



# Technology requirements

## FlexPod

NetApp  
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# Table of Contents

Technology requirements .....	1
Hardware requirements .....	1
Software requirements .....	1

# Technology requirements

A FlexPod Express system requires a combination of hardware and software components. FlexPod Express also describes the hardware components that are required to add hypervisor nodes to the system in units of two.

## Hardware requirements

Regardless of the hypervisor chosen, all FlexPod Express configurations use the same hardware. Therefore, even if business requirements change, either hypervisor can run on the same FlexPod Express hardware.

The following table lists the hardware components required for all FlexPod Express configurations.

Hardware	Quantity
AFF A220 HA Pair	1
Cisco C220 M5 server	2
Cisco Nexus 3172P switch	2
Cisco UCS virtual interface card (VIC) 1387 for the C220 M5 server	2
CVR-QSFP-SFP10G adapter	4

The following table lists the hardware required in addition to the base configuration for implementing 10GbE.

Hardware	Quantity
Cisco UCS C220 M5 server	2
Cisco VIC 1387	2
CVR-QSFP-SFP10G adapter	4

## Software requirements

The following table lists the software components required to implement the architectures of the FlexPod Express solutions.

Software	Version	Details
Cisco Integrated Management Controller (CIMC)	3.1(3g)	For Cisco UCS C220 M5 rack servers
Cisco nenic driver	1.0.25.0	For VIC 1387 interface cards
Cisco NX-OS	nxos.7.0.3.17.5.bin	For Cisco Nexus 3172P switches
NetApp ONTAP	9.4	For AFF A220 controllers

The following table lists the software required for all VMware vSphere implementations on FlexPod Express.

Software	Version
VMware vCenter server appliance	6.7
VMware vSphere ESXi hypervisor	6.7
NetApp VAAI Plug-In for ESXi	1.1.2

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