COMMVAULT EDGE® ENDPOINT BACKUP WITH MICROSOFT® AZURE
SECURE AND EFFICIENT LAPTOP/DESKTOP BACKUP USING THE CLOUD

Quick Facts
CommVault Edge® and Microsoft® Azure enable organizations to react quickly with a flexible and cost-effective data management solution that is cloud enabled and easy to manage.

- **Cloud Solution Benefits**
  Solutions that leverage the cloud for server infrastructure and storage have advantages such as efficient scalability, ease of provisioning, global access and minimal administration.

- **Flexible Architectures**
  An “All Cloud” configuration, where the entire backup infrastructure is hosted inside the Microsoft Azure cloud, is one common deployment. A “Hybrid” configuration option caches the primary copy on a local disk library and a secondary copy is hosted on the Microsoft® Azure Storage cloud.

- **Modern Endpoint Protection**
  CommVault Edge® delivers endpoint data protection that increases employee productivity and reduces cost and risk for backup, self-service access/recovery, eDiscovery and client data migrations.

Overview
More and more organizations are looking to leverage the cloud for operational, financial and strategic reasons. By deploying CommVault Simpana® software with Microsoft® Azure, businesses of all sizes can protect, archive, manage and access their data securely and efficiently both on premises and in the cloud from virtually anywhere, at virtually any time, while simultaneously lowering their total cost of operations. It is a streamlined, easy-to-use data management solution that is designed to maximize value to your business, whether your goals are doing more with less; providing new capabilities to increase your agility; enhancing business continuity – or all of the above.

In addition to the cloud, the growth of the mobile workforce and the accelerating amount of data being created on edge devices is also creating unprecedented challenges and opportunities for businesses. CommVault Edge addresses these business challenges with an endpoint data protection solution that increases employee productivity and reduces cost and risk for backup, self-service access/recovery, eDiscovery and client data migrations. CommVault Edge and Microsoft Azure enable organizations to react quickly with a flexible and cost-effective solution that is cloud enabled and easy to manage.

Common Architectures
The adoption of solutions that leverage the cloud for server infrastructure and storage is growing quickly since it has advantages such as efficient scalability, ease of provisioning, global access and minimal administration. The storage devices are typically accessed through the web-friendly Representational State Transfer (or REST) interface that allows users to store, retrieve, and manage data in the form of objects or Blobs in the cloud. CommVault Edge can live exclusively in Microsoft Azure, or in a hybrid infrastructure with a mix of local and cloud resources, as determined by business requirements and customer characteristics.

All Cloud
One common configuration is where the entire backup infrastructure, including the media agent, its DDB, and data library, is hosted inside the Microsoft Azure cloud. In this setup, the media agent is a Microsoft Azure virtual machine instance, the DDB is hosted on block storage and the data on an object-based or block storage. The block storage option is best suited to handle the DDB IO pattern that demands high performance for random reads and writes. Furthermore, such storage performs optimally when paired with a server instance from the cloud. The backup data can be stored on object-based storage like Microsoft Azure Storage for a cost-effective solution or block storage for an improved performance solution.
Hybrid

A second configuration, designed for performance and responsiveness, caches the primary copy on a local disk library and a secondary copy is hosted on the Microsoft® Azure Storage cloud. The secondary copy should be setup as an encrypted network optimized DASH copy to the cloud. A hybrid configuration may be best suited for an office with a large number of local users, as the local copy will offer faster backup and recovery times.

Forrester projects that we will see 905 million tablets in use for work and home globally by 2017.
Other Considerations

The pricing for cloud resources is comprised of three general components: storage capacity (per GB per month), data transferred (per GB per month) and storage transactions (per n thousand requests per month). This is different than non-cloud cost structures so is an important consideration when evaluating use of Microsoft® Azure with CommVault Edge®. If the All Cloud architecture is chosen, there is also a cost for the media agent in the cloud, which may be offset with lower data transfer costs into the cloud.

Cloud storage also requires moving data outside of the enterprise LAN into the WAN, resulting in certain costs and bandwidth requirements. The data also has to travel further away to reach the cloud, introducing latency concerns that are inherent in the cloud storage model. Network bandwidth and latency should be considered when evaluating the cloud against on-premise and hybrid deployment options.

Additionally, cloud infrastructure exhibits different device characteristics than disk storage. Therefore, performance tuning is recommended to get the optimal performance when using cloud storage. Factors such as parallel transfers, in-memory processing and read-ahead cache can impact the throughput.

Benefits of CommVault Edge

• Simplified data protection with efficient backup and recovery for laptops and desktops
• Improved employee productivity through secure anywhere, anytime, any device access to business data via web console and mobile app (view the online demo3), automated file sync between devices and user self-service restore
• Optimized performance and lower costs via intelligent scheduling, network management and source-side deduplication
• Secure data transfer utilizing HTTPS, built-in SSL certificates and full data encryption
• Reduced risk utilizing integrated eDiscovery and legal hold across all data in the ContentStore

Additional resources can be found at commvault.com/solutions/empower-mobile-workforce.

Microsoft and CommVault, a Microsoft Gold Certified partner and 2011 Microsoft Server Platform Partner of the Year, have collaborated for over a decade to provide businesses with superior data management solutions. The two companies are continuing this track record by strengthening these solutions with delivery of CommVault Simpana® software on the Microsoft Azure cloud platform. The joint solution enables you to protect, manage and access your data on premises with Simpana software — and, seamlessly, in the cloud — with Microsoft Azure.

To learn more about Simpana software, and how it will enable a modern, efficient data protection strategy, please visit commvault.com/edge.