

# DCIG Solution Profile

## GCP Cloud Backup Solutions

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### SOLUTION

#### HYCU DPaaS for GCP

#### COMPANY

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#### DISTINGUISHING FEATURES OF HYCU DPaaS FOR GCP

- Automated recovery of VM-related workloads
- Cloud native GCP SaaS backup solution
- Extends data protection to SAP HANA on GCP
- Facilitates immediate implementation of backup jobs

#### DISTINGUISHING FEATURES OF TOP 3 GCP CLOUD BACKUP SOLUTIONS

- All-inclusive licensing
- Available as a cloud-based SaaS offering
- Available in all GCP regions
- Predictive analytics
- Protect all default GCP VM operating systems
- Protect VMware applications running in GCP

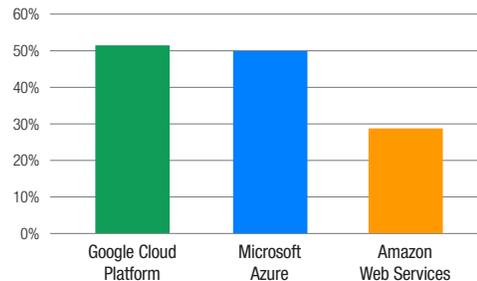
#### SOLUTION FEATURES EVALUATED

- Backup Administration
- Backup Capabilities
- Configuration, Licensing, and Pricing
- Recovery and Restores
- Snapshot Administration
- Support

### GCP Tops in YoY Cloud Revenue Percentage Growth

In 2008 Google introduced its Google Cloud Platform (GCP) to the world. Now it stands among the leaders in cloud providers worldwide. Compared to Amazon Web Services (AWS) and Microsoft Azure, GCP experienced the most revenue growth year-over-year (YoY) in Q4 2020 on a percentage basis.<sup>1</sup>

#### Q4 2020 YoY Revenue Percentage Increase



This growth indicates more organizations first look to GCP or consider it as an option to AWS or Azure. While AWS and Azure lead GCP in annual cloud infrastructure-as-a-service (IaaS) revenue, GCP offers features and services they do not. Key features and services that help differentiate GCP from them include:

- **Google Workspace (formerly G Suite)** holds the top spot as the most widely used cloud software-as-a-service (SaaS) office productivity suite. In early 2020, it had more than two billion monthly active users.<sup>2</sup>
- **GCP supports creating custom virtual machine (VM) instances.** While all cloud IaaS providers offer predefined VMs, only GCP currently makes custom VMs available. Organizations may create a VM with a specific number of vCPUs and a specified amount of memory.<sup>3</sup>
- **GCP's Cloud Healthcare APIs** positions organizations to comply with healthcare data standards like HL7®FHIR®, HL7® v2 and DICOM. Using its Cloud Healthcare APIs, they can better meet specific clinical and data standards and comply with HIPAA.<sup>4</sup>
- **GCP's Premium Tier network option** offers over 100 points of presence globally, more than any

public IaaS provider. The GCP Premium Network Tier includes Global Load Balancing that facilitates seamless expansion, overflow, or failover between GCP regions.<sup>5</sup>

Since 93 percent of enterprises already have a multi-cloud strategy, this foretells a bright future for GCP's continued growth. GCP provides the core IaaS services that many enterprises initially seek to create a viable multi-cloud strategy. These core services include analytics, compute, database, identity management, networking, storage, and virtual desktops.

GCP also offers advanced services such as artificial intelligence, containers, DevOps, Kubernetes, machine learning, and serverless compute, among many others. These services serve as a foundation for its hybrid vision of helping organizations create and maintain hybrid clouds. This vision supports organizations moving from VMs to containers and ultimately to Kubernetes pods.

As of February 2021, GCP has 25 regions throughout the world with nine more in development. Each of these 25 regions contains at least three zones with one containing four zones.<sup>7</sup> Taken together, these benefits make a compelling argument for enterprises to adopt, embrace, and expand their use of GCP.

### Backup Still a Requirement in the GCP Cloud

GCP offers many features organizations want from a public cloud platform to include high availability, redundancy, security, and much more. Despite these benefits, organizations must remember that as they host applications and data in GCP they retain responsibility for them.

This puts the onus on organizations to back up and recover their applications and data. Should they become corrupted, deleted, lost, or compromised, GCP does not automatically back up or recover them.

As a result of its acquisition of Actifio in December 2020, Google now offers its own backup solution. However, organizations must subscribe and pay for Actifio to back up their applications and data in the GCP cloud. Further, organizations may have application and data backup and recovery requirements that Actifio may not meet. This will necessitate they identify a third-party solution for their GCP backup and recovery needs.

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 2. <https://www.axios.com/google-g-suite-total-users-9a6d3df6-c990-4866-9efc-ba6756ba3c4d.html>. Referenced 2/9/2021.  
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## The State of GCP Cloud Backup Solutions

Despite GCP's growing prominence as an IaaS provider, DCIG only identified eight backup solutions from which organizations may choose. All eight solutions got started doing physical or virtual machine backup outside of GCP. This start gave them the core functionality organizations still need as they move existing applications and data to GCP.

