

Transform IT and Reduce Risk With **FlexPod Converged Infrastructure and Availability Software**

Converged infrastructure solutions such as FlexPod accelerate application deployments, speed up time to market, lower costs and simplify IT operational management. With application and data growth accelerating across enterprise data center environments, it is critically important for businesses adopting converged infrastructure systems to modernize their application Availability capabilities at the same time. By leveraging Availability software with FlexPod, businesses can accelerate their digital transformation initiatives, increase IT automation, mitigate risk and improve the return on their IT investments.

Why converged infrastructure

Why Availability is so essential

FlexPod and Veeam Availability Suite

Converged infrastructure has become one of the “go to” technology solutions to enable IT and digital transformation. With converged infrastructure, enterprise IT teams can leverage a pre-integrated, pretested and prevalidated virtualized infrastructure platform to accelerate deployments, reduce management complexity and lower costs. For many organizations, converged infrastructure systems are being used to enable private cloud and IT-as-a-service capabilities to aid in strategic initiatives such as bringing new business application services to market.

Ensuring application Availability and protecting critical business data are becoming more important as organizations increase the pace and volume of these new business services. However, one of the critical issues facing businesses today is an “Availability Gap.” According to recent research, nearly 84% of IT decision makers believe there is a gap between the application service levels end users demand and what IT can deliver.¹ Therefore, as IT decision-makers invest in converged infrastructure and private cloud technologies, they must confirm that these solutions can provide very high levels of application Availability while ensuring the protection of business-critical data assets.

In this white paper, we discuss how converged infrastructure systems such as FlexPod can be leveraged in tandem with Veeam Availability Suite to significantly enhance application Availability, improve business agility, simplify IT operational management, lower costs and mitigate risk.

Why converged infrastructure

In a converged infrastructure solution, server compute, flash storage, networking resources and virtualization software are combined into a single platform with unified management software capabilities. Among the benefits of this model are:

- **Reduced complexity:** Organizations can rapidly deploy and configure virtual machines by leveraging a pre-integrated and pretested platform with centralized management and orchestration tools. In addition to faster virtualized application deployments, converged infrastructure eases IT operational management by simplifying a wide range of labor-intensive operations.
- **Lower total cost of ownership (TCO):** FlexPod customers typically reduce power and storage costs by more than 50%, while also lowering ongoing operating costs. By combining highly efficient NetApp Storage Snapshot technology with compression and deduplication, it is possible to attain reductions of 50% or more in storage capacity compared with conventional storage systems.
- **Increased agility:** IT can set up new environments much faster, drastically shrinking the time typically required for procurement, deployment and management tasks. In addition, FlexPod offers an application-centric approach to deployment based on prevalidated designs and application best practices.

¹ 2017 Veeam Availability Report: “Why Organizations Struggle to Digitally Transform and Innovate,” Veeam and Enterprise Strategy Group, April 2017

- **Cloud readiness:** As more organizations embrace private cloud and hybrid cloud models, converged infrastructure provides a quick, safe path to cloud readiness. Customers can deploy FlexPod solutions that have been designed and prevalidated for use in private and hybrid cloud environments.

Why Availability is so essential

Every IT modernization effort—whether it’s for cloud, on-premises infrastructure, new applications or legacy business-critical applications—must focus on Availability and data protection. In today’s business environment, nothing is more important. If applications are down and customers, business partners and end users can’t access the resources they need, the costs can be significant.

How significant? According to the recently released 2017 Veeam Availability Report, the average enterprise incurs costs of \$21.8 million a year due to gaps in application Availability. In fact, 6 in 7 organizations lack confidence in their ability to reliably protect and recover data within their virtual environments.²

So, if you’re investing in converged infrastructure, it is essential to invest in Availability solutions at the same time. This means a solution that directly integrates with the virtualization environment of the platform to deliver the most stringent recovery time objectives (RTOs) and recovery point objectives (RPOs). The Availability software should also be capable of supporting 3-2-1 data protection best practices:

- 3: Maintain at least three separate copies of your data.
- 2: Store data on at least two different types of storage media.
- 1: Keep one copy in an off-site location.

FlexPod and Veeam Availability Suite

The combination of FlexPod and Veeam Availability Suite provides unprecedented levels of performance, operational simplicity, availability and data protection for enterprise application workloads.

In addition, Veeam’s direct integration with NetApp ONTAP® storage and VMware vSphere enables agentless, application-consistent snapshots that provide Recovery Time and Recovery Point Objectives (RTPO™) of less than 15 minutes for all applications and data.

Veeam’s integration with ONTAP also enables organizations to gain a higher return on their FlexPod storage investments. Additional benefits of the combined solution include:

² Ibid

- **High-speed recovery** to easily recover individual items or entire VMs from NetApp Snapshot™, SnapMirror® and SnapVault.®
- **Faster VMware backups** with less impact on the virtual environment by backing up directly from file-based (NFS) storage using Veeam's proprietary NFS client.
- **Fast, application-consistent recovery points** by orchestrating NetApp Data ONTAP to create snapshot-only backups. Organizations can achieve an RTPO of 15 minutes or less.
- **Reduced risk of data loss** by automating the creation of secondary backups from NetApp SnapVault.
- **Verified protection** by leveraging Veeam SureBackup® technology to greatly simplify the testing of backups to guarantee the recoverability of every file, application and VM.
- **On-Demand Sandbox™ for Storage Snapshots** to improve the ROI on investments in secondary FlexPod systems. Instantly create virtual labs that are totally isolated from production for dev/test, user training, testing application patch changes and other use cases.

The FlexPod and Veeam solution is also well suited for hybrid cloud environments. By leveraging Veeam Cloud Connect, businesses can efficiently and securely move backup copies to a public cloud provider environment. This helps organizations meet 3-2-1 data protection best practices and improve storage efficiencies through low-cost cloud storage.

Conclusion

The FlexPod solution from Cisco and NetApp is a leader in converged infrastructure, using best-of-breed technologies to support IT modernization and digital transformation. Similarly, Veeam has emerged as a leader in Availability by providing solutions that enhance application Availability and ensure data protection in virtualized and physical server environments across hybrid cloud infrastructure.

Together, FlexPod and Veeam help enterprise organizations accelerate their digital transformation initiatives by delivering a solution that enhances business agility, simplifies IT operational management, improves efficiencies and ensures Availability for the Always-On Enterprise.

To learn more about how FlexPod and Veeam can help your organization transform IT, eliminate your Availability Gap and reduce risk, please visit Veeam at <http://vee.com/netapptogether>.
