

# FlexPod®

## Accelerate Access to Business Information

### FlexPod Datacenter with Microsoft Exchange and Microsoft SharePoint and Cisco Application Centric Infrastructure

Do you use Microsoft collaboration tools? If so, you can benefit from a validated solution that lets you pool resources and co-host collaboration services. And after you define your needs, it sets up your infrastructure for you.

#### Invigorate Your Collaboration Environments

Many organizations use Microsoft Exchange and Microsoft SharePoint to collect, discover, and share business information. But with more users, more documents, and big data, demands are outpacing the capacity and performance of collaboration systems. IT managers are increasingly challenged to maintain IT agility, meet service levels, and keep infrastructure from sprawling out of control.

FlexPod Datacenter with Cisco® Application Centric Infrastructure (Cisco ACI™) offers a simple, policy-based approach to application deployment. You define the

characteristics you need from your Exchange and SharePoint environments, and the system automatically generates an infrastructure design. You don't need any knowledge about devices or configuration settings. These unified, pretested, and validated data center solutions are built on a flexible and secure shared IT infrastructure using leading technology from Cisco and NetApp.

#### Simplify with Integrated Infrastructure

The solution uses the FlexPod Datacenter platform based on Cisco UCS® Integrated Infrastructure. It combines Cisco Unified Computing System™ (Cisco UCS) servers, Cisco Nexus® 9000 Series Switches, next-generation NetApp fabric-attached storage (FAS) systems, VMware vSphere 5.1 software, and Cisco ACI software. You can run your Microsoft collaboration tools on a shared pool of high-performance resources that are easy to deploy and manage.

#### Accelerate Deployment

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.

#### Deliver Performance at Scale

As your collaboration environments increase in size and number, you can scale up your infrastructure for greater performance and capacity (adding or upgrading computing, network, or storage resources), or scale out if you need multiple consistent deployments (adding FlexPod Datacenter systems).

Running hundreds of servers and thousands of virtual machines does



not compromise performance. With the Cisco and NetApp solution, you can scale I/O bandwidth to match demand. By adding the F5 BIG-IP 5000 Application Switch to your Microsoft Exchange deployment, you can help ensure that traffic is routed intelligently to the right destination, further improving the response times of systems and applications.

### Benefit from Proven Performance

To demonstrate the effectiveness of the approach, Cisco and NetApp experts tested Microsoft SharePoint workloads to characterize the responsiveness and scalability of the solution. Results showed that the system can support 100,000 users, with approximately 10 percent concurrency, issuing 60 requests per user per hour with a response time of less than one second.

### Lower Total Cost of Ownership

When designed and deployed correctly, your infrastructure can work with you, not against you. FlexPod solutions based on Cisco UCS Integrated Infrastructure can help you get more work done with the same (or fewer) resources. With these innovative solutions, your IT staff can consolidate more workloads onto fewer servers, so you need to buy and manage fewer components. These solutions can also reduce cabling, power, and cooling requirements and automate routine tasks to increase productivity.

### Meet Service-Level Agreements

Keeping your business running means giving your employees constant access to Microsoft collaboration tools. 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 problems before they affect your business.

### Keep Your Collaboration Environments Secure

As you add, modify, or relocate your collaboration environments, their security policies need to stay with them. FlexPod with Cisco ACI weaves security into the fabric of your data center so you can deploy security measures quickly and effectively, easily audit logs and create compliance reports, and perform real-time risk assessment.

### Rely on Cooperative Support

NetApp and Cisco offer a cooperative support model that takes advantage of the combined experience, resources, and technical support expertise of NetApp and Cisco experts. You get a simplified process for identifying and resolving a FlexPod support issue, regardless of where the problem resides.

### Trust a Validated Solution

Cisco and NetApp make it easy to use technologies and create a flexible and secure collaboration environment in your data center. 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 foundation that helps protect against compromise while delivering a simplified, standardized, and trusted approach for the use

## Solution Fast Facts

### FlexPod

Jointly delivered by Cisco and NetApp, FlexPod is a ready-to-use platform that has been validated by Microsoft to run Microsoft Exchange and Microsoft SharePoint applications.

### Business and IT Benefits

- Take the guesswork out of deployments with pretested and validated solutions for Microsoft Exchange and Microsoft SharePoint.
- Deploy Microsoft applications more quickly with a solution that reduces the need for manual processes, configures infrastructure, and deploys applications.
- Deploy highly available infrastructure and tap into intelligence and telemetry to keep systems and applications running.
- Lower TCO by getting more work done with the same (or fewer) resources.
- Rely on cooperative support from Cisco and NetApp to resolve problems and keep your systems and business running.

and management of your shared collaboration resources.

## Conclusion

If you use Microsoft collaboration tools, consider a FlexPod with Cisco ACI solution. Your organization can take advantage of a validated solution that lets you pool resources and safely co-host collaboration services so that you can make cost-effective use of your capital investments.

## For More Information

Read the design guides for [Microsoft SharePoint](#) and [Microsoft Exchange](#).

To learn more about Cisco UCS, visit <http://www.cisco.com/go/ucs>.

To learn more about FlexPod, visit <http://www.netapp.com/flexpod>.

