Dell EMC OpenManage Integration Version 2.0 with Microsoft Windows Admin Center

Release Notes

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Notes, cautions, and warnings

(i) **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.**

Contents

Release summary

Dell EMC OpenManage Integration with Microsoft Windows Admin Center (OMIMSWAC) enables IT administrators to manage the Dell EMC PowerEdge servers as hosts, Microsoft Failover Clusters created with PowerEdge servers, and Hyper-Converged Infrastructure (HCI) created by using the Dell EMC Solutions 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.

Topics:

* Version
* Release date
* Priority and recommendations

Version

2.0

Previous version

1.1.1

Release date

March 2021

Priority and recommendations

Recommended: Dell EMC recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

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 https://www.microsoft.com/en-us/cloud-platform/windows-admin-center.
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 https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/plan/installation-options. ⓘ **NOTE:** 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 https://www.microsoft.com/en-us/cloud-platform/windows-admin-center.
Dell EMC System Update Utility (DSU)	1.9.0 The **Systems-Management_Application_8CTK7_WN64_1.9.0_A00.EXE** DSU file can be downloaded from here.
Dell EMC Inventory Collector (IC)	20_09_200_921_A00 The supported version of IC can be downloaded from here.
Dell EMC Repository Manager (DRM)	3.3.1 The supported version of DRM can be downloaded from here.
PowerEdge servers as target nodes. For more information on the generic naming convention of PowerEdge servers, see Identifying the generation of your Dell EMC PowerEdge server on page 15.	● YX2X and YX3X models of PowerEdge servers with iDRAC7 and iDRAC8 respectively (Recommended firmware version of 2.60.60.60 or later). ⓘ **NOTE:** ○ 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 *Dell EMC OpenManage Integration with Microsoft Windows Admin Center User's Guide*. ○ In YX2X and YX3X models of PowerEdge servers, following features are not available:

Table 1. Compatibility matrix (continued)

Supported software and hardware	Version
	■ Cluster-Aware Updating ■ Health and Inventory information of Accelerators - YX4X models of PowerEdge servers with iDRAC9 (Recommended firmware version of 3.30.30.30 or later). - YX5X models of PowerEdge servers with iDRAC9 (Recommended firmware version of 3.40.40.40 or later). - PowerEdge XE2420 Edge server (Recommended iDRAC firmware 4.00.129.00 or later).
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 (i) **NOTE:** 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

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

Key features

- 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:

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Revision history

Date	Document revision	Description of changes
February 2021	A00	Initial release for OMIMSWAC 2.0

Date	Document revision	Description of changes
March 2021	A01	Added support for Windows Admin Center 2103 GA.
June 2021	A02	● Added support for AX-6515 and AX-7525 nodes in Dell EMC Integrated System for Microsoft Azure Stack HCI. ● Added support for AX-7525 nodes in Dell EMC HCI Solutions for Microsoft Windows Server.
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.

Fixed issues

Issue 1

Description

The update compliance may intermittently and partially succeed for server and cluster nodes. When a cluster/server is connected by using Single Sign-on authentication, without using "Manage As" explicitly OMIMSWAC is unable to generate compliance report.

Known issues

Issue 1

Description

While installing OMIMSWAC by using local path or network path, multiple instances of OMIMSWAC extension may be listed under Available and Installed Extensions. This happens when more than one .nupkg package is available in the specified folder path, or the .nupkg packages are available in root or subfolders in addition to the folder path provided under **Feeds** > **Add package source**.

Workaround

Ensure that a single .nupkg package is available in the root or subfolders under **Feeds** > **Add package source**.

Issue 2

Description

The hardware inventory attribute values of storage enclosure components might be empty because the information is not available on the target iDRAC.

Issue 3

Description

If NICs are disabled in BIOS settings, there will be a delay in displaying the health and hardware inventory information for certain iDRAC firmware versions.

Workaround

Ensure all the NICs are enabled in BIOS settings.

Issue 4

Description

When accessing Windows Admin Center (WAC) locally with domain credentials, DUP downloads may fail during target node or cluster updates.

Workaround

Ensure to access the Windows Admin Center remotely using domain administrator credentials. Otherwise, use local administrator credentials to access the WAC locally. For more information, see https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/plan/installation-options

Instructions for installing Dell EMC OpenManage Integration with Microsoft Windows Admin Center

Topics:

* Installation process
* Download Dell EMC OpenManage Integration with Microsoft Windows Admin Center

Installation process

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

OMIMSWAC can be installed in one of the following ways:
* By using the Microsoft's public Windows Admin Center NuGet feed.
* By using local path or network file share with the downloaded `Dell_EMC_OpenManage_Integration_MS_WAC_<Version><Build_Number>zip` file from the Dell EMC Support Site. For more information about downloading the .zip file, see the *Download Dell EMC OpenManage Integration with Microsoft Windows Admin Center* section.
* By using the workflow of Microsoft Windows Admin Center during Azure Stack HCI cluster deployment or updates.

For more information about installing OMIMSWAC, see the *Dell EMC OpenManage Integration with Microsoft Windows Admin Center Installation Guide* at Dell.com/OpenManageManuals.

> (i) **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.

After installing OMIMSWAC, ensure the following are enabled or available on the target node:
* The Redfish service is enabled.
* An iDRAC user slot is available.
* SMB port 445 is open. For more information, see https://go.microsoft.com/fwlink/?linkid=2101556.
* For management of PowerEdge servers, OMIMSWAC uses an internal OS to iDRAC Pass-through interface. By default, iDRAC is reachable by 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 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.
* Ensure that the target node is not booted to Lifecycle Controller.
* Target node is not in the reboot state, or is powered-off.
* The USB NIC adapter is not disabled on the target node OS.
* Set the PowerShell execution policy to RemoteSigned on the system with Windows Admin Center installed and on the target node OS. For more information, see https://www.dell.com/support/article/sln318718/dell-emc-openmanage-integration-with-microsoft-windows-admin-center-omimswac-fails-to-query-host-information.

Download Dell EMC OpenManage Integration with Microsoft Windows Admin Center

1. Go to Dell.com/support.
2. Perform one of the following actions:
   a. Enter the Service Tag of your PowerEdge server, and then select **Search**.

    b. 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**.

The downloaded `Dell_EMC_OpenManage_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.

(i) **NOTE:** Do not rename the .nupkg file while installing the OMIMSWAC extension.

Instructions for upgrading Dell EMC 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.

OMIMSWAC can be upgraded in one of the following ways:
- By using the NuGet feed
- By using local path or network file share with the downloaded `Dell_EMC_OpenManage_Integration_MS_WAC_<Version>.<Build_Number>.zip` file from the Dell EMC Support Site. For more information about downloading the .zip file, see the *Download Dell EMC OpenManage Integration with Microsoft Windows Admin Center* section.

(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**.

For more information about upgrading OMIMSWAC, see the *Dell EMC OpenManage Integration with Microsoft Windows Admin Center Installation Guide* at Dell.com/OpenManageManuals.

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

YX5X servers	YX4X servers	YX3X servers
PowerEdge R7515	PowerEdge M640	PowerEdge M630
PowerEdge R6515	PowerEdge R440	PowerEdge M830
	PowerEdge R540	PowerEdge T130

Contacting Dell EMC

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:

1. Go to 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.

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There are other computer-related projects using the name curl as well. For details, check out our position on the curl name issue.

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