



Solution Overview

FlexPod

NetApp
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Table of Contents

- Solution Overview 1
 - FlexPod Converged Infrastructure Program 1
 - NetApp Verified Architecture Program 1
 - Solution technology 2
 - Use case summary 3

Solution Overview

This FlexPod Express solution is part of the FlexPod converged infrastructure program.

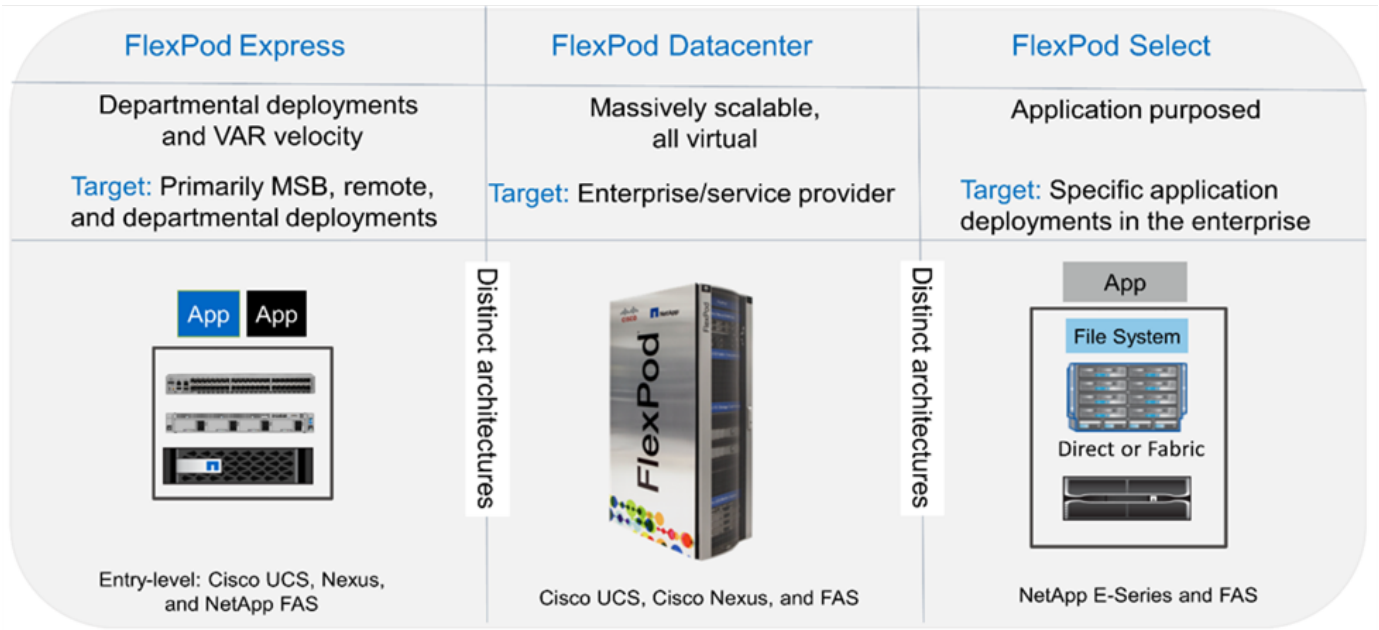
FlexPod Converged Infrastructure Program

FlexPod reference architectures are delivered as Cisco Validated Designs (CVDs) or NetApp Verified Architectures (NVAs). Deviations based on customer requirements from a given CVD or NVA are permitted if these variations do not create an unsupported configuration.

As depicted in the figure below, the FlexPod program includes three solutions: FlexPod Express, FlexPod Datacenter, and FlexPod Select:

- **FlexPod Express** offers customers an entry-level solution with technologies from Cisco and NetApp.
- **FlexPod Datacenter** delivers an optimal multipurpose foundation for various workloads and applications.
- **FlexPod Select** incorporates the best aspects of FlexPod Datacenter and tailors the infrastructure to a given application.

The following figure shows the technical components of the solution.



NetApp Verified Architecture Program

The NVA program offers customers a verified architecture for NetApp solutions. An NVA provides a NetApp solution architecture with the following qualities:

- Is thoroughly tested
- Is prescriptive in nature
- Minimizes deployment risks
- Accelerates time to market

This guide details the design of FlexPod Express with direct- attached NetApp storage. The following sections list the components used for the design of this solution.

