

# **Dell EMC OpenManage Integration Version 2.0 with Microsoft Windows Admin Center**

## Installation Guide

## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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# Overview of OpenManage Integration with Microsoft Windows Admin Center

Dell EMC OpenManage Integration with Microsoft Windows Admin Center (OMIMSWAC) enables IT administrators to manage PowerEdge servers as hosts, Microsoft Failover Clusters created with PowerEdge servers, and Hyper-Converged Infrastructure (HCI) created by using Dell EMC HCI Solutions for Microsoft Windows Server or Dell EMC Integrated System for Microsoft Azure Stack HCI. OMIMSWAC simplifies the tasks of IT administrators by remotely managing the PowerEdge servers and clusters throughout their life cycle. For more information about the features and benefits of OMIMSWAC, see the documentation at [Dell.com/OpenManageManuals](https://Dell.com/OpenManageManuals).

## Key features of OMIMSWAC

- OMIMSWAC provides a simplified solution for IT administrators to efficiently manage the following:
  - Dell EMC PowerEdge Servers running on supported Windows Operating Systems.
  - Dell EMC Integrated System for Microsoft Azure Stack HCI (also known as Azure Stack HCI or AS HCI) created using AX nodes from Dell Technologies.
  - Dell EMC HCI Solutions for Microsoft Windows Server (also known as Windows Server HCI or WS HCI) created using Storage Spaces Direct Ready Nodes or combinations of AX nodes and Storage Spaces Direct Ready Nodes.
  - Microsoft Failover Clusters created with Dell EMC PowerEdge servers running supported Windows Server operating system.
- Inventory—Provides information about overall Health, Hardware inventory, and iDRAC inventory of nodes including component-level information of all supported Dell EMC platforms.
- Online catalogs—Support for creating a firmware baseline by using the following online catalogs when OMIMSWAC is connected to the Internet:
  - **Dell EMC Enterprise Catalog**—Contains firmware updates for PowerEdge servers and PowerEdge server nodes in a cluster.
  - **Update Catalog for Microsoft HCI solutions**—Contains firmware updates for AX nodes and Storage Spaces Direct Ready Nodes and nodes in Windows Server HCI and Azure Stack HCI clusters.
  - **Dell EMC MX Solution Catalog** for PowerEdge MX Modular.
- Offline catalog—Support for creating local firmware baselines by using Dell EMC Repository Manager (DRM).
- Compliance report—Generate update compliance report against Dell EMC verified update catalogs and provide notifications when a new catalog version is available.
- Server update—Supports PowerEdge server update against baseline – Firmware, BIOS, Drivers, and system management applications.
- Cluster-Aware Update—Supports cluster update against validated baseline (Firmware, BIOS, and Drivers) for PowerEdge server-based Failover cluster, Dell EMC HCI Solutions for Microsoft Windows Server, and Dell EMC Integrated System for Microsoft Azure Stack HCI.
- Integrated Cluster Deploy and Update—Supports integrated Firmware, BIOS, and Drivers installation while creating Azure Stack HCI cluster. Also, performs symmetry check to keep hardware configuration of cluster nodes inline with Dell EMC recommended hardware configuration.
- Full Stack Cluster-Aware Updating—Supports integrated cluster-aware update for Azure Stack HCI clusters that include both operating system and hardware updates (Firmware, BIOS, and Drivers).
- iDRAC console—View iDRAC information of PowerEdge servers. For out-of-band management, you can directly launch the iDRAC console from Windows Admin Center.
- Dell EMC Solutions badge—
  - Displays Dell EMC Solutions badge **Azure Stack HCI Certified** for Dell EMC Integrated System for Microsoft Azure Stack HCI consisting of AX nodes from Dell Technologies.
  - Displays Dell EMC Solutions badge **Windows Server HCI Certified** for Dell EMC HCI Solutions for Microsoft Windows Server created using Storage Spaces Direct Ready Nodes or combinations of AX nodes and Storage Spaces Direct Ready Nodes.
- Availability of OMIMSWAC extension and documentation localized in English, French, German, Spanish, Simplified Chinese, and Japanese languages.