Organizations may deploy six of these backup solutions in the GCP cloud the same way they do on-premises, with minor differences. They obtain an appropriately sized virtual machine instance in GCP to host the backup software. They license, install, and maintain the backup solution themselves. They configure it to back up their applications hosted on GCP. In many respects, they manage this backup software in the cloud the same way they do now.

Cloud backup solutions delivered this way do, however, face challenges going forward. Fewer organizations want to manage backup software the same way they did in the past. Instead, they want to subscribe and pay for backup software like they do other services in GCP.

They also want backup software architected and available as a cloud-native service. Delivered this way, the backup software automatically scales up or down based on demand. The provider also handles all the backup software's ongoing maintenance, such as fixes, patches, and upgrades. This frees organizations to focus on using the backup software while removing the task of maintaining it.

## Common Features across GCP Cloud Backup Solutions

These eight solutions target organizations of various sizes based on capabilities they disclose publicly and to DCIG. Due to new GCP cloud backup offerings continually coming to market, they have few features in common. Attributes all these solutions share include the following:

- 1. Alerting on backup job errors and failures.** All include policies that alert organizations to backup job failures or errors that may occur during a backup.
- 2. Back up all Windows Server versions from 2012 forward.** Any of the GCP backup solutions will protect applications and data hosted on any Microsoft Windows Server OS released since 2012.
- 3. Back up Red Hat Enterprise Linux (RHEL).** Organizations may select from five Linux releases available in GCP to host applications. However, the eight backup solutions only universally support protecting applications and data hosted on RHEL.
- 4. Enterprise caliber technical support.** Technical support for GCP cloud backup solutions stand out in that they all offer enterprise caliber support. One does not find widespread, quality technical support for cloud backup offerings in the AWS and Azure clouds.
- 5. On-premises application and data backup.** While conditions apply, all solutions that back up and recover data in GCP also offer options to protect data on-premises. This does open the possibility for organizations to consolidate all their backups using one solution.
- 6. Perform incremental and full backups.** Every backup solution gives organizations the option to perform full backups with seven supporting incremental backups. Most create a first full backup and then do incremental backups thereafter.

**“HYCU DPaaS for GCP represents the only TOP 3 backup solution available as a SaaS offering native to GCP.”**

- 7. Robust snapshot capabilities.** All provide multiple options to configure, manage, retain, and take snapshots of VMs residing in GCP. All the solutions support taking snapshots as frequently as once an hour.
- 8. Granular recovery of Windows files and folders.** Users in many organizations continue to use the Windows operating system in some capacity. All these solutions support granular recovery options of Windows files and folders.

## HYCU Data Protection-as-a-Service (DPaaS) for GCP

Upon DCIG's completion of review multiple, available GCP cloud backup solutions, DCIG ranked HYCU DPaaS for GCP as a TOP 3 solution. HYCU DPaaS for GCP seamlessly handles the many hidden tasks to help minimize the tasks associated with backup management. In so doing, HYCU frees organizations to focus on why they embrace cloud platforms like GCP: to increase productivity and drive down costs. HYCU DPaaS for GCP offers the following features that help distinguish it from other GCP cloud backup solutions:

- **Automated recovery of VM-related workloads.** Recovering applications and data residing on VMs is easy, relatively speaking. Recovering all the workloads and services used by that VM represents a much more difficult task. HYCU DPaaS for GCP facilitates the automated recovery of services in GCP to accelerate and simplify VM recoveries.
- **Cloud native GCP SaaS backup solution.** HYCU DPaaS for GCP represents the only TOP 3 backup solution available as a SaaS offering native to GCP. Hosted on GCP, it helps remove any dependencies or unknowns associated with using a SaaS offering that operates outside of GCP.
- **Extends data protection to SAP HANA on GCP.** HYCU DPaaS for GCP creates application consistent, point-in-time recoverable images of SAP HANA. It automatically discovers SAP HANA instances residing in GCP. HYCU also offers the flexibility to perform cloning and disaster recovery of SAP HANA across Google regions.
- **Facilitates immediate implementation of backup jobs.** Organizations starting out with backing up their VMs in GCP may want to do it quickly and without hassle. HYCU DPaaS for GCP meets these needs by offering multiple different default backup policies. Once subscribed to HYCU DPaaS for GCP, organizations may immediately start doing backups without needing to allocate Google Cloud Storage or create backup policies. Organizations may also configure HYCU to scan their GCP environment and assign a backup policy to unprotected resources, to include both GCP VMs and storage. Once protected, HYCU deduplicates data and places it on different storage tiers to control costs. ■

### About DCIG

DCIG, the Data Center Intelligence Group, empowers the information technology industry with actionable analysis. DCIG provides informed third-party analysis of various cloud, data protection, and data storage technologies. Learn more at [www.dcig.com](http://www.dcig.com).