

FlexPod®

FlexPod with Infrastructure Automation

A converged infrastructure solution for enterprise remote offices

FlexPod in the Data Center

In today's data center, IT management focuses on procuring converged infrastructure platforms that provide architectural flexibility and enterprise-grade performance. The FlexPod® platform delivers on both counts. As the leading converged infrastructure platform for the data center, FlexPod offers a combination of innovative network, compute, and storage building blocks that have enabled its ever-growing presence in the modern data center. Today, FlexPod has been successfully deployed by over 7,000 enterprises worldwide.

Unique needs of remote offices, small data centers, and the edge

Enterprises are now looking to extend the benefits of converged infrastructure from the central data center. They want to expand the architectural richness and simplified management into remote office or branch office (ROBO) locations, small data centers, and the edge. However, there are several critical differences between centralized data centers and remote locations. Remote offices and edge environments are often space and power constrained. In addition, remote locations typically do not have access to the same level of technical personnel, whether in-house or vendor assigned.

If left to grow organically, ROBO and edge environments often end up deploying a diverse set of platforms and management practices that can result in higher operating costs for the enterprise. In addition, business units are increasingly turning to public cloud services as they attempt to bypass the operating complexities of deployed infrastructure.

New FlexPod with Infrastructure Automation

Enterprises need a converged solution for ROBOs, small data centers, and the edge environment that maintains architectural consistency with the central data center infrastructure. But this solution must be more compact and easy to deploy and manage. To meet this need, Cisco and NetApp have extended the FlexPod family with the introduction of the new FlexPod with Infrastructure Automation solution.

Key Benefits

Easy to order

- Reduced order shipment time from weeks to days
- Optimized standard configuration for network, compute, and storage
- Packaged as a single unit—delivered in a fully cabled rack

Easy to deploy

- Ready to deploy in less than one hour
- Comprehensive automation across the infrastructure
- Optimized and prevalidated for virtualized infrastructure and VDI workloads

Easy to own

- Enhanced management experience
- Scalable in any dimension
- Worldwide support in collaboration with ISVs



Tailored to ROBO and Edge Requirements

The FlexPod with Infrastructure Automation solution is optimized for ROBO, small data center, and edge deployments. This converged solution provides the following optimizations:

- **Well-defined configuration.** Although FlexPod Datacenter can be tailored to precise requirements, FlexPod with Infrastructure Automation is prescribed in its form and function, resulting in minimal architectural decision making within the remote environment.
- **Easy and consistent procurement.** FlexPod technology partners can procure FlexPod with Infrastructure Automation from a single source, confident that all the components will be in the stated configuration, prevalidated for virtualized infrastructure and VDI workloads.
- **Simplified configuration.** FlexPod Datacenter customized deployments can take several days. By leveraging Cisco Unified Computing System (Cisco UCS) Director scripting, FlexPod with Infrastructure Automation can be readied for enterprise workloads in less than 60 minutes.
- **The strengths of FlexPod.** Although this new FlexPod solution differs in important ways to meet the unique requirements of remote environments, it retains the commonality of FlexPod components. It also still offers the confidence that comes from leveraging the intellectual property that is embedded in the FlexPod prevalidated architecture.

Infrastructure automation

The FlexPod with Infrastructure Automation solution comprises Cisco Cloud Services Platform, Cisco Nexus 9300 switches, Cisco UCS Mini servers, and NetApp® FAS2500 storage, all mounted in a 24U rack for

fast deployment. It can be provisioned in less than 60 minutes after the platform has been powered up. This 90% reduction in provisioning time is the result of software enhancements within the FlexPod components, coupled with the powerful management capabilities of Cisco UCS Director.

Cisco UCS Director facilitates a seamless experience in managing infrastructure across the data center and remote locations. Policies that relate to network, compute, storage, and data management as determined by IT professionals at the central data center can be implemented at each remote location. Service profiles promote consistency and reduce the time required to configure the platform.

VDI and Virtualized Infrastructure

VDI and virtualized infrastructure are important workloads for remote environments. VDI workloads and virtualized infrastructure such as Oracle, SAP, and Microsoft applications can be hosted very efficiently on FlexPod with Infrastructure Automation. The base platform supports up to 500 VDI users with high-availability capability, easily expandable to 700 users by adding computing power to the available slots within the UCS Mini component.

Clustered Data ONTAP

The NetApp clustered Data ONTAP® 8.3 operating system addresses the needs of modern IT departments with a unified clustered architecture for

storage systems. It scales and adapts to changing needs, while reducing risk and costs. Key benefits include nondisruptive operations, proven efficiency, and seamless scalability.

These benefits become evident when multiple FlexPod units are deployed across the data center and remote locations. Enterprises can move data between storage systems without interrupting the application. Clustered Data ONTAP supports different generations of NetApp controllers, preserving and extending the investment in storage infrastructure. NetApp copy, replication, and cloning technologies provide additional cost savings that more than offset the additional capital outlays within remote environments.

Clustered Data ONTAP is the foundation of the Data Fabric, NetApp's vision for the future of data management. It is the world's #1 open networked branded storage operating system*, providing a clear path to the cloud.

Avnet Accelerated Procurement

Avnet provides considerable experience and expertise in integrating FlexPod components and delivering the result to customers expediently. FlexPod partners across the globe stand ready to provide sizing, deployment, and management assistance.

Getting Started

For further information, contact your local NetApp or Cisco representative or partner. Visit www.netapp.com/flexpod.



Cisco Cloud Services Platform 2100. Management appliance used to enable the UCS Director Automation GUI.

Cisco Nexus 9300 switches. Nonblocking 10Gb/40Gb Ethernet with Application Centric Infrastructure.

Cisco UCS Mini servers. The new benchmark in cost- and power-optimized compute for branch and remote offices.

NetApp FAS2500 storage. Enterprise storage that features Data ONTAP 8.3 data management.

Standard configuration. Preconfigured in a 24U rack for fast deployment in ROBO environments.

*Source: IDC Worldwide Quarterly Enterprise Storage Systems Tracker 2015 Q3, December 2015 (Open Networked Enterprise Storage Systems revenue).

© 2016 NetApp, Inc. All rights reserved. No portions of this document may be reproduced without prior written consent of NetApp, Inc. Specifications are subject to change without notice. NetApp, the NetApp logo, Data ONTAP, and FlexPod are trademarks or registered trademarks of NetApp, Inc. in the United States and/or other countries. All other brands or products are trademarks or registered trademarks of their respective holders and should be treated as such. The use of the word partner does not imply a partnership relationship between NetApp, Cisco and/or any other company. A current list of NetApp trademarks is available on the web at <http://www.netapp.com/us/legal/netapptmlist.aspx>. DS-3744-0216

