



## Prepare the cluster for expansion

System Manager Classic

NetApp

September 05, 2025

This PDF was generated from [https://docs.netapp.com/us-en/ontap-system-manager-classic/expansion/task\\_adding\\_node\\_locked\\_licenses.html](https://docs.netapp.com/us-en/ontap-system-manager-classic/expansion/task_adding_node_locked_licenses.html) on September 05, 2025. Always check [docs.netapp.com](https://docs.netapp.com) for the latest.

# Table of Contents

Prepare the cluster for expansion .....	1
Add node-locked licenses .....	1
Verify the health of the system .....	1
Back up the cluster configuration .....	2
Generate an AutoSupport message about starting expansion .....	3

# Prepare the cluster for expansion

To prepare a cluster for expansion, you must add node-locked licenses, verify the system health, back up the cluster's configuration, and generate an AutoSupport message.

## Add node-locked licenses

If the cluster has features that use node-locked licenses (which entitle only specific nodes to the licensed functionality), you must ensure that node-locked licenses are installed for the new nodes. You should add the licenses before the nodes are joined to the cluster.

Complete this task if you are using the *Classic* System Manager UI with ONTAP 9.7 and earlier releases. If you are using the System Manager UI with ONTAP 9.7 and later, see [Enable new features by adding license keys](#).

For more information about managing licenses, see [Manage licenses overview](#).

### Steps

1. Add each license key by using the `system license add` command.

```
cluster1::> system license add -license-code AAAAAAAAAAAAAA
```

2. View the existing licenses by using the `system license show` command.

```
cluster1::> system license show

Serial Number: 9-99-999999
Owner: cluster1
Package          Type    Description          Expiration
-----
Base            site    Cluster Base License  -
NFS             license NFS License        -
CIFS            license CIFS License        -
...

```

3. Review the output to ensure that a node-locked license is displayed for all serial numbers, including serial numbers for existing and new nodes.

## Verify the health of the system

Before you expand a cluster, you must verify that all components of the cluster are healthy by running the Config Advisor tool and running several ONTAP CLI commands.

### Steps

1. Verify that you have the latest version of Config Advisor:

- If you do not have Config Advisor on your laptop, download it.

#### [NetApp Downloads: Config Advisor](#)

- If you have Config Advisor, start it, click **Help > Check for Updates**, and follow the prompts to upgrade it if necessary.



Do not uninstall the previous version of the tool or delete the data folder during the upgrade. The tool uninstalls the previous version and replaces it with the latest version. It renames the data folder as the latest folder and retains all of the contents in the folder.

## 2. Verify the cabling and configuration by running Config Advisor:

- Connect your laptop to the management network for the cluster.
- Click **Collect Data**.

Config Advisor displays any problems found.

- If problems are found, correct them and run the tool again.

## 3. Check the health of the system with the following commands:

- Verify that the cluster is in a healthy state by using the `system health status show` command and verifying that the Status is `ok`.

```
cluster1::> system health status show
Status
-----
ok
```

- Verify that all nodes in the cluster are in a healthy state by using the `cluster show` command and verifying that the Health of each node is `true`.

```
cluster1::> cluster show
Node          Health  Eligibility
-----
cluster1-1    true    true
cluster1-2    true    true
2 entries were displayed.
```

## Back up the cluster configuration

Before you expand a cluster, you should use advanced privilege to create a backup file to save the cluster configuration information and optionally save the node configurations.

### Steps

- Set the privilege level to advanced by using the `set -privilege advanced` command.

2. Create a backup file of the cluster configuration by using the `system configuration backup create` command with the `-backup-type cluster` parameter.

```
cluster1::*> system configuration backup create -node cluster1-1 -backup
-name clusterbeforeexpansion.7z -backup-type cluster
[Job 5573] Job is queued: Cluster Backup OnDemand Job.
```

3. Create a backup file of each node's configuration by using the `system configuration backup create` command with the `-backup-type node` parameter for each node.
4. Return the privilege level to admin by using the `set -privilege admin` command.

## Generate an AutoSupport message about starting expansion

Immediately before you expand a cluster, you should send an AutoSupport message to indicate that you are about to start the expansion process. The message informs internal and external support staff about expansion and acts as a timestamp for any troubleshooting that might be required later.

### Before you begin

AutoSupport must be set up.

### Steps

1. For each node in the cluster, send an AutoSupport message by using the `system node autosupport invoke` command.

```
cluster1::> system node autosupport invoke -node * -message "cluster
expansion started" -type all
The AutoSupport was successfully invoked on node "cluster1-1". To view
the status
of the AutoSupport, use the "system node autosupport history show"
command.
Note: It may take several minutes for the AutoSupport to appear in the
history list.
The AutoSupport was successfully invoked on node "cluster1-2". To view
the status
of the AutoSupport, use the "system node autosupport history show"
command.
Note: It may take several minutes for the AutoSupport to appear in the
history list.
2 entries were acted on.
```

## Copyright information

Copyright © 2025 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—with 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.

**LIMITED RIGHTS LEGEND:** Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## 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.