

Maintaining Operations Hub

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Performing Cluster Maintenance

Feature History

Feature Name	Release Information	Description
Support for Performing Cluster Maintenance	Cisco Operations Hub, Release 23.1	Cisco Operations Hub supports cluster maintenance tasks when there's cluster node maintenance or node failure.

This section provides information about how to handle an Operations Hub cluster when there's cluster node maintenance or node failure.

Maintenance activities for cluster nodes can be classified as:

- Planned maintenance: This activity is performed when the cluster node is still working but needs to be removed from the Kubernetes cluster for maintenance. Maintenance activity in this case drains the node, remove all the pods running on the node, and marks the node as not schedulable.
- Unplanned maintenance: This activity is performed when the node is dead. The node state is *Not Available*, and its IP address is unreachable. In this case, since the node is present in the vCenter but isn't running, it's deleted and re-created during maintenance.

Cluster Node Maintenance through Autodeploy Tool

Use the following steps to perform maintenance of cluster through the Autodeploy tool.

1. To trigger cluster maintenance, use the --maintenance option as an argument with the Autodeployer.

   ```
   ~/opshub-installer-<release-version-tag>$ ./deploy -c <config_file> --maintenance
   ```

2. Cluster maintenance provides you two options. Select one of the two available options:
   - **Node Maintenance**: Use this option to push one or more nodes into maintenance. After selecting this option, Autodeployer shows a list of node names and prompts the user to enter a list of nodes to be maintained in a comma-separated way.

- **Host Maintenance**: Use this option to push all the nodes running on the ESXi host to maintenance. Typically used when an upgrade is planned for ESXi. After selecting this option, Autodeployer shows a list of ESXi host IPs and FQDNs and prompts the user to select one of the ESXI host details. After selecting ESXi host IP/FQDN, all nodes running on top are pushed into maintenance.

Note

- During the maintenance activity, the Autodeployer ensures that the quorum criteria aren't broken.
- Maintenance procedure is application only on a Multinode installation.

Resuming Cluster Node from Maintenance through Autodeploy Tool

Use the following steps to resume cluster nodes from maintenance through Autodeployer.

1. To resume cluster nodes from maintenance, use the --resume-maintenance option as an argument with the Autodeployer.

```
~/opshub-installer-<release-version-tag>$ ./deploy -c <config_file> --resume-maintenance
```

This ensures that all the nodes under maintenance are added back to the cluster. If nodes are deleted due to unplanned maintenance, those nodes are recreated.

TAC Debug Package

Table 1: Feature History

Feature Name	Release Information	Description
Inclusion of Meta Data and `robot-cfgsvc` pod logs in TAC Debug Packages	Cisco Operations Hub, Release 23.3	TAC debug packages are more descriptive and include metadata information such as created date, file size, created user, and the start and end collection dates entered at the time of creating the packages. TAC debug packages also include `robot-cfgsvc` pod logs.
TAC Debug Package Enhancements	Cisco Operations Hub, Release 22.3	You can create a TAC debug package for a cluster using the Operations Hub GUI. You can select start and end dates, and start and end times, while creating TAC Debug Packages. You can download TAC Debug Packages locally and delete TAC Debug Packages, if necessary.
TAC Debug Package	Cisco Operations Hub, Release 22.2	You can create a TAC debug package for a cluster. The collected information helps the TAC team to debug and troubleshoot the issue at the earliest.

The TAC Debug feature in Operations Hub enables you to create and collect the debug package for a specified time duration. You can download the debug package and attach it to a TAC case.

When you trigger the create operation on the Operations Hub cluster, you can monitor the status of the operation as **ongoing** or **completed**. When the operation is complete, the TAC debug package is available for download.

Creating and Downloading TAC Debug Package

To create a TAC Debug package:

1. At the main menu, select **System** > **SUPPORT** > **TAC Debug Packages**.
2. Enter the start and end dates, and start and end times, which are required for the data collection.
3. Click **Create**.

   The TAC Debug package is created along with the following metadata that is displayed below it:

   Table 2: TAC Debug Package Metadata Fields

Metadata Field	Description
Created	Date of Creation
File Size	Size of the TAC Debug package(in MB)
Created By	User who created the TAC Debug package
Created From	Start date of data collection (Entered during TAC Debug Package creation)
Created To	End date of data collection (Entered during TAC Debug Package creation)

   The latest TAC Debug package is displayed on top.
4. When a package is created:
   - You can download a package locally by clicking the package name.
   - You can delete a package by clicking the **Delete** icon.



Note TAC debug packages can be large and can demand significant storage space on the disk. To optimize the cluster disk space, Operations Hub allows you to store up to ten TAC debug packages. We recommend that you delete the old TAC debug packages from the cluster if you don't need them.