## Topics:

- [Revision history](#)
- [What is new in this release](#)

# Revision history

Date	Document revision	Description of changes
February 2021	A00	Initial release for OMIMSWAC 2.0
March 2021	A01	<ul style="list-style-type: none"><li>• Added support for Windows Admin Center 2103 GA.</li></ul>
June 2021	A02	<ul style="list-style-type: none"><li>• Added support for AX-6515 and AX-7525 nodes in Dell EMC Integrated System for Microsoft Azure Stack HCI.</li><li>• Added support for AX-7525 nodes in Dell EMC HCI Solutions for Microsoft Windows Server.</li></ul>
June 2021	A03	Added support for WAC 2103.2 GA.
July 2021	A04	Added support for Microsoft Failover Cluster Tool Extension 1.280.0.nupkg release.

## What is new in this release

- Supports Microsoft Windows Admin Center Preview 2103.2 GA.
- Supports managing and monitoring of Azure Stack HCI solution based on the new Azure Stack HCI version 20H2 operating system.
- Installation—Provides the ability for in-place installation of Dell EMC OpenManage Integration snap-in when creating an Azure Stack HCI cluster using AX nodes or running full stack update on Azure Stack HCI cluster.
- OpenManage Integration snap-in to provide integrated firmware and driver updates during Azure Stack HCI cluster creation or cluster update available in the Windows Admin Center.
  - Integrated Cluster Deploy and Update—This feature is applicable for Dell EMC Integrated System for Microsoft Azure Stack HCI (running Azure Stack HCI version 20H2 operating system).

When creating an Azure Stack HCI cluster using AX nodes:

    - Supports Hardware symmetry checks that validate the cluster nodes configuration against the Dell EMC recommended configurations. After the symmetry check, it provides a comprehensive report that displays the status of all the configurations and recommended actions for unsupported configurations. This feature ensures that the cluster configuration is compliant with Dell EMC recommendations.
    - Supports integrated Firmware, BIOS, and Drivers updates. This provides a unified experience that includes rebooting the nodes only once after both operating system and hardware updates are done.
    - Ability to rerun prerequisites and Hardware symmetry checks when the failures are corrected.
  - Full Stack Cluster-Aware Updating—This feature is applicable for Dell EMC Integrated System for Microsoft Azure Stack HCI (running Azure Stack HCI version 20H2 operating system).
    - In addition to the operating system update available in the Windows Admin Center, perform hardware updates (Firmware, BIOS, and Drivers) for Dell EMC Integrated System for Microsoft Azure Stack HCI cluster in a single flow. This feature will not only help administrators to update the OS and the firmware, but also OS drivers and management applications that are installed on the cluster.
- Cluster-Aware Updating (CAU)—Ability to schedule CAU updates using OpenManage Integration extension for the following:
  - PowerEdge server-based Failover cluster
  - Dell EMC HCI Solutions for Microsoft Windows Server
  - Dell EMC Integrated System for Microsoft Azure Stack HCI
- Supports Dell EMC System Update (DSU) 1.9 to check compliance and update.
- Supports AX-6515 and AX-7525 nodes in Dell EMC Integrated System for Microsoft Azure Stack HCI.

- Supports AX-7525 nodes in Dell EMC HCI Solutions for Microsoft Windows Server.
- Enhancements:
  - Supports target nodes running Windows Server Core operating system.
  - License details are displayed by clicking a license attribute name under iDRAC inventory.
  - Optimized iDRAC inventory attributes to improve usability.
  - Renamed MX catalog for PowerEdge MX Modular to "Dell EMC MX Solution Catalog".
  - PowerEdge catalog option is now available under Update Source for Failover clusters created using MX Modular.
  - Revamped the Tool tip information of Update Source to make it more readable.
  - Improved Update Source catalog selection view.
  - Improvements in Compliance Report view from doughnut chart to bar chart to indicate the compliance level. Added a search box in the compliance report to search and select components.
  - Improvements in compliance generation and update performance.
- Fixes:
  - Previously, if a target node/cluster was connected (using Single Sign-on authentication) without using "Manage as" credentials, to generate a compliance, it was required to reconnect the target node/cluster from the "All connections" page in the Windows Admin Center using "Manage as" credentials.  
 In this release, the extension may prompt you to specify the "Manage as" credentials on the same page when attempting to manage a target node or cluster. Therefore, you do not need to go back to the "All connections" page in the Windows Admin Center to connect the target node or cluster.
  - With support for Microsoft Failover Cluster Tool Extension 1.280.0.nupkg release, the issue of full stack update has been resolved.

