



Immutable Backup Solution for Ransomware Defense

PAC Storage Veeam V12 Backup and Replication

current PS Firmware version 1.64 v20

Challenges

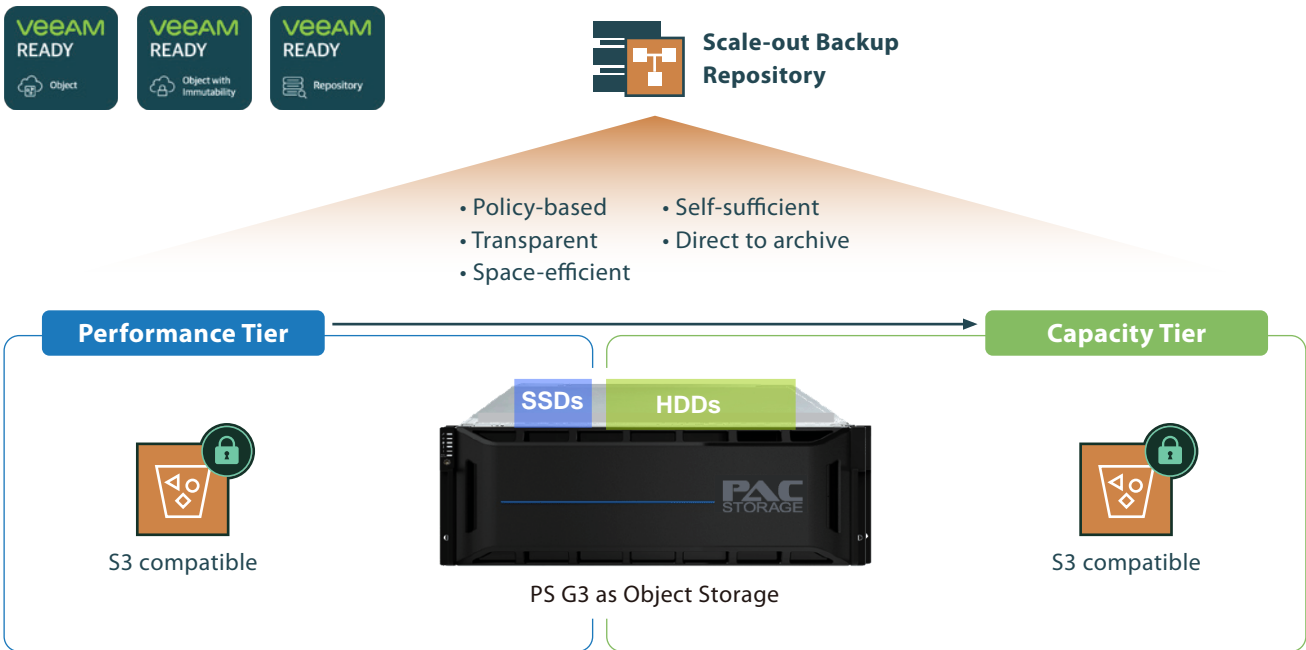
Digital data is crucial to modern society, but ransomware and malicious acts pose a serious threat to data security, making it a critical risk that organizations must address. Such attacks can strike any internet-accessible device without warning and quickly spread throughout the entire infrastructure, disabling business operations, and incurring significant costs. The threats are constantly evolving, with advanced ransomware targeting backups and even secondary backups to impede recovery during an attack. As a result, organizations must prepare and defend against these threats.

Traditional vs. Modern Immutable Backup

Tape backup is completely offline, read-only, and cannot be altered or deleted. While tape backup can effectively prevent ransomware from modifying or destroying critical data in theory, long recovery times, unreliable tape media, and the cost and complexity of maintaining large tape backup systems have made it less practical in modern times. As a result, new technologies like immutable backup are becoming increasingly popular. It not only features the complete data immutability like traditional tape backup, but also provides fast and guaranteed recoverability, all while maintaining network connectivity without the need for offline operations. PAC Storage and Veeam together offer backup protection solutions that prevent ransomware from destroying data in virtual, physical, NAS and cloud-native environments.

Solution Overview

The PAC Storage PS G3 is an HDD-based storage solution featuring built-in U.2 NVMe SSD as cache, which can provide a performance tier and a capacity tier in the Veeam scale-out backup repository architecture. The PS G3 provides S3-compatible object storage that ensures immutability for Veeam backup repository. With support for the S3 Object Lock API, data can be retained for a defined period, thereby preventing any unauthorized modifications, deletions, or encryption, ensuring complete availability and protection against malicious acts and insider threats.



Solution Benefits

- **Lowering Storage Expenses:** The PAC Storage PS G3 has built-in U.2 NVMe SSD as cache and can serve as the performance tier and capacity tier in Veeam scale-out backup repository architecture. It can significantly reduce physical storage costs and footprints. In addition, PAC Storage and Veeam utilize deduplication and compression technologies to lower long-term data retention costs.
- **Simplifying Backup Process:** Veeam simplifies the data backup process and offers robust yet user-friendly immutable backup protection to mitigate the risks of ransomware and insider threats.
- **Meeting Regulation Standard:** Veeam provides integrated AES 256-bit encryption from start to finish, allowing you to encrypt data and backup files at the source (during backup), while in transit, and when stored, ensuring comprehensive protection.
- **Fast Recovery:** The PAC Storage PS G3 with Veeam provides lower recovery point objectives (RPOs) and recovery time objectives (RTOs). This means destroyed data can be restored and businesses can resume operations as quickly as possible in the event of ransomware attacks.

Conclusion

While preventing malicious acts can be challenging, the backup solutions from PAC Storage and Veeam, with advanced features and benefits, allow for the quick and effective restoration of critical data that has been infected by ransomware to its original state.

Solution partner

veeam