Veritas Backup Exec
Unified data protection for the cloud.

Veritas Backup Exec™ is the backup solution without barriers, delivered your way. You choose what to back up, where to store it and how to pay for it. Your data remains secure and available at every stage—whether backing up on-premises to the cloud, protecting workloads within the cloud, recovering from the cloud or connecting to on-prem storage. With Backup Exec you can connect with an ever-expanding family of solutions to help you to run your business confidently.

Backup Exec is available for purchase in either perpetual or term subscription licensing, with the level of functionality you require—Bronze, Silver or Gold. Bronze edition offers the most economic option. Silver edition offers the most-used features. Gold edition includes all features and functionality available in Backup Exec. Your purchase is based on the amount of front-end data you need to back up. Your chosen license-set is available in whatever quantities you require.

Backup Exec gives you comprehensive protection against external threats. So if the unthinkable happens, your critical data is backed up and ready to be recovered, quickly and easily.

Unified Data Protection for Long-Term Survival

Organizations know—whether or not they learned it the hard way—that creating backups of their most important data assets keep them safe from disasters and accidental deletion. They have done backups for decades with little to no changes. However, their backup data stores continue to grow as they use a more diverse set of data to make business decisions and digitize larger parts of the business process and supporting data.

Today, applications and data are highly fragmented across virtual and physical infrastructures and across multiple cloud providers and locations. The inevitable parallel result of this fragmentation is often a creeping change to a disparate way of doing backups, making it an extremely complex and a costly burden for organizations to assure timely access to the backup data, putting survival of the business at risk.

Organizations that want to seriously participate in, or who must rely on, the new digital era will find out that they can't continue cobbling together makeshift data protection solutions from different point-product vendors. The impact of greater cost, resource requirements and new skill-sets on SMBs is only outweighed by the risk of leaving some data unprotected in error.

What these organizations require is a unified data backup solution that covers all their data and applications across virtual and physical and integrates seamlessly with today's leading cloud platforms.

ESG Research surveyed how organizations leverage cloud (see Figure 1) and found that data protection efforts (specifically backup, archiving, and disaster recovery) sit at the top of the cloud use-case list right now.
For Which of the Following Purposes Does/Did Your Organization use Cloud Infrastructure Services?

Percent of respondents, N=319, multiple responses accepted

- Data backup and archive: 46%
- Disaster recovery: 36%
- Run internal production applications: 31%
- Primary storage for files: 30%
- Run internally/externally facing web servers: 30%

Figure 1: Top Five Cloud Infrastructure Use Cases. Source: Enterprise Strategy Group, 2016

Responsibility for Data Protection in Cloud

As organisations move to the cloud, many may incorrectly believe their cloud service provider holds the principal responsibility for data protection - over eight in ten (83%) believe that their organisation's cloud service provider takes care of protecting their data in the cloud. This is often not the case. In addition, over half of respondents see responsibility for the secure transfer of data between on-premises and cloud (54%) and backups of workloads running in the cloud (51%) as sitting primarily with their cloud service provider. So, are organisations again leaving themselves exposed to additional risks?

83% “My organization’s cloud provider takes care of protecting our data in the cloud.”

54% “My organization’s cloud provider takes care of secure transfer of data between on-premises and cloud.”

Figure 2: misconceptions of data management in cloud

Considerations When Using Cloud for Data Protection

Leveraging cloud-based storage to augment on-premises data protection is growing in popularity. In fact, ESG Research says that 25% of organizations today use cloud-based capacity to store backup data remotely, with another 23% intending to do so within the next 12 months.

The ability to store data remotely on cloud-based storage for disaster recovery, for example as an alternative for traditional tape, is a top driver. It can not only improve disaster recovery preparedness, but also save an organization time and money in restoring operations.

Most organizations that are adding cloud-based storage to existing data protection prefer one or sometimes a combination of the following two ways:
Disk to Disk to Cloud (D2D2C) – Data is initially backed up to on-premises disk storage, and a copy is then sent to a cloud service provider.

Disk to Cloud (D2C) – Data is backed up over the WAN to a cloud service provider (no on-premises storage of the backup data).

Both have their pros and cons. The main deciding factor between them usually centers on the organization’s recovery requirements. Specifically, the recovery objectives that IT agree with internal business units, and external customers sometimes demand a faster, more agile recovery capability than what a pure-cloud (i.e., D2C) arrangement can typically accommodate. Therefore, the need to recover data locally tends to drive the decision to D2D2C, because for many organizations, recovery speed is of utmost importance when it comes to recovering their data.

Stop Backing up Data Blindly

Another critical consideration when using cloud for data protection involves a clearly defined backup data lifecycle. This is often an overlooked element, but crucial to get right. Organizations must match the backup policies to the data they protect. By understanding data and its value as an asset or liability, organizations can properly assign backup methodologies and policies to protect and store their data as it ages. For example, deep knowledge of the true composition of the data an organization is storing, empowers backup administrators and application owners to:

- Choose different backup methods for different types of data based on change rates and recovery requirements
- Use deduplication and compression when and where it makes the most sense
- Set up different backup retention policies for different recovery needs
- Adopt archiving, instead of backup, for long-term data retention
- Confidently dispose of data that is no longer necessary to keep

Without this understanding, data may be overprotected or perpetually retained to address worst-case fears of data loss, drastically driving up storage and management costs.