# OpenManage Integration with Microsoft Windows Admin Center Licensing

This section provides licensing guidance for OpenManage Integration with Microsoft Windows Admin Center (OMIMSWAC).

## Overview

Installing and using OMIMSWAC Base version does not require any license and can be downloaded from the NuGet feed of Microsoft Windows Admin Center or Dell support site. The Base version provides basic management and monitoring for Dell EMC PowerEdge Servers, AX nodes, and Storage Spaces Direct Ready Nodes from Dell Technologies. However, to use some of the premium features, such as Cluster-Aware Updating (CAU), Hardware symmetry checks using Integrated Cluster Deployment and Update (IDU), and Full Stack Cluster-Aware Updating you must install the OMIWAC Premium License on target nodes.

### Types of premium licenses and platforms supported

There are two types of OMIWAC Premium Licenses currently available as below.

- The "OMIWAC **Premium License for PowerEdge**" is available for:
  - YX4X models of Dell EMC PowerEdge server and above with iDRAC firmware 4.00.00.00 or newer.
- The "OMIWAC **Premium License for MSFT HCI Solutions**" is available for:
  - AX nodes and Storage Space Direct Ready Nodes from Dell Technologies with firmware 4.00.00.00 or newer.
  - Dell EMC Integrated System for Microsoft Azure Stack HCI.
  - Dell EMC HCI Solutions for Microsoft Windows Server.

## Premium features supported

- Cluster-Aware Updating feature is supported for:
  - Failover clusters
  - Azure Stack HCI clusters
  - Windows Server HCI clusters
- Integrated Cluster Deploy and Update as part of Azure Stack HCI cluster creation with hardware symmetry checks is supported for:
  - AX nodes (running Azure Stack HCI version 20H2 operating system) while creating Azure Stack HCI cluster.
- Full Stack Cluster-Aware updating feature is supported for:
  - Azure Stack HCI cluster (running Azure Stack HCI version 20H2 operating system)


## Purchase OMIWAC Premium License

OMIWAC Premium Licenses can be purchased while ordering the corresponding servers and solutions through Point of Sale (POS) or After Point of Sale (APOS) by contacting Dell sales representatives. The OMIWAC Premium License is bundled as part of the server license if purchased along with the server. If the license is purchased in APOS method, import the license manually using the iDRAC. For more information about importing license manually, see iDRAC documentation.

**i** **NOTE:** Licenses must be purchased for the corresponding Azure Stack HCI or PowerEdge Servers in a cluster as follows where you want to use the premium feature. As, mixing the licenses will not be supported.

License	Description	Licensing model
iDRAC express	All base features.	

OMIWAC <b>Premium License for PowerEdge.</b>	All base features along with premium management features.	Perpetual iDRAC based license.
OMIWAC <b>Premium License for MSFT HCI Solutions.</b> This is also shown as "OMIWAC Premium License for Azure Stack HCI" in iDRAC.	All base features along with premium management features.	Perpetual iDRAC based license.


 **NOTE:** The OMIWAC Premium License is not required to update individual target node.

You can download the purchased license from the Software License Management Portal at [HTTPS://WWW.DELL.COM/SUPPORT/SOFTWARE/US/EN/04](https://www.dell.com/support/software/us/en/04).

## Verify license information

In OMIMSWAC, you can view nodes details and their licenses from the iDRAC inventory. To view the iDRAC inventory of a target node

1. In Windows Admin Center, connect to a server or cluster.
2. In the left pane of Windows Admin Center, under EXTENSIONS, click **Dell EMC OpenManage Integration**, and then navigate to the **iDRAC** tab.
3. Under iDRAC tab, you can verify the OMIWAC Premium License available on the target nodes.

 **NOTE:** All nodes participating in the managed cluster must have OMIWAC Premium License installed to use premium features. If any of the cluster nodes are not licensed, OMIMSWAC notifies and does not allow you to use the premium feature.



## Compatibility matrix

The following table lists the supported Microsoft Windows Admin Center version, browser, operating system, supported software, and supported hardware required for OMIMSWAC.

