear categorization of the type of data in your environment can you confidently structure your backup policies to prioritize valuable data over junk.

Veritas is committed to helping you solve the diverse challenges of today and tomorrow, giving you the confidence to move faster and take bigger risks trusting that your information will be safe. Over the years we've perfected the process of collecting information from every corner of the data center, no matter what platform, application, or storage is used. No matter where your data lives, there's a good chance we can get it. In the past our focus has been on recovery, but soon we will go beyond recovery and invent the next generation of information availability.

Imagine if an application developer could provision the latest copy of a database on their own. Imagine if a sys admin could provision last night's server image to test a new maintenance patch. Imagine if a data scientist could independently provision a snapshot of the CRM system. Now, imagine all this could be done without making a phone call, without compromising security or disrupting production activity, and without allocating massive amounts of storage. This is the next generation of information availability, delivering agile, real-time access to data at every level of the business, inside and outside of IT.

TAKE YOUR BUSINESS FORWARD WITH FORWARD THINKING BACKUP

No successful business stands still. As you continue your digital business transformation, consider how you will protect and manage the information that will be vital to your success. Any seasoned IT pro knows one of the gates that stands between success and failure is a sound data protection strategy. Without it, new services wait offline and the business stands still. Meanwhile competitors race forward, putting new ideas into action.

Bold decisions must be made now so your data protection strategy is ready to tackle the shifting landscape of the digital business. Backup infrastructure must be radically simplified and converged. Backup data can't be reserved for a select few in an emergency; it must be readily available at all times to propel the business. Backup investments must be leveraged to reveal dark data and clarify the road ahead. With the right foundation, anything is possible. Stop compromising and start doing.

Veritas can address these challenges with a solution-level approach that no point-product vendor can match. We call it Forward Thinking Backup. We bring together trusted solutions, new innovations, and professional services to address our customers' data protection requirements. Forward Thinking Backup starts with NetBackup, the industry's leading backup and recovery software. It is offered as an integrated, converged platform with highly scalable storage appliances that dramatically simplifies deployment and operation, and lowers cost. On top of this foundation we layer innovative solutions such as Information Map that leverage your NetBackup investment to further improve how your data is managed and accessed. With Forward Thinking Backup from Veritas, you will be ready for whatever comes next.

ABOUT VERITAS TECHNOLOGIES LLC

Veritas Technologies LLC enables organizations to harness the power of their information, with solutions designed to serve the world's largest and most complex heterogeneous environments. Veritas works with 86 percent of Fortune 500 companies today, improving data availability and revealing insights to drive competitive advantage.

For specific country offices and contact numbers, please visit our website.

Veritas World Headquarters
500 East Middlefield Road
Mountain View, CA 94043
+1 (650) 933 1000
www.veritas.com

VERITAS