



# Update compute node firmware

## HCI

Ann-Marie Grissino, dbag-personal

April 20, 2020

This PDF was generated from [https://docs.netapp.com/us-en/hci/docs/task\\_hcc\\_upgrade\\_compute\\_node\\_firmware.html](https://docs.netapp.com/us-en/hci/docs/task_hcc_upgrade_compute_node_firmware.html) on May 29, 2020. Always check docs.netapp.com for the latest.



# Table of Contents

Update compute node firmware ..... 1

# Update compute node firmware

For any H-Series compute node, you can update the firmware for hardware components such as the BMC, BIOS, and NIC using the RTFI image while leaving the ESXi installation and other configuration data in place.

After the update, the compute node boots into ESXi and works as before, retaining the configuration.

## *Before you begin*

See the firmware and driver matrix for your hardware in [NetApp KB article 1088658](#) (login required).

## *About this task*

In production environments, only update the firmware on one compute node at a time.

As an alternative to using the USB thumb drive method described in this procedure, you can mount the compute node RTFI image on the compute node using the **Virtual CD/DVD** option in the Virtual Console in the Baseboard Management Controller (BMC) interface. The BMC method takes considerably longer than the USB thumb drive method. Ensure your workstation or server has the necessary network bandwidth and that your browser session with the BMC does not time out.

## *Steps*

1. Browse to the [NetApp HCI software downloads](#) page and click the download link for correct version of NetApp HCI.
2. Accept the End User License Agreement.
3. Under the **Compute and Storage Nodes** heading, download the NetApp HCI compute node image.
4. Write the raw contents of the compute node RTFI image to a USB thumb drive with at least 32GB capacity (using dd or Etcher).
5. Place the compute node in maintenance mode using VMware vCenter, and evacuate all virtual machines from the host.



If VMware Distributed Resource Scheduler (DRS) is enabled on the cluster (this is the default in NetApp HCI installations), virtual machines will automatically be migrated to other nodes in the cluster.

6. Insert the USB thumb drive into a USB port on the compute node and reboot the compute node using VMware vCenter.
7. During the compute node POST cycle, press **F11** to open the Boot Manager. You may need to press **F11** multiple times in quick succession. You can perform this operation by connecting a video/keyboard or by using the console in **BMC**.
8. Select **One Shot > USB Flash Drive** from the menu that appears. If the USB thumb drive does not appear in the menu, verify that USB Flash Drive is part of the legacy boot order in the BIOS of the

system.

9. Press **Enter** to boot the system from the USB thumb drive. The firmware flash process begins.

After firmware flashing is complete and the node reboots, it might take a few minutes for ESXi to start.

10. After the reboot is complete, exit maintenance mode on the updated compute node using vCenter.
11. Remove the USB flash drive from the updated compute node.
12. Repeat this task for other compute nodes in your ESXi cluster until all compute nodes are updated.

## Find more information

- [NetApp HCI Documentation Center](#)
- [NetApp HCI Resources Page](#)

## 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.