**Table 1. Compatibility matrix**

Supported software and hardware	Version
Microsoft Windows Admin Center	Windows Admin Center 2103.2 GA. Microsoft recommends to use the latest version of the Windows Admin Center. For more information, see the Microsoft Windows Admin Center documentation at <a href="https://www.microsoft.com/en-us/cloud-platform/windows-admin-center">https://www.microsoft.com/en-us/cloud-platform/windows-admin-center</a> .
Microsoft Cluster Creation Extension	1.556.0.nupkg release.
Microsoft Failover Cluster Tool Extension	1.280.0.nupkg release.
Operating systems	For more information about the supported OSs for installing Microsoft Windows Admin Center and different modes of installation, see the Microsoft Windows Admin Center documentation at <a href="https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/plan/installation-options">https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/plan/installation-options</a> . <b>i NOTE:</b> To view the update compliance details of the devices by using OpenManage Integration with Windows Admin Center, the supported OSs are Microsoft Windows 2012 R2 and later. Also, supports managing and monitoring of Azure Stack HCI solution based on the new Azure Stack HCI version 20H2 operating system.
Browsers	For more information about the supported browsers by Microsoft Windows Admin Center, see the Microsoft Windows Admin Center documentation at <a href="https://www.microsoft.com/en-us/cloud-platform/windows-admin-center">https://www.microsoft.com/en-us/cloud-platform/windows-admin-center</a> .
Dell EMC System Update Utility (DSU)	1.9.0 The <b>Systems-Management_Application_8CTK7_WN64_1.9.0_A00.EXE</b> DSU file can be downloaded from <a href="#">here</a> .
Dell EMC Inventory Collector (IC)	20_09_200_921_A00 The supported version of IC can be downloaded from <a href="#">here</a> .
Dell EMC Repository Manager (DRM)	3.3.1 The supported version of DRM can be downloaded from <a href="#">here</a> .
PowerEdge servers as target nodes. For more information on the generic naming convention of PowerEdge servers, see <a href="#">Identifying the generation of your Dell EMC PowerEdge server</a> on page 19.	<ul style="list-style-type: none"> <li>YX2X and YX3X models of PowerEdge servers with iDRAC7 and iDRAC8 respectively (Recommended firmware version of 2.60.60.60 or later).</li> </ul> <b>i NOTE:</b> <ul style="list-style-type: none"> <li>For PowerEdge servers with firmware versions lesser than 2.60.60.60, information of hardware inventory and health status of few components might not be available. For more information about the components for which the information is not available, see <a href="#">Dell EMC OpenManage Integration with Microsoft Windows Admin Center User's Guide</a>.</li> <li>In YX2X and YX3X models of PowerEdge servers, following features are not available:</li> </ul>

**Table 1. Compatibility matrix (continued)**

Supported software and hardware	Version
	<ul style="list-style-type: none"> <li>▪ Cluster-Aware Updating</li> <li>▪ Health and Inventory information of Accelerators</li> <li>• YX4X models of PowerEdge servers with iDRAC9 (Recommended firmware version of 3.30.30.30 or later).</li> <li>• YX5X models of PowerEdge servers with iDRAC9 (Recommended firmware version of 3.40.40.40 or later).</li> <li>• PowerEdge XE2420 Edge server (Recommended iDRAC firmware 4.00.129.00 or later).</li> </ul>
Supported AX nodes (running Azure Stack HCI version 20H2 operating system) as target nodes for Dell EMC Integrated System for Microsoft Azure Stack HCI	AX-640, AX-740xd , AX-6515, and AX-7525 ⓘ <b>NOTE:</b> Integrated Cluster Deployment and Update and Full Stack Cluster-Aware Updating features are supported in Dell EMC Integrated System for Microsoft Azure Stack HCI cluster using OpenManage Integration snap-in extension.
Supported AX and/or Storage Spaces Direct Ready Nodes (using Windows Server operating system) as target nodes for Dell EMC HCI Solutions for Microsoft Windows Server	AX nodes: AX-640, AX-740xd , AX-6515, and AX-7525 Storage Spaces Direct Ready Nodes: R440, R640, R740xd, and R740xd2

ⓘ **NOTE:** Dell EMC OpenManage Integration supports target nodes running Windows Server Core operating system.

# Installing Dell EMC OpenManage Integration with Microsoft Windows Admin Center

The Dell EMC OpenManage Integration with Microsoft Windows Admin Center can be installed in one of the following methods:

- By using the Microsoft's public Windows Admin Center NuGet feed. See [Install Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using the official Microsoft NuGet feed](#) on page 12.
- By using a local path or a network share as package source for installation. See [Install Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using local path or network file share](#) on page 12.
- By using the workflow of Microsoft Windows Admin Center during Azure Stack HCI cluster deployment or updates. [Install Dell EMC OpenManage Integration snap-in extension](#).

