# **■** NetApp

# **Technology requirements**

FlexPod

NetApp June 03, 2021

This PDF was generated from https://docs.netapp.com/us-en/flexpod/express/express-direct-attach-aff220-deploy\_technology\_requirements.html on October 13, 2021. Always check docs.netapp.com for the latest.

# **Table of Contents**

echnology requirements	 	. ′
Hardware requirements	 	. '
Software requirements	 	. •

## **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 that are required for all FlexPod Express configurations.

Hardware	Quantity
AFF A220 HA Pair	1
Cisco UCS B200 M5 server	2
Cisco Nexus 31108PCV switch	2
Cisco UCS Virtual Interface Card (VIC) 1440 for the Cisco UCS B200 M5 server	2
Cisco UCS Mini with two Integrated UCS-FI-M-6324 fabric interconnects	1

## Software requirements

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

Software	Version	Details
Cisco UCS Manager	4.0(1b)	For Cisco UCS Fabric Interconnect FI-6324UP
Cisco Blade software	4.0(1b)	For Cisco UCS B200 M5 servers
Cisco nenic driver	1.0.25.0	For Cisco VIC 1440 interface cards
Cisco NX-OS	7.0(3)I6(1)	For Cisco Nexus 31108PCV switches
NetApp ONTAP	9.5	For AFF A220 controllers

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

Software	Version
VMware vCenter Server Appliance	6.7U1
VMware vSphere ESXi hypervisor	6.7U1

#### **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.