

A Practical Guide for Data Protection in Cloud

Presenter:
Cornel Popescu,
Systems Engineer
Veeam Software

Moderator:
Brad Sams,
Executive Editor at Petri.com
Petri IT Knowledgebase



The background of the image is a server rack with multiple vertical server units. Each unit has two glowing green lights at the top. The units are labeled with '1.2TB' and '10K' on their front panels. A semi-transparent blue box is overlaid on the left side of the image, containing the text 'Overview' and a paragraph. The overall color scheme is blue and green.

Overview

With more and more content being stored in hybrid and cloud environments, making sure you are fully protected in the event of an outage is becoming increasingly complex as data is retained in multiple locations. These environments have many advantages when it comes data replication and protection but only if they are utilized correctly and efficiently.

Context

Cornel Popescu discussed how you can protect your data in a multi-cloud environment, the 3-2-1 rule, how Veeam fits into your backup solution, and why you should be using the cloud for availability and data protection.

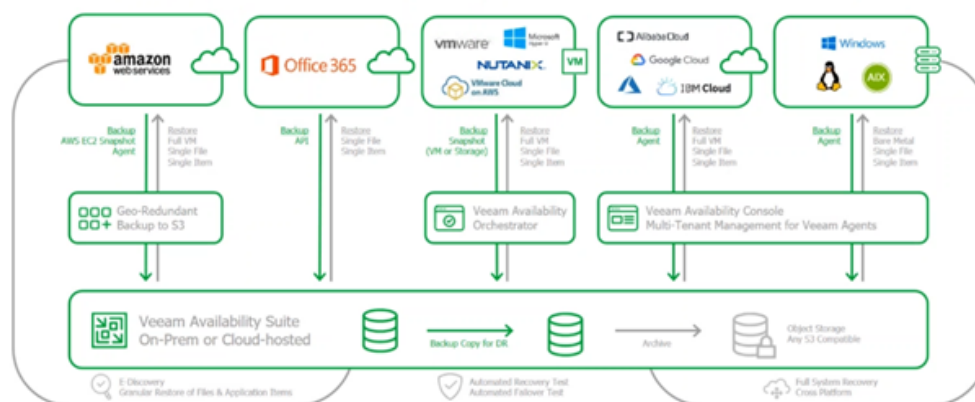
Key Takeaways

Veeam provides data protection to, from, and within your multi cloud enterprise.

Veeams software is designed to work with multiple cloud services including cloud backup and DRaaS, IaaS, SaaS, and cross-cloud scenarios.

With cloud backup, this can help you avoid data loss by sending your content offsite and when used with Veeam's solution, can improve your RTOs, lower costs for an outage and eliminate tape too. On the IaaS side, where your data is your responsibility, Veeam's software helps you maintain control with file and granular level recovery options. And in cross cloud scenarios, Veeam can help you backup data across provides for true cloud-level redundancy.

Veeam in Multi-Cloud Environments



3-2-1-0 Data Protection Strategy

A standard rule in the industry is the 3-2-1-0 data protection practice that is designed to help protect your company's information if an outage occurs.

- 3 copies of your data
- 2 stored on two different types of media
- 1 copy of your data is stored off-site
- 0 errors in your backup/replication data



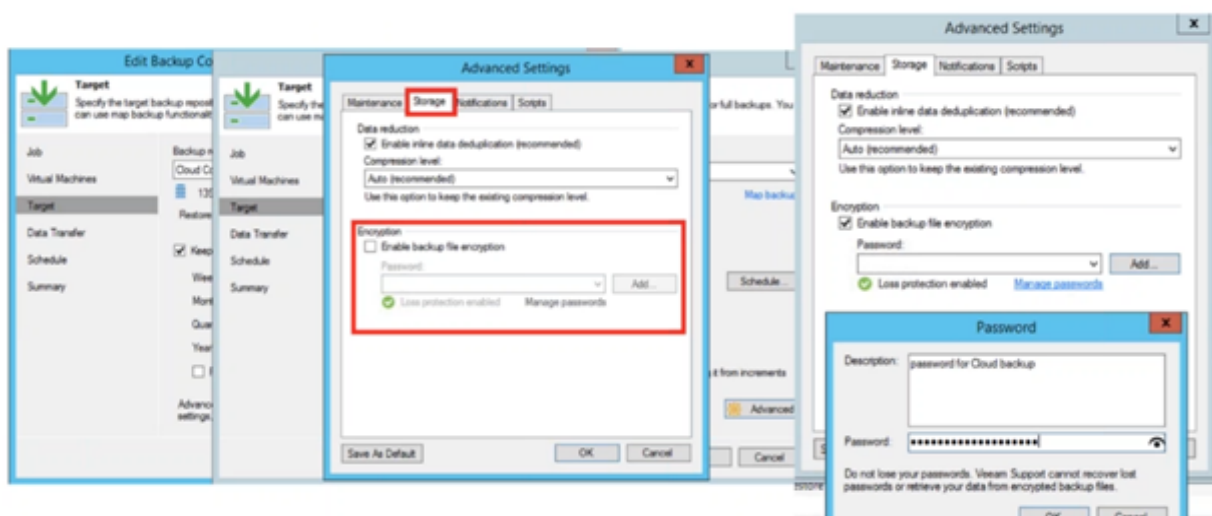
The Top 3 Reasons Why You Should Use the Cloud for Availability

Popescu identified the top three reasons he believes that everyone should be using the cloud for availability which includes that it has cost and usage model which means minimal investment upfront, it is easier to manage, and the cloud can easily solve the offsite requirement of the 3-2-1-0 protection strategy.