**NOTE:** If you are installing Dell EMC OpenManage Integration with Windows Admin Center extension by using the Custom Feed option, see the [Microsoft documentation](#) to set up a custom feed or share.

## Topics:

- [Download Dell EMC OpenManage Integration with Microsoft Windows Admin Center](#)
- [Install Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using the official Microsoft NuGet feed](#)
- [Install Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using local path or network file share](#)
- [Install Dell EMC OpenManage Integration extension including snap-in with Microsoft Windows Admin Center](#)

## Download Dell EMC OpenManage Integration with Microsoft Windows Admin Center

### Steps

1. Go to [Dell.com/support](https://Dell.com/support).
2. Perform one of the following actions:
  - Enter the Service Tag of your PowerEdge server, and then select **Search**.
  - Select **Browse all products > Servers > PowerEdge**, and then select the appropriate model of your PowerEdge server.
3. On the support page of your server, select **DRIVERS & DOWNLOADS**.
4. From the **Category** list, select **Systems Management**.
5. Select the supported version of OpenManage Integration with Microsoft Windows Admin Center, and then click **Download**.

### Results

The downloaded `Dell_EMCAOpenManage_Integration_MS_WAC_<Version>.<Build_Number>.zip` file contains the `.nupkg` file which is used to install OMIMSWAC integrator in Windows Admin Center by using a local path or network share.

**NOTE:** Do not rename the `.nupkg` file while installing the OMIMSWAC extension.

# Install Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using the official Microsoft NuGet feed

## Prerequisites

Before you install Dell EMC OpenManage Integration extension in Windows Admin Center by using the NuGet feed, ensure that you have:

- Installed the Windows Admin Center 2103.2 GA.
- Logged in to Windows Admin Center as a gateway administrator.

To install Dell EMC OpenManage Integration extension by using the NuGet feed:

## Steps

1. In the Windows Admin Center application, in the upper right corner, select **Settings**.
2. Under **GATEWAY**, click **Extensions**.  
In the **Available extensions** tab, the Dell EMC OpenManage Integration extension is listed.
3. Select **Dell EMC OpenManage Integration** extension, click **Install**, and then click **Confirm** to confirm the changes and to install the extension.

## Results

After the Dell EMC OpenManage Integration extension is installed, Windows Admin Center is restarted, and the extension is listed under **Installed extensions**.

# Install Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using local path or network file share

## Prerequisites

Before you install Dell EMC OpenManage Integration extension in Windows Admin Center by using a local path or a network file share, ensure that you have:

- Installed the Windows Admin Center 2103.2 GA.
- Logged in to Windows Admin Center as a gateway administrator.
- Downloaded and extracted the OpenManage Integration with Microsoft Windows Admin Center .zip file from the Dell EMC support site.

To install Dell EMC OpenManage Integration extension by using a local or network file share:

## Steps

1. In the Windows Admin Center application, in the upper right corner, select **Settings**.
2. Under **GATEWAY**, click **Extensions**.
3. Select **Feeds > Add**.
4. In the **Add package source** window, enter the local path or network file share where you have extracted the .zip file.  
Example paths: C:\<foldername>, \\sharename\foldername.

### NOTE:

- Make sure the .nupkg file name is `dell-emc.openmanage-integration.<Version>.nupkg` while adding the OMIMSWAC extension.
- You must set read and write permissions to the local or network file location.

5. Click **Add**.

If the extension is successfully added, the extension is listed under the **Available Extensions** tab.

6. Select **Dell EMC OpenManage Integration** extension, click **Install**, and then click **Confirm** to confirm the changes and to install the extension.

## Results

After the Dell EMC OpenManage Integration extension is installed, Windows Admin Center is restarted, and the extension is listed under **Installed extensions**.

**NOTE:** While installing OMIMSWAC by using local path or network path, multiple instances of OMIMSWAC extension might be listed under Available and Installed Extensions, when:

- More than one .nuget packages are available in the specified folder path.
- The .nuget packages are available in root or subfolders in addition to the folder path provided under **Feeds > Add package source**.

# Install Dell EMC OpenManage Integration extension including snap-in with Microsoft Windows Admin Center

You can install OpenManage Integration extension including snap-in during Azure Stack HCI cluster deployment or Azure Stack HCI cluster updates in Windows Admin Center to ensure hardware symmetry compliance and run hardware updates (Firmware, BIOS, and Drivers) on target nodes.

