



VMware hypervisor and hardware considerations

ONTAP Select

David Peterson
November 04, 2020

This PDF was generated from https://docs.netapp.com/us-en/ontap-select/reference_plan_ots_hardware.html on December 17, 2020. Always check docs.netapp.com for the latest.

Table of Contents

- VMware hypervisor and hardware considerations 1
 - Hypervisor requirements 1
 - Core hardware requirements 1

VMware hypervisor and hardware considerations

There are several hardware requirements and planning issues you should consider related to the VMware environment.

Hypervisor requirements

There are several requirements related to the hypervisor where ONTAP Select runs.



You should refer to the current release notes to review any additional known restrictions or limitations.

VMware licensing

To deploy an ONTAP Select cluster, your organization must have a valid VMware vSphere license for the hypervisor hosts where ONTAP Select runs. You should use the licenses that are appropriate for your deployment.

Software compatibility

ONTAP Select can be deployed on the following hypervisors:

- VMware ESXi 6.5 U2 (build 8294253 or greater)
- VMware ESXi 6.7 GA (build 8169922 or greater) including 6.7 U1, U2, and U3
- VMware ESXi 7.0 GA (build 15843807 or greater)



NetApp supports ONTAP Select on these versions of ESXi as long as VMware also continues to support the same versions.

Upgrading to VMware ESXi 6.5 U2 or later

If you currently have ONTAP Select deployed on VMware ESXi 6.5 U1, you should upgrade to ESXi 6.5 U2 or later as soon as possible. Using ESXi 6.5 U1 can expose you to a virtual machine failure due to a known VMware bug.

VMware vCenter and standalone ESXi hosts

If an ESXi hypervisor host is managed by a vCenter server, you must register the host to the Deploy administration utility using the vCenter credentials. You cannot register the host as a standalone host using the ESXi credentials.

Core hardware requirements

The physical hypervisor host where you deploy ONTAP Select must meet several hardware requirements. You can choose any platform for the hypervisor host, as long as it meets the minimum hardware requirements. The following vendors provide supported hardware platforms: Cisco, Dell, HP, Fujitsu, Lenovo, and Supermicro.

Refer to the [NetApp Interoperability Matrix Tool](#) for more information.

Basic hardware requirements

There are several common hardware requirements that apply to all platforms regardless of the node instance type or license offering.

- Processor
 - Intel Xeon processors for Server (see [Intel Xeon Processors](#) for more information)
- Ethernet network ports
 - 4 x 10GbE (recommended)
 - 2 x 10GbE
 - 1 x 10GbE
 - 4 x 1GbE (only for a two-node ROBO cluster)
 - 2 x 1GbE (only for a single-node cluster)

Additional hardware requirements based on the instance type

There are several additional hardware requirements based on the node instance type.

Refer to [Understanding the platform license offerings](#) for more information.

Small

- CPU cores
Six physical cores or greater, with four reserved for ONTAP Select.
- Memory
24GB or greater with 16GB reserved for ONTAP Select.
- Required platform license offering
Standard, premium, or premium XL

Medium

- CPU cores
Ten physical cores or greater, with eight reserved for ONTAP Select.
- Memory
72GB or greater with 64GB reserved for ONTAP Select
- Required platform license offering
Premium or premium XL

Large

- CPU cores
Eighteen physical cores or greater, with sixteen reserved for ONTAP Select.
- Memory
136GB or greater with 128GB reserved for ONTAP Select
- Required platform license offering
Premium XL



There are additional disk requirements based on the platform license. See [Storage and RAID](#) for more information.

Copyright Information

Copyright © 2020 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 <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.