



# Remove Witness Nodes after expanding cluster

## HCI

amitha, Ann-Marie Grissino  
October 02, 2020

This PDF was generated from [https://docs.netapp.com/us-en/hci/docs/task\\_hci\\_removewn.html](https://docs.netapp.com/us-en/hci/docs/task_hci_removewn.html) on October 12, 2020. Always check docs.netapp.com for the latest.

# Table of Contents

Remove Witness Nodes after expanding cluster..... 1

Find more information ..... 2

# Remove Witness Nodes after expanding cluster

After you expand a two-node storage cluster to four or more nodes, you can delete the pair of Witness Nodes to free up compute resources in your NetApp HCI installation. The Witness Nodes previously used by the storage cluster are still visible as standby virtual machines (VM) in vSphere Web Client.

### About this task

Witness Nodes are not required in clusters with more than four storage nodes. This is an optional procedure if you want to free up CPU and memory after you expand your two-node cluster to four or more nodes.



Verify that no cluster faults or errors are reported. You can find information about system alerts by clicking **Reporting > Alerts** in the NetApp Element Management extension point in vSphere.

### Steps

1. From vSphere, access the NetApp Element Management extension point from the **Shortcuts** tab or the side panel.
2. Select **NetApp Element Management > Cluster > Nodes**.

NetApp Element Management

Cluster SFPS-CLUSTER MVIP: 10.146 SVIP: 10.84 vCenter: 10.140											
Getting Started Reporting Management Protection Cluster VVols											
<input type="checkbox"/>	Node ID	Node Name	Node State	Available 4k IOPS	Node Role	Node Type	Active Drives	Management IP	Storage IP	Management VLAN ID	Storage VLAN
<input type="checkbox"/>	1	sfps-stg-01	Active	50000	Ensemble Node	H410S-0	6	10.147	10.85	0	101
<input type="checkbox"/>	2	sfps-stg-02	Active	50000	Ensemble Node, Cluster Master	H410S-0	6	10.148	10.86	0	101
<input checked="" type="checkbox"/>	3	sfps-witness-01	Active	0		SFVIRT	0	10.42	10.90		
<input checked="" type="checkbox"/>	4	sfps-witness-02	Active	0		SFVIRT	0	10.43	10.91		
<input type="checkbox"/>	5	sfps-stg-03	Active	50000	Ensemble Node	H410S-0	6	10.149	10.87	0	101
<input type="checkbox"/>	6	sfps-stg-04	Active	50000		H410S-0	6	10.150	10.88	0	101

3. Select the checkbox for the Witness Node that you want to delete, and click **Actions > Remove**.
4. Confirm the action in the prompt.

5. Click **Hosts and Clusters**.
6. Navigate to the Witness Node VM that you removed earlier.
7. Right-click the VM and power it off.
8. Right-click the VM that you powered off, and click **Delete from Disk**.
9. Confirm the action in the prompt.

## Find more information

- [NetApp HCI Two-Node Storage Cluster | TR-4823](#)
- [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.