## Prerequisites

Before you install Dell EMC OpenManage Integration snap-in in Windows Admin Center, ensure that you have:

- Installed the Windows Admin Center 2103.2 GA.
- Logged in to Windows Admin Center as a gateway administrator.

## Steps

1. If OMIMSWAC extension is not installed, you can install the OpenManage Integration extension including snap-in using one of the following methods:
  - When deploying an Azure Stack HCI cluster, on **Install hardware updates**, click **Install** to install the snap-in extension.
  - When updating an Azure Stack HCI cluster, under **Tools > Updates**, on **Hardware updates** page, click **Install** to install the snap-in extension.
2. If the extension is getting installed for the first time, a consent form is displayed to inform you about the End User License Agreement (EULA) and operations performed by the OpenManage Integration such as enabling the USB NIC and creating an iDRAC user on the target node. Click **Accept** to continue to update the target nodes or cluster by using the OpenManage Integration.

## Results

When the OpenManage Integration snap-in is installed, the OpenManage Integration extension appears under the **Tools** menu in the Windows Admin Center. You will be able to use all the features of OpenManage Integration extension along with the snap-in specific features.

**NOTE:** If OpenManage Integration version 1.1.1 or earlier is already installed,

- To install OpenManage Integration snap-in extension when deploying or updating an Azure Stack HCI cluster, it is recommended to uninstall the older version (OMIMSWAC 1.1.1 or earlier) and then use the Microsoft cluster creation or cluster update workflow to install OpenManage Integration snap-in extension to use the latest features. See [Installing Dell EMC OpenManage Integration with Microsoft Windows Admin Center](#).OR,
- To upgrade to OpenManage Integration snap-in from earlier versions, go to **Extensions > Installed extensions** tab. Select Dell EMC OpenManage Integration extension with the status "Update available (version)" and then click **Update**.

### Next steps

After the OMIMSWAC extension version 2.0 is installed, while deploying or updating an Azure Stack HCI cluster, select **Get updates** in the **Install hardware updates page** or **Hardware updates** page respectively to continue to update the target nodes or cluster by using OpenManage Integration snap-in.

# Upgrading OpenManage Integration with Microsoft Windows Admin Center

Before you upgrade to OMIMSWAC version 2.0, ensure that you have installed the Windows Admin Center 2103.2 GA.

You can upgrade the OpenManage Integration with Microsoft Windows Admin Center (OMIMSWAC) extension by using one of the following methods:

- [By using the official Microsoft Nuget feed.](#)
- [By using a local path or network file share with the downloaded .zip file from Dell EMC Support Site.](#)

**i** **NOTE:** Upgrading to OMIMSWAC version 2.0 from OMIMSWAC version 1.1.1 or earlier is not supported by the Azure Stack HCI cluster creation or update workflow interface. Instead, you can only install the OMIMSWAC version 2.0 when creating or updating an Azure Stack HCI cluster. To do that, it is recommended to uninstall the older version (OMIMSWAC 1.1.1 or earlier) and then use the Microsoft cluster creation or update workflow to install the OMIMSWAC version 2.0 to use the latest features.

However, to upgrade to OpenManage Integration snap-in from earlier versions, go to **Extensions > Installed extensions** tab. Select Dell EMC OpenManage Integration extension with the status "Update available (version)" and then click **Update**.

## Topics:

- [Upgrading Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using the official Microsoft NuGet feed](#)
- [Upgrade Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using local path or network file share](#)

## Upgrading Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using the official Microsoft NuGet feed

### Prerequisites

Before you upgrade Dell EMC OpenManage Integration extension in Windows Admin Center by using a local path or a network file share, ensure that you have:

- Installed the Windows Admin Center 2103.2 GA.
- Logged in to Windows Admin Center as a gateway administrator.
- Downloaded and extracted the OpenManage Integration with Microsoft Windows Admin Center .zip file from the Dell EMC support site.

### Steps

1. In the Windows Admin Center application, in the upper right corner, select **Settings**.
2. Under **GATEWAY**, click **Extensions**.
3. In the **Installed extensions** tab, available update to the **Dell EMC OpenManage Integration** extension is displayed. Click **Update**.

Alternatively, you can also update the **Dell EMC OpenManage Integration** extension by using the **Available extensions** tab and clicking **Install**.

