VersaStack Solution by Cisco and IBM

Highlights

IT leaders are rapidly shifting away from traditional siloed environments and moving toward integrated Infrastructure, in which the full stack of data center technologies is combined into a pre-engineered, tested, and supported system designed to operate as a whole.

Cisco has joined with IBM to create the world's first integrated infrastructure based on the IBM Storwize family of virtualized storage technologies and the Cisco Unified Computing System™ (Cisco UCS).

This new integrated infrastructure brings new levels of ease, efficiency, and versatility to cloud, big data, and enterprise application deployments.

Evolving Data Center Needs

The data center industry is always evolving, and current trends make evolution more critical than ever. The data center has moved far beyond a simple repository for digital records. Increasingly, its computing, storage, and networking facilities are being used to power complex analytical operations that are becoming essential for competitive advantage and business agility.

This trend is exemplified by the growth in demand for big data applications. These applications involve data sets so large and complex that they cannot easily be processed using traditional computing tools. According to Transparency Market Research, the global big data market is set to grow to over US$48 billion by 2018, which represents a compound annual growth rate (CAGR) of 40.5 percent over 2012 spending levels.

Two other trends are making it easier to provision data center resources:

- Cloud computing, in which computing and storage assets are managed and allocated from a shared pool rather than from application-based silos, is rapidly becoming the standard for data center resource deployment.
- The advent of virtualization and software-defined networking (SDN), in which management is abstracted from lower-level functions, promises to make it easier than ever to allocate resources.

These trends are related, because the scalability of big data and the simplicity implied by SDN help organizations manage the increased compute requirements of big data. And underpinning these trends are changes in hardware. Vendors are adapting specific data center components to address cloud, SDN, and big data requirements. IBM, for example, has evolved its Storwize family of virtualized storage technologies specifically for software-defined environments. Cisco, meanwhile, developed Cisco® Application Infrastructure (ACI) to accelerate the configuration of infrastructure to match the needs of applications, and Cisco Intercloud Fabric technology to make it easier to move workloads between different cloud models.

Another significant development is the emergence of integrated infrastructure solutions for the data center. Previously, data center teams purchased computing, storage, and network building blocks separately and assembled, configured, and tested the various technologies with the hope everything would work together. With integrated infrastructure, servers, networking resources, storage systems, and management systems are combined into a predesigned, tested, and supported solution. This approach massively simplifies asset purchasing, deployment, and management.
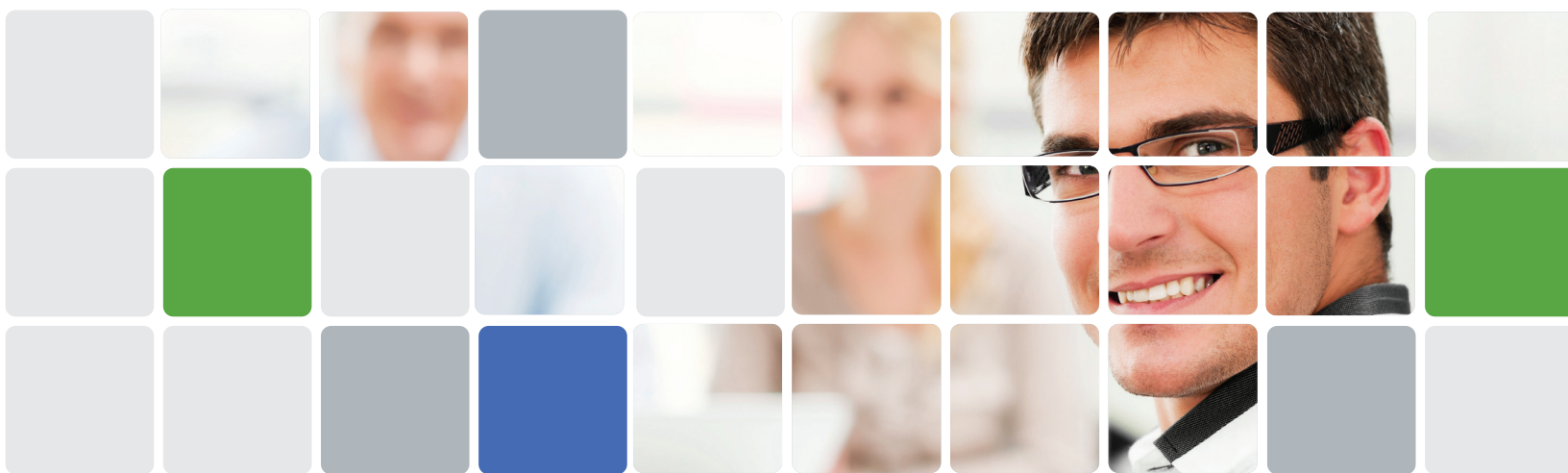
The popularity of these solutions is growing fast. In fact, IDC forecasts that the integrated systems market will grow during the 5-year period from 2012 to 2017 at a CAGR of 33 percent: to US$14 billion by 2017, up from US$5.4 billion in 2013.

