Cisco ACI vPod Overview

About Cisco ACI vPod

Organizations increasingly adopt hybrid data center models to meet infrastructure demands, flexibility, and reduce costs. They combine various technologies—including virtual private clouds and other internal IT resources—with remote locations. The remote locations can be hosted data centers, satellite data centers, or multicloud environments.

However, hybrid deployments require consistent management and policy for workloads regardless of their location. They also require support for disaster recovery and the ability to migrate workloads between data centers. Meanwhile, they can lack compatible hardware or space to add new equipment.

By deploying Cisco Application Centric Infrastructure (ACI) Virtual Pod (vPod), you can overcome these challenges and virtually extend the Cisco ACI fabric into various remote locations.

What Cisco ACI vPod Is

Cisco ACI vPod is introduced with general availability in Cisco APIC Release 4.0(2). It is a software-only solution that you can deploy wherever you have at least two servers on which you can run the VMware ESXi hypervisor. Cisco ACI vPod and its components—a virtual spine (vSpine), virtual leaf (vLeaf), and Cisco ACI Virtual Edge, run on the ESXi hypervisor.

Cisco ACI vPod allows you to use Cisco ACI Virtual Edge where you do not have a physical leaf. You can use up to eight instances of Cisco ACI Virtual Edge in each Cisco ACI vPod in the remote location as you would in your on-premises data center.

Cisco ACI vPod communicates with a physical, on-premises pod or multipod over an interpod network. You configure the physical pod or multipod, the interpod network (IPN) connection, and Cisco ACI vPod in Cisco Application Policy Infrastructure Controller (APIC). You then use the Cisco ACI vCenter plug-in, a Python script, or PowerCLI to deploy Cisco ACI vPod components.

Benefits of Cisco ACI vPod

Once Cisco ACI vPod is installed, you can use it with Cisco APIC to enforce Cisco ACI fabric policy in the remote location.

Cisco APIC provides central management of workloads in the on-premises data center and the remote location. It enables you to enforce policy easily and consistently in both on-premises and remote locations.

The flexibility, scalability, and central management of the Cisco ACI vPod solution enable you to take advantage of the following use case scenarios:

- Extension of the Cisco ACI fabric to the bare-metal cloud
- Extension of the Cisco ACI fabric to brownfield deployments
- Extension of the Cisco ACI fabric to colocation data centers
- Migration of workloads from non-Cisco hardware to the Cisco ACI fabric

Where to Find More Information

For general information, see the *Cisco ACI Virtual Pod Release Notes* on Cisco.com.