



OpenShift Dedicated 4

Upgrading

Upgrading OpenShift Dedicated

OpenShift Dedicated 4 Upgrading

Upgrading OpenShift Dedicated

Legal Notice

Copyright © 2024 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux[®] is the registered trademark of Linus Torvalds in the United States and other countries.

Java[®] is a registered trademark of Oracle and/or its affiliates.

XFS[®] is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL[®] is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js[®] is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack[®] Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

This document provides information about upgrading OpenShift Dedicated clusters.

Table of Contents

CHAPTER 1. OPENSIFT DEDICATED CLUSTER UPGRADES	3
1.1. UNDERSTANDING OPENSIFT DEDICATED CLUSTER UPGRADES	3
1.1.1. Recurring upgrades	3
1.1.2. Individual upgrades	3
1.1.3. Upgrade notifications	4
1.2. SCHEDULING RECURRING UPGRADES FOR YOUR CLUSTER	4
1.3. SCHEDULING INDIVIDUAL UPGRADES FOR YOUR CLUSTER	5

CHAPTER 1. OPENSIFT DEDICATED CLUSTER UPGRADES

You can schedule automatic or manual upgrade policies to update the version of your OpenShift Dedicated clusters. Upgrading OpenShift Dedicated clusters can be done through Red Hat OpenShift Cluster Manager or OpenShift Cluster Manager CLI.

Red Hat Site Reliability Engineers (SREs) monitor upgrade progress and remedy any issues encountered.

1.1. UNDERSTANDING OPENSIFT DEDICATED CLUSTER UPGRADES

When upgrades are made available for your OpenShift Dedicated cluster, you can upgrade to the newest version through Red Hat OpenShift Cluster Manager or OpenShift Cluster Manager CLI. You can set your upgrade policies on existing clusters or during cluster creation, and upgrades can be scheduled to occur automatically or manually.

Red Hat Site Reliability Engineers (SRE) will provide a curated list of available versions for your OpenShift Dedicated clusters. For each cluster you will be able to review the full list of available releases, as well as the corresponding release notes. OpenShift Cluster Manager will enable installation of clusters at the latest supported versions, and upgrades can be canceled at any time.

You can also set a grace period for how long **PodDisruptionBudget** protected workloads are respected during upgrades. After this grace period, any workloads protected by **PodDisruptionBudget** that have not been successfully drained from a node, will be forcibly deleted.



NOTE

All Kubernetes objects and PVs in each OpenShift Dedicated cluster are backed up as part of the OpenShift Dedicated service. Application and application data backups are not a part of the OpenShift Dedicated service. Ensure you have a backup policy in place for your applications and application data prior to scheduling upgrades.



NOTE

When following a scheduled upgrade policy, there might be a delay of an hour or more before the upgrade process begins, even if it is an immediate upgrade. Additionally, the duration of the upgrade might vary based on your workload configuration.

1.1.1. Recurring upgrades

Upgrades can be scheduled to occur automatically on a day and time specified by the cluster owner or administrator. Upgrades occur on a weekly basis, unless an upgrade is unavailable for that week.

If you select recurring updates for your cluster, you must provide an administrator's acknowledgment. OpenShift Cluster Manager does not start scheduled y-stream updates for minor versions without receiving an administrator's acknowledgment.



NOTE

Recurring upgrade policies are optional and if they are not set, the upgrade policies default to individual.

1.1.2. Individual upgrades

If you opt for individual upgrades, you are responsible for updating your cluster. If you select an update version that requires approval, you must provide an administrator's acknowledgment.

If your cluster version becomes outdated, it will transition to a limited support status. For more information on OpenShift life cycle policies, see [OpenShift Dedicated update life cycle](#).

1.1.3. Upgrade notifications

From OpenShift Cluster Manager console you can view your cluster's history from the **Overview** tab. The Upgrade states can be viewed in the service log under the **Cluster history** heading.