Security of Data in the Cloud

One of the primary concerns about moving your data to the cloud is if it is safe and secure. Popescu dives into this concern and shows how Veeam's software has the ability to secure your data at rest; Veeam has AES 256-bit encryption built in to make it simple to secure your backup files.

When data is secured, the encryption key is randomly generated and each backup key has two passwords. A backup job password created by the admin and a public key automatically generated by Veeam Enterprise Manager that is pushed out to all backup servers.





If someone forgets the backup job password, using a challenge/response system, you are still able to access your data without compromising on security.

Additionally, data transferred between public networks is encrypted by default.

Backup In the Cloud

Backing up your data in the cloud can be accomplished in a few simple steps using Veeam's software. In the webinar, Popescu walks-through these steps in detail starting at the 25 minute mark.

These steps include: subscribing to a cloud vendor, adding a cloud provider backup repository, configuring connection traffic and security settings, defining the backup copy job, configuring security for backup copy jobs and how to restore data from the cloud provider.

Things to Remember when Backing Up to the Cloud

When you are storing data in the cloud, there are several key things that Popescu outlines to remember as you setup your services:

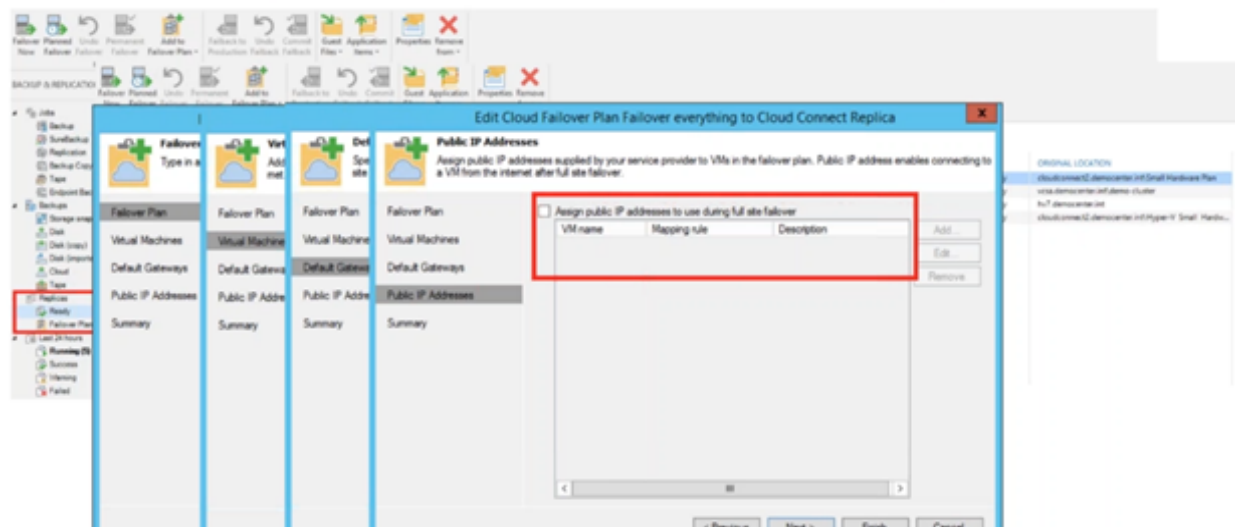
- You can use cloud backup repository to perform recovery on-prem
- You can set retention policy on Backup Copy Job options for data archival
- The feature of using cloud repository is included in all Veeam B&R editions

Disaster Recovery in the Cloud

Popescu outlines how to use Veeam Availability Suite to use the cloud for disaster recovery. Starting at the 35 minute mark, he dives deep into how you can overcome complex networking tasks with Veeam Cloud Connect, adding a cloud provider, setting up replication, recovery failover, and how to execute a failover plan.

Veeam's suite of software makes the process of defining your disaster recovery plans

for full or partial failover simple and gives you complete control of your data depending on the type of recovery that is needed.



It's important that when using the cloud as a disaster recovery site to remember these things:

- You can use cloud replicats to recover data
- You can failover and failback to the cloud
- While you are in failover state, the workload is running in the cloud
- Veeam allows full and partial failover, without complex network settings
- For failover purposes, public IPs and DNS should be planned

It's important to remember that Veeam works across many different clouds and environments which provides you with a significant number of options for creating your backup environment.

Additional Information

Download Free Trial: [Veeam offers a free trial](#) of it's Availability Suite for 30 days that is fully featured.