COMMVAULT®

Commvault and Google Cloud Platform

WHAT IS COMMVAULT?

The Commvault Data Management Platform enables organizations to move, manage, and use their data wherever it resides. Although comprehensive data protection is the primary use case for which the platform is best known, its capabilities do not stop there. Commvault software can also act as the foundation for archiving, compliance (e.g., GDPR, HIPAA, or SOX), eDiscovery, and analytics initiatives that are important to many businesses today. Commvault software also offers endpoint protection, enabling businesses to reduce the risks of mobile workers or the implementation of BYOD policies.

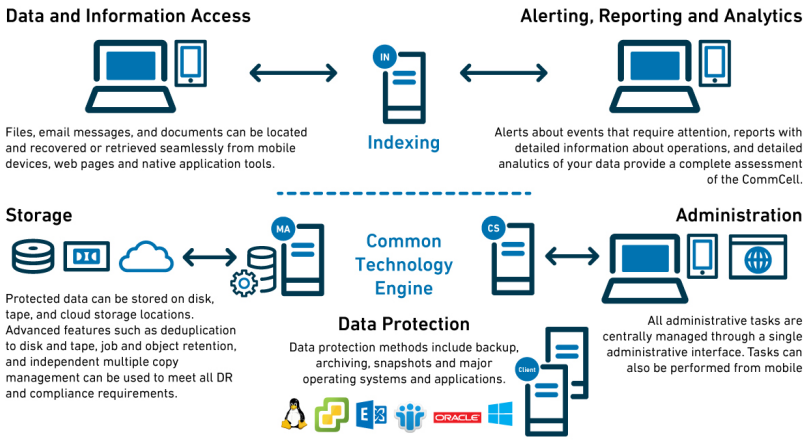

FIGURE 1: Commvault Data Platform overview diagram

The Commvault Data Platform has a straightforward architecture, which can scale to protect and manage organization's ever-growing volumes of data. It consists of a few core components: the CommServe®, Media Agents, and agents:

- The CommServe provides control and monitoring of a Commvault software deployment (known as a CommCell®). This provides the "single pane of glass" from which all operations can be managed, including policies, role-based access control, delegated administration, and scheduling. Administrators (and end users) can interact with the CommServe via an HTML5 web interface, advanced GUI client, command line, or REST API.
- Media Agents are responsible for moving data into and out of the platform. The most prevalent of these are MediaAgents, software components that interface with storage platforms (tape, disk, or cloud storage) and oversee Virtual Repository, the virtual repository of all data known to a CommCell. MediaAgents also provide target deduplication to ensure efficient use of secondary storage targets, and further amplify the cost benefits of utilizing Google Cloud Storage for backup and archival data. Another widely-deployed client is the Virtual Server Agent, which directly integrates with traditional hypervisors and public cloud platforms, like Google Compute Engine, to provide agentless protection of virtual machines.
- Agents are the components within the architecture that interact with operating systems and applications to provide granular protection and recovery, and data management. Agents are available for standard applications (e.g., Oracle, Exchange, SQL Server, SharePoint, SAP, DB2, Informix, MySQL, and PostgreSQL), Big Data applications (e.g., Greenplum, Hadoop, and MongoDB), and even SaaS platforms (e.g., Office 365, Salesforce, and G Suite).

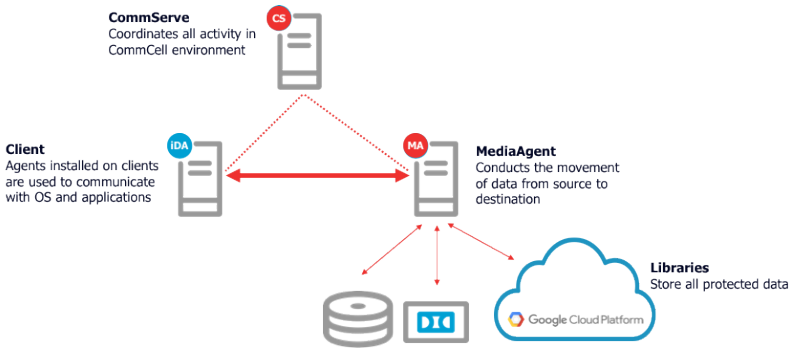

FIGURE 2: Commvault Data Platform components

COMMVAULT AND GOOGLE CLOUD PLATFORM

With support for Google Cloud Platform APIs, Commvault software can help an organization with its journey to the cloud, whether it is just getting started, or has fully-committed to deploying most or all of its workloads on Google Cloud Platform.

