VersaStack with VMware: Easy-to-manage, efficient shared infrastructure

Based on Cisco UCS Integrated Infrastructure and IBM Storwize Unified storage

Highlights

- Simplify virtual and private cloud deployments with a versatile, integrated system based on Cisco UCS® Integrated Infrastructure and IBM® Storwize Unified storage.

- Take the guesswork out of creating shared infrastructure with a tested, validated, and documented solution.

- Scale up or out depending on the needs of your business, applications, and users.

- Store up to five times more data in the same footprint with data virtualization and real-time compression capabilities.

- Achieve three times better performance using flash-optimized storage and IBM Easy Tier analytics-based data placement.

- Keep your business running on cloud infrastructure with built-in redundancy and no single point of failure.

Deploy the shared infrastructure you need

Your business is being asked to deliver instant access to information and services. If your IT staff and IT infrastructure can't respond, you likely need to move from a traditional design with static resources to a flexible computing strategy that supports dynamic resource allocation and increased utilization. IBM and Cisco can help you replace your disparate layers of computing, network, and storage resources with an integrated solution that delivers IT and business agility for less.

VersaStack Solution with VMware vSphere

Your IT staff spends a lot of time selecting, connecting, integrating, testing, and managing infrastructure components. The VersaStack Solution by Cisco and IBM is a Cisco UCS® Integrated Infrastructure solution that combines the Cisco Unified Computing System™ (Cisco UCS), Cisco Nexus® 9000 Series Switches, IBM® Storwize Unified storage, and VMware vSphere 5.5 Update 1 into a cloud-ready foundation. Your organization can quickly and easily deploy the shared infrastructure your business needs and break down the barriers that limit agility and innovation.

Easy

Cisco and IBM make it easy to use these technologies and build a cost-effective virtualized environment today and simplify your evolution to shared cloud infrastructure. Verified, lab-tested architectures provide detailed design and implementation guidance that help reduce risk and guesswork by giving your architects and administrators guidebooks for implementation. By following the

guidelines in these Cisco® Validated Designs, you can create a VersaStack foundation that helps protect against compromise while delivering a simplified, standardized, and trusted approach for the deployment, use, and management of your infrastructure resources.

Efficient

Traditional management approaches can make it difficult for your staff to meet their goals on schedule. In the VersaStack solution, unified management simplifies processes and provides the automation you need to be efficient. Using the role- and policy-based management capabilities of Cisco UCS Manager, your IT staff can provision servers in minutes rather than the days or weeks required in traditional environments. System configuration information can be exported to configuration management databases (CMDBs) to support processes based on IT Infrastructure Library (ITIL) concepts.

Optimized resource utilization and performance

The solution uses IBM Storwize Unified Storage, a virtualized, flash-optimized, enterprise-class storage system that supports an efficient storage infrastructure. The system includes technologies that both complement and enhance virtual environments with built-in functions such as data virtualization, real-time compression, and IBM System Storage Easy Tier, which automatically migrates data between tiers based on real-time use patterns, for extraordinary levels of performance and efficiency. Your administrators can centrally manage storage volumes from a single point, migrate data without disruption to applications, and avoid downtime for backup, maintenance, and upgrade operations.

Versatile

With traditional IT architectures, the deployment of new services often requires infrastructure modifications. The VersaStack solution provides a uniform approach to IT architecture, offering a well-characterized and documented shared pool of resources for application workloads. Your IT staff can use a flexible and consistent approach to support a variety of service-level agreements (SLAs) and virtual infrastructure and private cloud initiatives.

Capacity at scale

As your virtual and private cloud environments grow, you must be able to scale your infrastructure without the need to make fundamental changes to the solution architecture. Each layer of the VersaStack solution offers platform and resource options to scale the integrated infrastructure up or down while continuing to support the same features and functions that are required by the configuration and connectivity best practices. For example, you can scale your environment up if you need greater performance and capacity (adding computing, network, and storage resources individually as needed), or you can scale it out if you need multiple consistent deployments (adding integrated systems).

Availability at all levels

Whether you are building more flexible virtual infrastructure or a private cloud environment, the technologies you deploy must help ensure that applications, services, and data are accessible and ready to use. The VersaStack solution offers highly available and scalable infrastructure that can evolve over time to support multiple physical and virtual application workloads. The solution has no single points of failure at any level, including on the server, network, and storage layers. The communication fabric is fully redundant, providing smooth, transparent traffic failover should any individual physical or virtual component fail.

Conclusion

If your organization needs a better way to build and share infrastructure, consider the VersaStack Solution by Cisco and IBM. Our integrated infrastructure approach can help you deploy your systems right the first time and avoid delays and service disruptions that can affect your company's profitability. With scalable, industry-standard components, a holistic virtual approach, and end-to-end management capabilities, your organization can take advantage of a consistent platform to build the virtual and cloud infrastructure that your business needs to innovate and stay ahead.

For more information

- Read the Cisco Validated Design at VersaStack for Data Center Design Guide.
- Learn more about VersaStack at http://www.cisco.com/go/versastack.