

Solution Brief:

Veeam Data Protection for FlashStack for business-critical applications

Business-critical applications like databases, messaging, collaboration, big data and even AI/ML are the foundation for today's modern enterprises. Now more than ever, these applications must perform flawlessly, which requires a resilient infrastructure that is built for these applications. The applications need a total ecosystem that can support their performance, including networking, compute, automation, load balancing and storage to name a few, all to assure maximum performance and availability. Beyond physical and virtual infrastructures, you also need to pay attention to the actual data and applications themselves, assuring that they are available and recoverable when an issue arises. Of course, not all applications are created equal, and different applications have different performance and availability requirements.

One size doesn't fit all

One size doesn't fit all for your applications. Look for solutions that are pre-validated, designed and optimized for your workloads. The result will be faster and more consistent deployments plus reliable, consistent performance for your applications and workloads. In other words, higher levels of customer satisfaction.



Challenges facing today's organizations

Today's business requires new levels of IT efficiency and infrastructure agility to meet user expectations and business demands. Understanding each of your business-critical applications, their interdependencies and their architectural requirements is vitally important. Poorly performing applications or downtime can be costly and be a drain on the already scarce IT resources needed to operate them.

You need to have confidence that the infrastructure you choose will deploy quickly, seamlessly and deliver the promised performance without spending needless time performing tuning and management. Furthermore, you want to be assured that the applications will be available so when something does happen, you can recover quickly with the lowest recovery point objectives (RPOs) and recovery time objectives (RTOs).

Modern infrastructure combined with modern data protection

In recognition of this, Veeam®, Cisco and Pure Storage have partnered to provide customers a pre-validated and configured infrastructure and data protection solution that's designed for modern business-critical applications. First, there is a modern converged infrastructure in FlashStack that provides a pre-integrated, pre-validated solution that combines compute, network and storage into a modern infrastructure platform designed for business-critical applications and tailored for specific workloads.

FlashStack delivers maximum performance, increased flexibility and rapid scalability. It deploys quickly and confidently, delivers reliable performance, and reduces management and overhead for patches and updates.

Veeam delivers modern data protection that today's infrastructures need when combining backup and replication with advanced monitoring analytics and intelligent automation. Veeam integrates with FlashStack to deliver the highest performance and the most advanced features to assure that your data and applications are available while also unlocking the power of your backup data for additional business value.

Veeam Data Protection for FlashStack

Pure Storage's Purity software enables you to instantly snapshot any volume without worrying about pausing workloads, all with zero overhead. Veeam can directly leverage these storage snapshots for backups or replicas as often as you need to, which dramatically lowers RPOs. It gives you added flexibility and the ability to initiate a backup at any time and frequency, with no interruptions to operations.

Unleash the power of your data

Unleash the power of your data with Veeam's DataLabs™. DataLabs leverage Pure Storage's storage snapshot to create nearly live copies of your data in a protected virtual environment where you can perform any data reuse use case including DevOps testing, security forensics, compliance assurance and analytics. Use some of Veeam's advanced functionality like SecureRestore and SecureReplica. SecureRestore offers the ability to stage

a backup in a quarantined environment and scan the data for viruses or malware BEFORE you restore that data back into production. This is particularly important in the event of a ransomware incident. In fact, Veeam and Pure Storage complement each other by using Pure Storage's SafeMode Snapshots technology to make an immutable snapshot of your backup to prevent the backup environment from being modified or deleted.

Business Critical Production



FlashStack



Backup

Recovery

Backup Targets

C220 M5



FlashArray//C

Option 1

- Flash performance
- Storage efficiency
- Scale-up and scale-out
- SafeMode snapshots



C240 M5 All-Flash

Option 2

- Flash performance
- Modular, scale-out architecture
- Veeam Hardened Linux Repository



S3260 M5

Option 3

- High performance with PB capacity
- High density scale-up & scale-out
- Veeam Hardened Linux Repository

Veeam Data Protection for FlashStack

Choose the right backup environment for your needs

Veeam, Cisco and Pure Storage have tested workloads on FlashStack and using a choice of Pure Storage or Cisco secondary storage and servers to run Veeam solutions and to store backups and replicas. We tested Veeam by orchestrating the limitless snapshots of FlashStack to back up and restore virtualized workloads on FlashStack as the source for backups and replicas. We also tested sending backups to the target as either a Pure Storage FlashArray//C, Cisco UCS S3260 storage server or Cisco UCS C240 M5 All Flash servers. Using Pure Storage's limitless snapshots enable Veeam to perform more frequent backups to achieve the lowest RPOs, all without impacting the performance of the production environment. At the end of the day, it's all about choice; the right choice of performances, scalability, capabilities and price for your workloads and the service level agreements (SLAs) and scale you need to achieve.

Choose the backup environment that is right for you!

Depending on your requirements, you have a choice of the right infrastructure to run your data protection.

Here is a quick look at what we tested with Veeam as backup targets.

Cisco UCS S3260 M5 storage servers deliver amazing performance with massive scale-out scalability and the economics of disk environments. Powered by Cisco Intersight or Cisco UCS Manager for lower TCOs, simplified management and consistent policy-based deployments and scalability.

Cisco UCS C240 M5 all-flash storage servers deliver the performance and flexibility to run support virtually any workload in addition to the data protection environment. It provides the ability to scale-out and scale-up to meet the performance and flexibility for complex environments.

Pure Storage FlashArray//C combined with Cisco UCS B200 M5 servers delivers maximum flash-based performance that can handle multiple workloads while delivering the ultimate performance for your data protection environment. It also scales out and up. FlashArray//C also offers Pure Storage SafeMode Snapshots to protect backup data and metadata against data loss and threats. Ransomware can't delete, modify or encrypt SafeMode snapshots, even with administrative credentials.