Easy. Efficient. Versatile.

Quick deployment and execution of business applications plus the versatility to adapt as business priorities change are essential for dynamic organizations that want to accelerate business growth while reducing costs. Organizations today require IT Infrastructure that is easy, efficient, and versatile. The VersaStack™ solution by Cisco and IBM is an integrated infrastructure solution that can help you accelerate data center infrastructure deployment, efficiently manage information and resources, and adapt to business change.

The VersaStack solution combines the performance and innovation of Cisco UCS® Integrated Infrastructure, which includes the Cisco Unified Computing™ System™ (Cisco UCS), Cisco Nexus® and Cisco MDS 9000 Family switches, and Cisco UCS Director, with the performance and efficiency of the IBM Storwize storage system. The IBM Storwize V7000 includes technologies that both complement and enhance virtual environments with built-in functions such as IBM Data Virtualization, Real-time Compression, and Easy Tier that deliver extraordinary levels of performance and efficiency.

The VersaStack solution is backed by Cisco Validated Designs, for faster delivery of applications and increased IT efficiency with less risk.

The VersaStack solution is ready for Cisco ACI, enhancing business agility by allowing IT to build, deploy, secure, and maintain applications through a more agile framework. This capability, combined with Cisco Intercloud Fabric, can enable the creation of open and secure hybrid cloud-ready solutions that accelerate IT agility while delivering dramatic improvements in deployment, operation efficiency, and simplicity.

Benefits of an Integrated Approach

By opting for the VersaStack solution, data center managers and administrators benefit from:

- Ease-of-deployment capabilities provided by Cisco UCS integrated infrastructure innovations such as Cisco UCS service profiles, reducing design, deployment, and management overhead
- Performance optimization without complexity with IBM Easy Tier features
- Efficient use of computing, networking, and storage resources with up to five times more data storage with IBM Real-time Compression
- Transparent integration of new technologies with Cisco Validated Designs
- Unified integrated infrastructure provisioning and management with Cisco UCS Director
- Versatile storage virtualization capabilities enable a dynamic infrastructure by extending IBM Storwize functions to existing IBM and non-IBM storage
- Validated IBM applications and analytics capability, with IBM Services support

The IBM and Cisco Advantage

Cisco and IBM are global leaders in the IT industry with deep expertise in driving emerging technology transitions. The VersaStack solution provides a foundation for future innovation and highlights our collaboration around key technologies to meet the needs of our joint customers. This new solution gives you the opportunity to take advantage of integrated infrastructure solutions targeted at cloud, big data and mobility.

Both companies are recognized for their innovation, Cisco is one of the world's foremost providers of server, networking, and management products and solutions. IBM is a leader in storage with deep expertise in big data and analytics. Our goal is to create total solutions that deliver positive business outcomes. Recognized for its innovation, Cisco is one of the world's foremost providers of server, networking, and management products and expertise, with a robust portfolio of data center products. IBM completes the data center equation with business and technology expertise: a proven capability to transform the enterprise.

The VersaStack solution is supported by IBM Services and Cisco Services, which provides capabilities to supplement in-house IT management with proactive approaches that save money.

IBM also holds numerous, high-level Cisco certifications at both corporate and individual levels, enhancing the team's ability to get the job done quickly and with less risk. Together, we can offer clients what they need to accelerate the journey to a more responsive model for IT.

For more information

To find out more about how IBM and Cisco can help you build a network for the modern data center, go to:

- www.cisco.com/go/versastack
- www.ibm.com/cisco
- IBM and Cisco: Together for a World-Class Data Center

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