Every change of state also triggers an email notification to the cluster owner and subscribed users. You will receive email notifications for the following events:

- An upgrade has been scheduled.
- An upgrade has started.
- An upgrade has completed.
- An upgrade has been canceled.



NOTE

For recurring upgrades, you will also receive email notifications before the upgrade occurs based on the following cadence:

- 2 week notice
- 1 week notice
- 1 day notice

Additional resources

- For more information about the service log and adding cluster notification contacts, see [Accessing the service logs for OpenShift Dedicated clusters](#).

1.2. SCHEDULING RECURRING UPGRADES FOR YOUR CLUSTER

You can use OpenShift Cluster Manager to schedule recurring, automatic upgrades for z-stream patch versions for your OpenShift Dedicated cluster. Based on upstream changes, there might be times when no updates are released. Therefore, no upgrade occurs for that week.

Procedure

1. From [OpenShift Cluster Manager](#), select your cluster from the clusters list.
2. Click the **Upgrade settings** tab to access the upgrade operator.
3. To schedule recurring upgrades, select **Recurring updates**.
4. Provide an administrator's acknowledgment and click **Approve and continue**. OpenShift Cluster Manager does not start scheduled y-stream updates for minor versions without receiving an administrator's acknowledgment.

5. Specify the day of the week and the time you want your cluster to upgrade.
6. Click **Save**.
7. Optional: Set a grace period for **Node draining** by selecting a designated amount of time from the drop down list. A **1 hour** grace period is set by default.
8. To edit an existing recurring upgrade policy, edit the preferred day or start time from the **Upgrade Settings** tab. Click **Save**.
9. To cancel a recurring upgrade policy, switch the upgrade method to individual from the **Upgrade Settings** tab. Click **Save**.

On the **Upgrade settings** tab, the **Upgrade status** box indicates that an upgrade is scheduled. The date and time of the next scheduled update is listed.

1.3. SCHEDULING INDIVIDUAL UPGRADES FOR YOUR CLUSTER

You can use OpenShift Cluster Manager to manually upgrade your OpenShift Dedicated cluster one time.

Procedure

1. From [OpenShift Cluster Manager](#), select your cluster from the clusters list.
2. Click the **Upgrade settings** tab to access the upgrade operator. You can also update your cluster from the **Overview** tab by clicking **Update** next to the cluster version under the **Details** heading.
3. To schedule an individual upgrade, select **Individual updates**.
4. Click **Update** in the **Update Status** box.
5. Select the version you want to upgrade your cluster to. Recommended cluster upgrades appear in the UI. To learn more about each available upgrade version, click **View release notes**.
6. If you select an update version that requires approval, provide an administrator's acknowledgment and click **Approve and continue**.
7. Click **Next**.
8. To schedule your upgrade:
 - Click **Upgrade now** to upgrade within the next hour.
 - Click **Schedule a different time** and specify the date and time that you want the cluster to upgrade.
9. Click **Next**.
10. Review the upgrade policy and click **Confirm upgrade**.
11. A confirmation appears when the cluster upgrade has been scheduled. Click **Close**.
12. Optional: Set a grace period for **Node draining** by selecting a designated amount of time from the drop down list. A **1 hour** grace period is set by default.

From the **Overview** tab, next to the cluster version, the UI notates that the upgrade has been scheduled. Click **View details** to view the upgrade details. If you need to cancel the scheduled upgrade, you can click **Cancel this upgrade** from the **View Details** pop-up.

The same upgrade details are available on the **Upgrade settings** tab under the **Upgrade status** box. If you need to cancel the scheduled upgrade, you can click **Cancel this upgrade** from the **Upgrade status** box.



WARNING

In the event that a CVE or other critical issue to OpenShift Dedicated is found, all clusters are upgraded within 48 hours of the fix being released. You are notified when the fix is available and informed that the cluster will be automatically upgraded at your latest preferred start time before the 48 hour window closes. You can also upgrade manually at any time before the recurring upgrade starts.