GOOGLE CLOUD STORAGE AS A TARGET

Google's Cloud Storage offering provides a compelling value proposition for companies looking to reduce or eliminate the acquisition and maintenance costs associated with tapes or cabinets of disk storage arrays on-premises. It provides a storage target that is essentially infinitely-scalable while customers only need to pay for what they are currently using.

Commvault software extends the benefits of Cloud Storage to help customers take on-premises data and store it securely and efficiently. Furthermore, it provides this capability without the need for installing or configuring complicated cloud gateway devices. The platform can be configured to write to Cloud Storage in just minutes and supports all storage classes – Multi-Regional, Regional, Nearline, and Coldline.

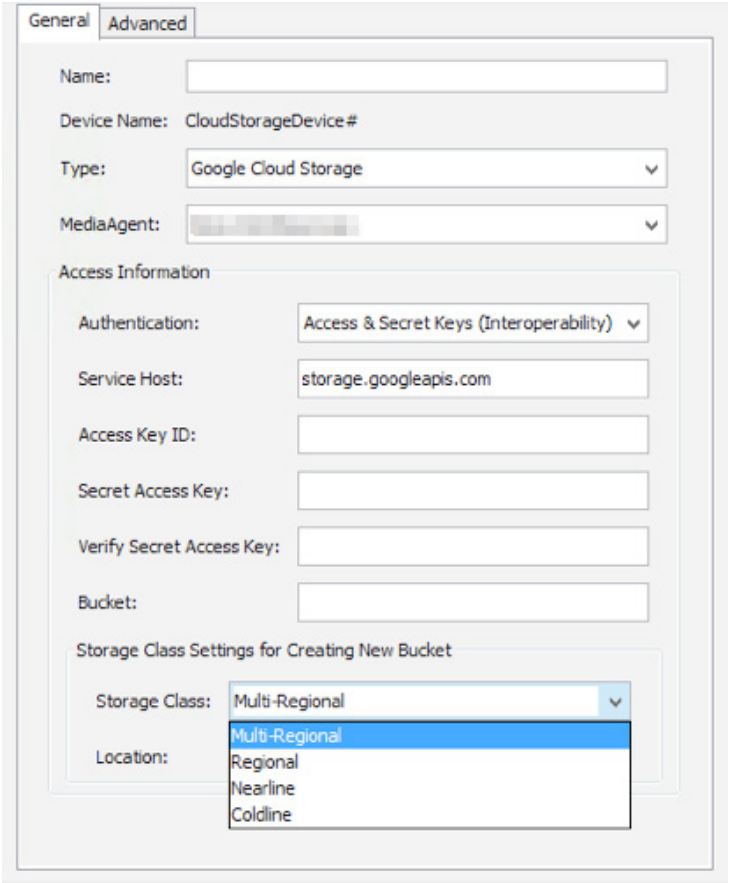

FIGURE 3: Setting up a cloud library for Google Cloud Storage

To see exactly how simple the process is, watch "Two Clicks to the Cloud with Google Cloud Platform" video on YouTube.

PROTECTION FOR GOOGLE COMPUTE ENGINE VIRTUAL MACHINES

The decision to use a cloud provider's platform does not exempt an organization from its responsibilities to safeguard its data. Commvault software integrates with Google Compute Engine to provide customers with the comfort of knowing that workloads they run on Google's infrastructure have access to the same enterprise-class protection they have come to expect from traditional datacenter deployments.

A Commvault Virtual Server Agent will detect virtual machines running on Google Compute Engine based on user-defined rules and protect them using Persistent Disk snapshots and/or storing the contents of Persistent Disk volumes on low-cost Cloud Storage. The end result is that customers can achieve automated protection of all deployed virtual machines without having to configure complicated scripts. Furthermore, all of the data on virtual machines protected by Commvault will be indexed enabling operations teams to find and recover data significantly faster than a solution based purely on Persistent Disk snapshots.