The Real Cost of Data Protection

The real cost of data protection is not just the cost of the raw storage capacity. It also includes backup infrastructure software and hardware, maintenance contracts, remote vaulting services, and administrative staff/time and operational processes. These elements (regardless whether tape, disk or cloud is used) and associated cost models dramatically vary from one organization to another, which makes delivering a universal cost calculation a nearly impossible task.
One cost advantage of tape that we must take into account is that many organizations have made substantial investments over the years in tape libraries and drives. These investments typically last seven to ten years without the need to refresh. Some may be halfway through their depreciation cycle, which is probably one of the reasons why tape is still used in about 60% of the backup deployments today. Most organizations have a good idea of the cost of their tape infrastructure. However, they are often unsure of the cost of using cloud for data backup. While organizations won’t face high upfront capital outlay, there are variable elements associated with cloud storage usage, which can make it seem harder to predict recurring cost. However, Table 1 lists the major cost factors with their associated considerations.

<table>
<thead>
<tr>
<th></th>
<th>Tape</th>
<th>Disk</th>
<th>Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Outlay</td>
<td>Medium</td>
<td>High</td>
<td>None</td>
</tr>
<tr>
<td>Capacity Costs</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Shipping &amp; Logistics</td>
<td>Medium</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Networking Cost</td>
<td>None</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Personnel Cost</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Recovery Cost</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

Table 1: Cost of Backup

Taking in to account the above table—although being far from a comprehensive analysis—it should come as no surprise that cloud-based storage is growing popularity these days as a remote backup target beyond on-premised disk-based recovery, often at the expense of tape – especially where investments in tape are fully depreciated and due for refresh.

**Veritas Backup Exec Approach: Unified Data Protection for the Cloud**

Veritas Unified Data Protection delivers the flexibility to meet all your virtual, physical and cloud backup needs. Supplementing it with cloud, is one of the most effective ways to advance your data protection strategy and probably the least invasive too, because integrating cloud storage from our growing list of supported cloud providers, is a seamless experience. However, before you start some key decisions must be made to ensure you get the best possible outcome.

**Understand your data protection needs**

Establishing a clear line of sight into your environment in respect of the priorities and demands of the business, and the nature of the data being stored, will help you to accurately assess your requirements, data inventory and anticipate hidden vulnerabilities and costs.

**Match protection policies to the data you protect**

By understanding data and its value as an asset or liability, you can accurately assign backup policies that protect and store that data. Without this understanding, data may be overprotected or perpetually retained to address worst-case fears of data loss, drastically driving up storage and management costs.

**Choose the cloud service provider that best fit your unique requirements**

With Backup Exec, you can choose from a range of integrated cloud connectors including Microsoft Azure, AWS S3, Google Cloud Platform, EMC Elastic Cloud Storage (ECS), Chunghwa Telecom hicloud S3, IBM Cloud Object Storage, Infoniq SWISS3CLOUD, Veritas Access Storage, RedHat Ceph Storage, Scality RING Storage, Cloudian Hyper-store and other S3 cloud storage providers. Please refer to the Backup Exec Cloud and Hardware Compatibility Guide for the complete list of supported cloud platforms: www.backupexec.com/compatibility
Always maintain an on-premises disk-based backup tier, with short retention for fast recovery

Backup Exec is your hub to cloud storage. It delivers you the advantage of combining local storage for your critical data backups, close to your production applications for immediate restore, with policies to automatically deliver a secondary copy of data securely to your cloud storage destination for disaster recovery without compromising timely access.

Extend unified data protection to your cloud-based applications

The presumption that more organizations eventually move applications to the cloud is made simpler still with the addition of Backup Exec to cloud provider market-places (AWS & Azure). This allows the simple deployment of Backup Exec server architecture directly into cloud infrastructures in a pre-built fashion, whilst still maintaining the flexibility to determine the resource allocated prior to final Backup Exec configuration. It is a smart way to extend your data protection to your cloud-based applications without the need for new tools or processes. One backup console to manage and govern your backups across all your cloud and local virtual and physical.

Summary

Veritas is trusted today to provide data management to organizations of all sizes, including 86 percent of global Fortune 500 companies. Veritas is unique in providing solutions that are software-based, vendor-agnostic, and infrastructure independent, uniquely focused on the value of information rather than the underlying environment.

Organizations today need to manage their data as a critical asset, with solutions that reliably protect the right data, help ensure resiliency and on-demand access from anywhere, and reduce the risks and costs of storing their ever-increasing amounts of data throughout the globe.

The ‘always on’ nature of digital business also demands the removal of the artificial barriers between these frequently siloed capabilities, to reduce complexity, streamline operations, and benefit from synergies that otherwise are not achievable.

By providing deep integrations with freedom of choice from an extensive list of leading cloud service providers, Backup Exec enables you to accelerate your own digital transformation with all the benefits of unified data protection. It delivers seamless, automated data lifecycle management and governance – be that protection of your data and applications in your organizations, remote branch offices or in the cloud.
Veritas Technologies is a global leader in data protection and availability. Over 80,000 customers—including 87 percent of the Fortune Global 500—rely on us to abstract IT complexity and simplify data management. The Veritas 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 Enterprise Data Services Platform supports more than 800 different data sources, over 100 different operating systems, more than 1,400 storage targets, and more than 60 different cloud platforms. Learn more at www.veritas.com. Follow us on Twitter at @veritastechllc.