# **■** NetApp

## **Program summary**

FlexPod

NetApp June 03, 2021

This PDF was generated from https://docs.netapp.com/us-en/flexpod/express/express-c-series-c190-design\_program\_summary.html on October 13, 2021. Always check docs.netapp.com for the latest.

## **Table of Contents**

Program summary	
FlexPod Converged Infrastructure Portfolio	
NetApp Verified Architecture program	
Solution overview	
Target audience	
Solution technology	

## **Program summary**

### FlexPod Converged Infrastructure Portfolio

FlexPod reference architectures are delivered as Cisco Validated Designs (CVDs) or as NetApp Verified Architectures (NVAs). Deviations that are based on customer requirements from a given CVD or NVA are permitted if those variations do not result in the deployment of unsupported configurations.

As illustrated in the following figure, the FlexPod portfolio includes the following solutions: FlexPod Express and FlexPod Datacenter.

- FlexPod Express is an entry-level solution with technologies from Cisco and NetApp.
- FlexPod Datacenter delivers an optimal multipurpose foundation for various workloads and applications.

# Expanded portfolio of platforms

## FlexPod® Express

### Departmental deployments and VAR velocity

Target: Primarily MSB, remote, and departmental deployments



**Entry level:** Cisco UCS, Cisco Nexus, and NetApp AFF and FAS systems

### FlexPod Datacenter

# Massively scalable, mission-critical workloads

Target: Enterprise/service provider



Cisco UCS, Cisco Nexus, and NetApp AFF and FAS systems

### **NetApp Verified Architecture program**

The NetApp Verified Architecture program offers customers a verified architecture for NetApp solutions. An NVA solution has the following qualities:

Distinct Architectures

Distinct Architectures

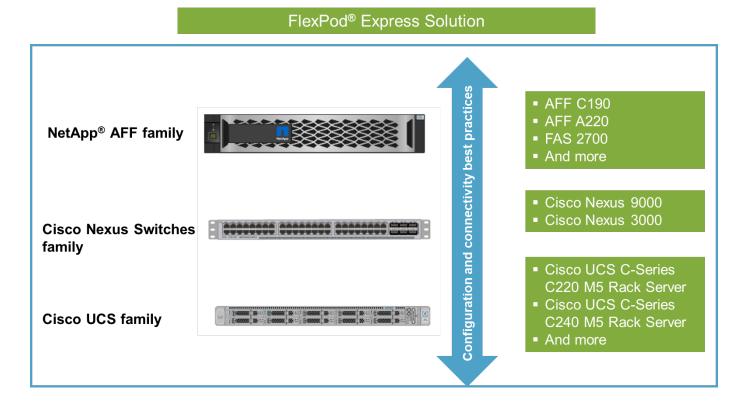
- · Is thoroughly tested
- · Is prescriptive in nature
- · Minimizes deployment risks
- Accelerates time to market This guide details the design of FlexPod Express with VMware vSphere.

In addition, this design leverages the all-new AFF C190 system, which runs NetApp ONTAP 9.6 software, Cisco Nexus 31108 switches, and Cisco UCS C220 M5 servers as hypervisor nodes.

### Solution overview

FlexPod Express is designed to run mixed virtualization workloads. It is targeted for remote and branch offices and for small to midsize businesses. It is also optimal for larger businesses that want to implement a dedicated solution for a specific purpose. This new solution for FlexPod Express adds new technologies such as NetApp ONTAP 9.6, NetApp AFF C190 system, and VMware vSphere 6.7U2.

The following figure shows the hardware components that are included in the FlexPod Express solution.



### Target audience

This document is intended for people who want to take advantage of an infrastructure that is built to deliver IT efficiency and to enable IT innovation. The audience for this document includes, but is not limited to, sales engineers, field consultants, professional services personnel, IT managers, partner engineers, and customers.

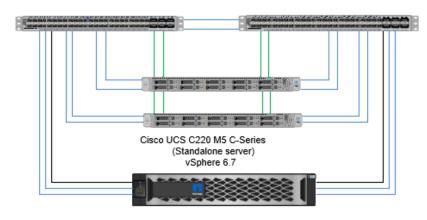
### Solution technology

This solution leverages the latest technologies from NetApp, Cisco, and VMware. It features the new NetApp AFF C190 system, which runs ONTAP 9.6 software, dual Cisco Nexus 31108 switches, and Cisco UCS C220 M5 rack servers that run VMware vSphere 6.7U2. This validated solution, illustrated in the following figure,

uses 10 Gigabit Ethernet (10GbE) technology. Guidance is also provided on how to scale by adding two hypervisor nodes at a time so that the FlexPod Express architecture can adapt to an organization's evolving business needs.

### FlexPod Express

Cisco Nexus 31108 Switches



NetApp AFF C190 Storage Controller

> Mgmt\_\_\_\_ 10GbE\_\_\_

> > CIMC\_

Next: Technology requirements.

#### **Copyright Information**

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system-without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

#### **Trademark Information**

NETAPP, the NETAPP logo, and the marks listed at <a href="http://www.netapp.com/TM">http://www.netapp.com/TM</a> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.