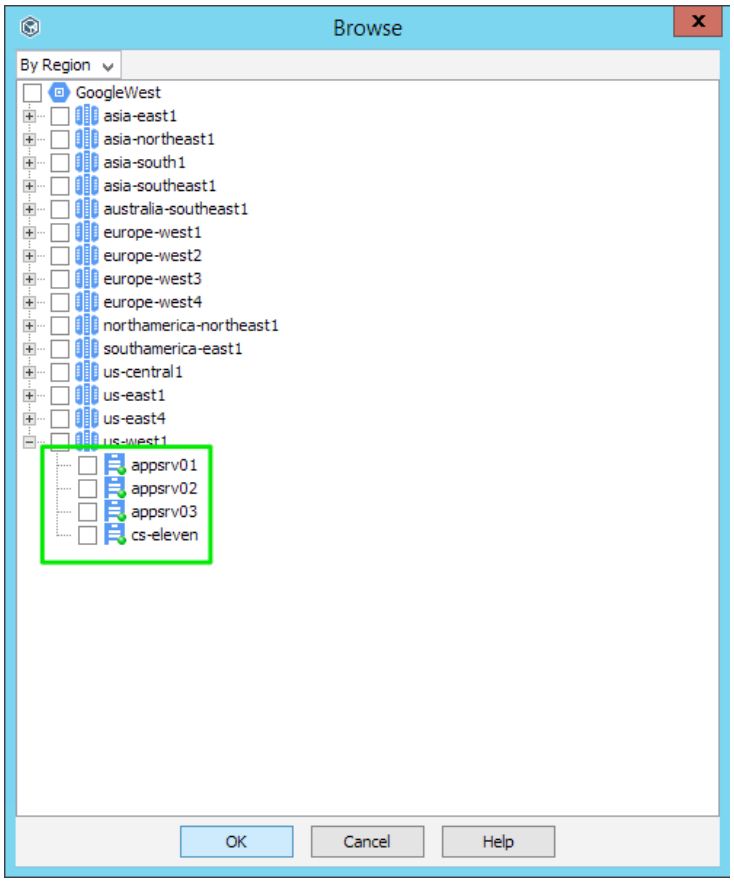

FIGURE 4: The Commvault Virtual Server Agent integrates with Google Compute Engine to provide agentless data protection

APPLICATION-CONSISTENT PROTECTION WITH GRANULAR RECOVERY

While the Virtual Server Agent is an excellent solution for providing a base level of protection for workloads on Google Compute Engine virtual machines, it is not always optimal. When looking to protect advanced applications, like databases or multi-tier applications, the best practice is to utilize specific agents. Agents ensure that critical business data is captured and stored in an application-consistent format. More importantly, agents can provide granular recovery. So, rather than having to restore an entire database to repair a small data corruption, one can merely replace the database tables that were affected – all from within Commvault software.

COMMVAULT AS A DRIVER FOR A MULTI-CLOUD STRATEGY

The Commvault Data Platform provides "out of the box" integration with many different cloud platforms, including more than 40 cloud storage systems, multiple IaaS offerings, and several SaaS solutions. This level of integration gives customers the flexibility to pick and choose the most appropriate cloud solutions for each application or line of business without having to worry about how to protect and manage business-critical data. As such, organizations can use Commvault software in conjunction with Google Cloud Platform to create powerful solutions that reduce risk and increase business efficiency.

ARCHIVE OFFICE 365 TO GOOGLE CLOUD PLATFORM

Commvault software can backup and archive Office 365 data to virtual machines running within the Google Compute Engine infrastructure and storing all content compressed and deduped on Google Cloud Storage. End users will be able to access archived content by using the Commvault plugin for Outlook. And, this solution provides a path for compliance departments to utilize Commvault's eDiscovery capabilities to search and execute legal holds against archived data.

GOOGLE CLOUD PLATFORM AS A SALESFORCE.COM DOCUMENT REPOSITORY

Many companies use Salesforce.com to support their sales initiatives. As part of that process, there are many critical documents that can be attached to customer records. To reduce risk an organization might decide to retain those documents on an external system for better control. Simply connect Salesforce.com to the ObjectStore feature within Commvault software deployed on the Google Cloud Platform. Then, configure policies within Commvault to store the customer documents on Google Cloud Storage. The storage policies can even be tuned to store multiple copies minimize loss or corruption of these critical data sets.

CONCLUSION

Commvault provides a holistic solution for protecting and managing file and application data whether it lives on premises, or IaaS or SaaS clouds. With close integration with the Google Cloud Platform, Commvault provides customers flexibility without risk. These capabilities are rounded out by a proven, secure platform that lets end-users, application administrators, and operations staff use the job-appropriate interface to access the data they need, when they need it. Learn how the **Commvault Data Platform works with Google Cloud Platform**.

▶ Learn how the **Commvault Data Platform works with Google Cloud Platform**.

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