

# FlexPod®

## Deploy and Scale Faster with an Application-Centric Approach

### FlexPod with Cisco Application Centric Infrastructure

Rarely does a vendor's vision change the way you think about deploying applications. Cisco and NetApp's vision does just that.

Business agility requires application agility—and that means that underlying infrastructure must take into account the needs of applications. Whether you need to move to cloud-based services or make your existing data center infrastructure more agile, you can't let a siloed view hold you back. With FlexPod® Datacenter with VMware vSphere and Cisco® Application Centric Infrastructure (ACI), your business can reinvent application and infrastructure deployment and break down the barriers that limit agility and innovation.

Imagine that you had a single place to go for server, storage, and networking resources, and that application deployment took just seconds to complete. Think about the efficiency that could result, particularly if your

application, network, security, and cloud teams could each speak its own language yet use a common model that simplifies operations.

We designed a solution that changes the way organizations think about and handle application deployment. With our application-centric, policy-based approach, your teams don't have to learn the details of deployment and can trust that things will work right the first time.

#### A Proven Approach

FlexPod Datacenter with VMware vSphere and Cisco ACI gives you the agility you need without the deployment and performance challenges you don't need. We designed the solution to simplify your evolution to a shared cloud infrastructure. By centralizing automation and using policy-based application profiles, we made it possible to deliver software flexibility without compromising hardware performance.

The solution uses the FlexPod Datacenter platform based on Cisco Unified Computing System™ (Cisco

UCS®) integrated infrastructure, delivering the servers, storage, network, and software resources you need to build highly scalable virtual infrastructure. It combines Cisco UCS servers, Cisco Nexus® 9000 Series Switches, next-generation NetApp® fabric-attached storage (FAS®) systems, and VMware vSphere 5.1 software.

#### What Makes This Solution Different

We've taken a number of steps to help ensure that our approach delivers value.

- We simplified architecture and eliminated server management costs to reduce your capital and operating expenses.
- We make it possible for FlexPod computing and storage resources to take advantage of an existing network fabric built with Cisco ACI. You can create a flexible, highly available and scalable architecture that delivers application instances through the use of profiles that speak the language of application developers, not network engineers.



- We use an application-centric infrastructure fabric that supports management automation, programmatic policies, and dynamic workload provisioning so you can improve consistency and efficiency.
- We tested, validated, and documented the solution through a Cisco Validated Design. This approach reduces risk and guesswork by giving your architects and administrators a guidebook for implementing the solution. You can get your environment up and running quickly and with confidence.
- We offer a cooperative support program to quickly fix problems.

Furthermore, our engineers are already testing and validating the next generation of hardware and software components to help you stay ahead while protecting your investments.

## Revolutionary Application-Infrastructure Deployment

Keeping pace with dynamic priorities requires application flexibility, agility, and ease of operation. Delivering these capabilities with existing platforms is proving to be complex and expensive for many companies. That's why using an application-centric model is essential. With closely integrated infrastructure, systems management, and application layers, our validated solution equips you to succeed.

### Accelerate Provisioning

FlexPod with Cisco ACI provides a common programmable automation and management framework for your network, application, virtualization, and security teams. Your IT staff defines application-centric profiles, and

the solution automatically configures the entire infrastructure needed. By automating layers of configuration that your IT staff likely performs manually today, you can deliver the resources that your applications need in less time and with end-to-end security.

### Scale to New Heights

As your application deployments increase in size and number, the solution grows with you. Using Cisco Nexus 9000 Series Switches, you can build high-performance, scalable FlexPod solutions to meet growing user and business demand. The solution can scale up for greater performance and capacity (adding computing, network, and storage resources), or it can scale out for environments that require multiple consistent deployments.

### Move Workloads

Should the need arise, you can connect multiple FlexPod solutions into an integrated whole with transparent boundaries. With this capability, your IT staff can deploy applications on hardware located anywhere in the world and move them on a moment's notice, without the need for complex reconfiguration.

### Keep Applications Secure

As you add, modify, or relocate your application workloads, their security policies need to stay with them. FlexPod with Cisco ACI unifies security policy lifecycle management, allowing your IT staff to enforce policies anywhere in the data center across physical and virtual workloads. Because the solution weaves security into the fabric of your application-oriented data center, you can deploy

security measures more quickly and effectively, easily audit logs and create compliance reports, and perform real-time IT risk assessment.

### Improve Operation Efficiency

The Cisco Application Policy Infrastructure Controller (APIC) unifies automation and management points. This feature offers numerous practical benefits: centralized access to fabric information, optimized application lifecycles for scalability and performance, and flexible provisioning across physical and virtual resources. Therefore, your IT staff can spend less time on management tasks and more time focusing on strategic IT and business initiatives.

### Deliver High Availability

Keeping your business running means having access to applications at any time. FlexPod with Cisco ACI is fully redundant in the computing, network, and storage layers. Intelligence built into the solution allows your IT staff to tap into visibility, telemetry, and health scores to identify and resolve issues before they affect your business.

### Get Worry-Free Support

Many NetApp and Cisco certified channel partners sell FlexPod solutions throughout the world. With Cisco, NetApp, and VMware offering cooperative support, you can deploy FlexPod solutions with confidence.

### For More Information

- Learn more about [FlexPod](#)
- Read the [Cisco Validated Design with Application Centric Infrastructure](#)