Hardware components

- NetApp AFF A220
- Cisco UCS Mini
- Cisco UCS B200 M5
- Cisco UCS VIC 1440/1480.
- Cisco Nexus 3000 Series Switches

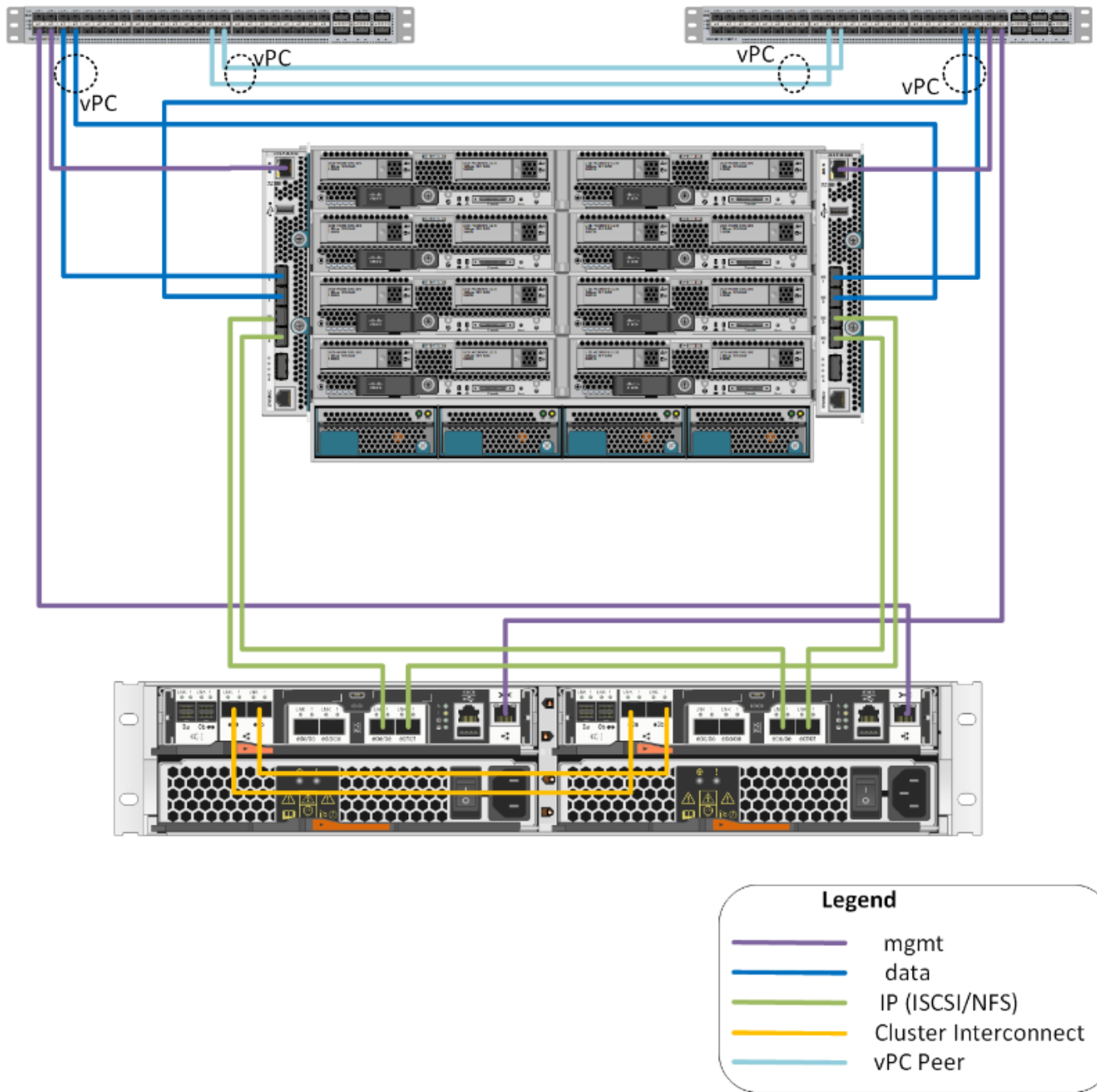
Software components

- NetApp ONTAP 9. 5
- VMWare vSphere 6.7U1
- Cisco UCS Manager 4.0(1b)
- Cisco NXOS Firmware 7.0(3)I6(1)

Solution technology

This solution leverages the latest technologies from NetApp, Cisco, and VMware. It features the new NetApp AFF A220 running ONTAP 9.5, dual Cisco Nexus 31108PCV switches, and Cisco UCS B200 M5 servers that run VMware vSphere 6.7U1. This validated solution uses Direct Connect IP storage over 10GbE technology.

The following figure illustrates FlexPod Express with VMware vSphere 6.7U1 IP-Based Direct Connect architecture.



Use case summary

The FlexPod Express solution can be applied to several use cases, including the following:

- ROBOs
- Small and midsize businesses
- Environments that require a dedicated and cost-effective solution

FlexPod Express is best suited for virtualized and mixed workloads.

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