## Results

After the Dell EMC OpenManage Integration extension is updated to a newer version, the Microsoft Windows Admin Center is restarted.

# Upgrade Dell EMC OpenManage Integration with Microsoft Windows Admin Center by using local path or network file share



## Prerequisites

Before you upgrade the Dell EMC OpenManage Integration extension in Windows Admin Center by using a local path or a network file share, ensure that you have:

- Installed the Windows Admin Center 2103.2 GA.
- Logged in to Windows Admin Center as a gateway administrator.
- Downloaded and extracted the latest version of OpenManage Integration with Microsoft Windows Admin Center .zip file from the Dell EMC support site.


To upgrade Dell EMC OpenManage Integration extension by using a local or network file share:

## Steps

1. In the Windows Admin Center application, in the upper right corner, select **Settings**.
2. Under **GATEWAY**, click **Extensions**.
3. Under **Feeds**, select any previously added feed and click **Delete**.
4. To add a new feed, click **Add**.
5. In the **Add package source** window, enter the local path or network file share where you have extracted the .zip file. Example paths: C:\<foldername>, \\sharename\foldername.  
 **NOTE:** Do not rename the .nupkg file in the extracted folder.
-  **NOTE:** You must set read and write permissions to the local or network file location.
6. After the extension is successfully added, the latest version of the extension is listed under the **Available Extensions** tab. To upgrade, click **Install**.

## Results

After the Dell EMC OpenManage Integration extension is upgraded, Windows Admin Center is restarted, and the extension is listed under **Installed extensions**.

 **NOTE:** While installing OMIMSWAC by using local path or network path, multiple instances of OMIMSWAC extension might be listed under Available and Installed Extensions, when:

- More than one .nuget packages are available in the specified folder path.
- The .nuget packages are available in root or subfolders in addition to the folder path provided under **Feeds > Add package source**.



# Launching OpenManage Integration with Microsoft Windows Admin Center

Before you launch Dell EMC OpenManage Integration extension in Windows Admin Center, ensure that you have:

- Logged in to Windows Admin Center as a gateway administrator.

After installing the OpenManage Integration with Microsoft Windows Admin Center (OMIMSWAC), perform the following actions to launch the extension:

1. In the upper left corner of Windows Admin Center, select **Server Manager** or **Cluster Manager** from the drop-down menu.  
The supported WAC version is Windows Admin Center 2103.2 GA.
2. From the list, select a server or cluster connection, and then click **Connect**.
3. Provide server or cluster credentials.

**NOTE:** If "Manage as" credentials are not provided while connecting to a target node or cluster or not available to the extension, you will be prompted to specify the "Manage as" credentials inside the extension when you try to manage the target node or cluster.

4. In the left pane of the Microsoft Windows Admin Center, under **EXTENSIONS**, click **Dell EMC OpenManage Integration**.

When you launch the OpenManage Integration for the first time, a consent form is displayed to inform you about the operations performed by the OpenManage Integration such as enabling the USB NIC and creating an iDRAC user on the target node. Click **Accept** to continue to manage the PowerEdge servers by using the OpenManage Integration.

**NOTE:** After the information from the target nodes is collected, the previously created iDRAC user is deleted by OMIMSWAC.

To ensure proper functioning of OpenManage Integration with Microsoft Windows Admin Center, ensure that:

- Firewall in your enterprise environment enables communication through SMB port 445.
- Redfish service is enabled on the target node.
- An iDRAC user slot is available on the target node.
- The target node is not booted to Lifecycle Controller.
- The target node is not in the reboot state, or is powered-off.
- The USB NIC adapter is not disabled on the target node OS.
- The lockdown mode is disabled on target node.

**NOTE:** For management of PowerEdge servers, OMIMSWAC uses an internal OS to iDRAC Pass-through interface. By default, iDRAC will be reachable using the IP address 169.254.0.1/<Subnet> or 169.254.1.1/<Subnet>. However, if the host has another network interface in the same subnet (For example, when a tool like VMFleet is installed), OMIMSWAC might not be able to communicate to the iDRAC from the host OS. To resolve the conflict, log in to iDRAC and change the USB NIC IP address under the OS to iDRAC passthrough section. For more information about assigning this IP address, see the iDRAC documentation on the Dell EMC support site.

