



# IP address requirements

## HCI

Michael Wallis  
May 19, 2020

This PDF was generated from [https://docs.netapp.com/us-en/hci/docs/hci\\_prereqs\\_ip\\_address.html](https://docs.netapp.com/us-en/hci/docs/hci_prereqs_ip_address.html) on September 18, 2020. Always check docs.netapp.com for the latest.

# Table of Contents

- IP address requirements ..... 1
  - Number of IP addresses needed per NetApp HCI deployment ..... 1
  - IP addresses reserved by NetApp HCI ..... 1

# IP address requirements

NetApp HCI has specific IP address requirements that depend on the size of your deployment. Note that by default the initial IP addresses you assign to each node before using the NetApp Deployment Engine to deploy the system are temporary and cannot be reused. You need to set aside a second permanent set of unused IP addresses that you can assign during final deployment.

## Number of IP addresses needed per NetApp HCI deployment

The NetApp HCI storage network and management network should each use separate contiguous ranges of IP addresses. Use the following table to determine how many IP addresses you need for your deployment:

System component	Management network IP addresses needed	Storage network IP addresses needed	vMotion network IP addresses needed	Total IP addresses needed per component
Compute node	1	2	1	4
Storage node	1	1		2
Storage cluster	1	1		2
VMware vCenter	1			1
Management node	1	1		2
Witness Node	1	1		2 per Witness Node (two Witness Nodes are deployed for each two-node or three-node storage cluster)

## IP addresses reserved by NetApp HCI

NetApp HCI reserves the following IP address ranges for system components. When planning your network, avoid using these IP addresses:

IP address range	Description
10.0.0.0/24	Docker overlay network

IP address range	Description
10.0.1.0/24	Docker overlay network
10.255.0.0/16	Docker swarm ingress network
169.254.100.1/22	Docker bridge network
169.254.104.0/22	Docker bridge network

## Find more information

- [NetApp HCI Resources page](#)
- [NetApp HCI 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.