Build the Foundation for an Enterprise Private Cloud

FlexPod Datacenter with VMware vSphere and Cisco UCS Director

Build a Better Cloud
As your IT department transitions from a cost center to an integrated, strategic part of the business, your IT infrastructure must shift to provide services through an elastic, self-service, pay-as-you-go cloud computing model. FlexPod Datacenter with VMware vSphere and Cisco UCS® Director offers the infrastructure you need to deploy infrastructure as a service (IaaS). This unified, pretested, and validated data center solution is built on a flexible and secure shared IT infrastructure using leading technology from Cisco and NetApp.

Simplify Cloud Deployment with Integrated Infrastructure
Your IT staff does not have to spend time making everything in your private cloud work together and perform as expected. 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, and VMware vSphere 5.1 software. With this powerful solution, your IT staff can rapidly deliver private cloud infrastructure as a service to increase IT and business agility.

Deliver Self-Service IT
The solution lets you move from technology silos to a cloud model that transforms your data center infrastructure into pools of resources that can be easily allocated and repurposed. Your applications can run more efficiently within, between, and beyond your data center boundaries—and your IT department can evolve to IT as a service (ITaaS) to accelerate service delivery and increase revenue.

Self-service access to cloud resources is easy. Cisco UCS Director abstracts the complexity of individual devices, hypervisors, and virtual machines into a simplified model that makes them easy to manipulate and to incorporate into automated processes (Figure 1). Users simply request the resources they need through an easy-to-use, secure, self-service portal, and the system provisions the underlying infrastructure resources. Your cloud infrastructure layers are synchronized and optimized, helping ensure that resources are available on demand.

Measure, Monitor, and Charge
Cisco UCS Director helps you securely separate tenants, monitor and manage applications, provide resource consumption reports, and charge appropriately for IT infrastructure use. With at-a-glance status panels, resource utilization tracking, and predefined reports, your IT department can monitor cloud infrastructure status, show IT resource charges, and charge users only for the resources they use.
Scale Your Cloud on Your Terms

FlexPod solutions make it easy to expand your private cloud deployments to support more users and workloads. You can purchase the infrastructure you need today and scale up (by adding more resources to the FlexPod system) or scale out (by adding more FlexPod instances to your private cloud infrastructure).

Lower Total Cost of Ownership

When designed and deployed correctly, your private cloud can be an asset to your business. FlexPod solutions based on Cisco UCS Integrated Infrastructure can help you build a private cloud that gets more work done with the same (or fewer) resources. With these innovative solutions, your IT staff can run more cloud workloads on fewer servers so there are fewer components to buy and manage. These solutions can also reduce cabling, power, and cooling requirements and automate routine tasks to increase productivity.

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 have access to a simplified process for identifying and resolving FlexPod problems, regardless of where a problem resides.

Trust a Validated Solution

Cisco and NetApp make it easy to use technologies and to create a flexible and secure private cloud within your data center. A verified, lab-tested architecture provides detailed design and implementation guidance that helps reduce risk and guesswork by giving your architects and administrators a guidebook for implementation. By following the guidelines in this Cisco® Validated Design, you can use a trusted approach to create a private cloud foundation that optimizes the use and management of your shared infrastructure resources.

Solution Fast Facts

<table>
<thead>
<tr>
<th>FlexPod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jointly delivered by Cisco and NetApp, the FlexPod platform is a ready-to-use, private cloud platform that has been validated to deliver a private cloud foundation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business and IT Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Take the guesswork out of deployments with a pretested and validated solution.</td>
</tr>
<tr>
<td>• Deliver infrastructure as a service using pooled resources that are easily shared</td>
</tr>
<tr>
<td>• Scale your private cloud up or out to support more users and deliver more applications and services</td>
</tr>
<tr>
<td>• Lower TCO by getting more work done with the same (or fewer) resources.</td>
</tr>
<tr>
<td>• Rely on cooperative support from Cisco and NetApp to resolve problems and keep your private cloud and business running.</td>
</tr>
</tbody>
</table>

Conclusion

For your IT department to remain relevant to your lines of business, it must deliver value faster and invest in innovation. With the FlexPod Datacenter with VMware vSphere and Cisco UCS Director solution, you can transform your data center infrastructure into an environment that is fast, agile, smart, and secure. Let Cisco and NetApp help you break down the IT barriers that are holding your business back and build the private cloud foundation you need to keep your business running.

For More Information

Read the FlexPod Datacenter with VMware vSphere and Cisco UCS Director design guide.

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

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