For more information about using and configuring the OpenManage Integration with Microsoft Windows Admin Center extension, see [Dell EMC OpenManage Integration with Microsoft Windows Admin Center User's Guide](#) on the Dell EMC support site.


# Uninstall Dell EMC OpenManage Integration with Microsoft Windows Admin Center

## Steps

1. In the Windows Admin Center application, in the upper right corner, select **Settings**.
2. Under **GATEWAY**, click **Extensions**.
3. In the **Installed extensions** tab, select the **Dell EMC OpenManage Integration** integration, and then click **Uninstall**.
4. Click **Confirm** to proceed with the uninstallation of the extension.

## Results

After the Dell EMC OpenManage Integration extension is uninstalled, Windows Admin Center is restarted, and the extension is listed under **Available extensions**.

 **NOTE:** After OpenManage Integration with Windows Admin Center is uninstalled, the update tool settings will be retained in the Windows Admin Center instance. However, the passwords are not retained.

# Identifying the generation of your Dell EMC PowerEdge server

To cover a range of server models, the PowerEdge servers are now be referred to using the generic naming convention and not their generation.

This topic explains how to identify the generation of a PowerEdge server that are referred to using the generic naming convention.

Example:

The R740 server model is a rack, two processor system from the 14th generation of servers with Intel processors. In the documentation, to refer to R740, generic naming convention **YX4X** server is used, where:

- The letter **Y** (alphabet) denotes the type (form factor: Cloud (C), Flexible(F), Modular (M or MX), Rack(R), Tower(T)) of the server.
- The letter **X** (digit) denotes the class (number of processors) of the server.
- The digit **4** denotes the generation of the server.
- The letter **X** (digit) denotes the make of the processor.

**Table 2. PowerEdge servers naming convention and examples**

<b>YX5X servers</b>	<b>YX4X servers</b>	<b>YX3X servers</b>
PowerEdge R7515	PowerEdge M640	PowerEdge M630
PowerEdge R6515	PowerEdge R440	PowerEdge M830
	PowerEdge R540	PowerEdge T130

## Additional resources


**Table 3. Additional resources**

Document	Description	Availability
<i>Dell EMC OpenManage Integration with Microsoft Windows Admin Center User's Guide</i>	Provides information about using OpenManage Integration with Microsoft Windows Admin Center.	<ol style="list-style-type: none"> <li>1. Go to <a href="https://Dell.com/OpenManageManuals">Dell.com/OpenManageManuals</a>.</li> <li>2. Select <b>OpenManage Integration with Microsoft Windows Admin Center</b>.</li> <li>3. Click <b>DOCUMENTATION &gt; MANUALS AND DOCUMENTS</b> to access these documents.</li> </ol>
<i>Dell EMC OpenManage Integration with Microsoft Windows Admin Center Release Notes</i>	Provides information about new features, known issues and workarounds in OpenManage Integration with Microsoft Windows Admin Center.	
<i>Dell EMC Infrastructure Compliance Report for PowerEdge Servers and Azure Stack HCI Clusters using the OMIMSWAC</i>	This white paper describes the process to generate update compliance report for PowerEdge servers, Microsoft Azure Stack HCI clusters, and Hyper-V based failover clusters by using OMIMSWAC.	
<i>Dell EMC OpenManage Integration with Microsoft Windows Admin Center Security Configuration Guide</i>	Provides information about security features and capabilities of Dell EMC OpenManage Integration with Microsoft Windows Admin Center.	
<i>Microsoft Windows Admin Center documentation</i>	For more information about using Microsoft Windows Admin Center.	<a href="https://www.microsoft.com/en-us/cloud-platform/windows-admin-center">https://www.microsoft.com/en-us/cloud-platform/windows-admin-center</a>
<i>Integrated System for Azure Stack HCI</i>	For more information about Dell EMC Integrated System for Microsoft Azure Stack HCI.	<a href="https://infohub.delltechnologies.com/t/microsoft-hci-solutions-from-dell-technologies-1/">https://infohub.delltechnologies.com/t/microsoft-hci-solutions-from-dell-technologies-1/</a>

# Contacting Dell EMC

## About this task

Dell EMC provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area.

 **NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell EMC product catalog.

To contact Dell EMC for sales, technical support, or customer service issues:

## Steps

1. Go to [Dell.com/support](https://Dell.com/support).
2. Select preferred country or region from the list at the bottom right of the page.
3. Click **Contact Us** and select the appropriate support link.