



Inventory selection and node compatibility

HCI

Michael Wallis
October 09, 2020

This PDF was generated from https://docs.netapp.com/us-en/hci/docs/concept_nde_node_compatibility.html on December 16, 2020. Always check docs.netapp.com for the latest.

Table of Contents

- Inventory selection and node compatibility 1
 - Storage node compatibility 1
 - Compute node compatibility 1
 - Find more information 2

Inventory selection and node compatibility

When choosing nodes for your deployment, some restrictions apply to the node configurations you can combine in the same deployment.

Storage node compatibility

NetApp HCI supports storage nodes and drives with SED (Self-encrypting drive) and FIPS 140-2 drive encryption capability. When deploying or expanding NetApp HCI, you can mix nodes with different reported levels of encryption, but NetApp HCI only supports the more basic form of encryption in this situation. For example, if you mix a storage node that is FIPS encryption capable with nodes that only support SED encryption, SED encryption is supported with this configuration, but FIPS drive encryption is not.



Adding storage nodes capable of FIPS drive encryption to the storage cluster does not automatically enable the FIPS drive encryption feature. After you deploy or expand an installation with FIPS-capable nodes, you need to manually enable FIPS drive encryption. See the Element Software User Guide for instructions.

All storage nodes must run the same minor version of Element software to be compatible in the same deployment. For example, you cannot mix a storage node running Element 11.3.1 with other storage nodes running Element 11.5.



Depending on node hardware configuration, H410S storage nodes might appear in the inventory list labeled as H300S, H500S, or H700S storage nodes.

NetApp HCI supports only certain storage node models in two-node or three-node storage clusters. For more information, see the Release Notes for your NetApp HCI version.

Compute node compatibility

Compute nodes must meet the following requirements to be selectable as inventory:

- The CPU generations in all compute nodes must match for proper VMware vMotion functionality. After you select a compute node from the inventory, you cannot select compute nodes with different CPU generations.
- You cannot intermix compute nodes with GPU-enabled compute nodes in the same compute cluster. If you select a GPU-enabled compute node, CPU-only compute nodes become unselectable, and vice versa.
- The software version running on the compute node must match the major and minor version of the NetApp Deployment Engine hosting the deployment. If this is not the case, you need to reimagine the compute node using the RTFI process. See the NetApp Knowledgebase articles regarding RTFI

for instructions.

- The compute node must have the cabling configuration you selected on the Network Topology page to be selectable in the **Compute Nodes** list.
- The network cabling configurations for compute nodes of the same model must match within a single compute cluster.

Find more information

- [NetApp HCI Documentation Center](#)
- [SolidFire and Element Software Documentation Center](#)

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.