

Configure Microsoft Hyper-V instances using Windows Admin Center on Dell EMC VxFlex integrated rack and appliance

Abstract

Use of Windows Admin Center to configure Hyper-V instances on Dell EMC VxFlex integrated rack and appliance.

February 2020

Revisions

Date	Description
February 2020	Initial release

Acknowledgements

This paper was produced by the following:

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1 Introduction

VxFlex Manager supports the deployment of a compute-only service with Microsoft Windows Server 2016. This applies to compute-only (CO) nodes on VxFlex appliance or integrated rack. VxFlex Manager also installs the SDC to the nodes and can also optionally enable the Microsoft Hyper-V service. However, the setup is incomplete and so the user must configure the environment after VxFlex Manager enables Hyper-V. Once the VxFlex Manager CO service is deployed, users can add or delete nodes to the service.

This document helps users to configure the Hyper-V instances using Windows Admin Center (WAC) and presents VxFlex Storage volumes to those Hyper-V instances installed on a Compute-only node.

A prerequisite for using this deployment guide is that the user must be running VxFlex Manager 3.3 (or higher) to allow following features to be deployed:

- Windows Server 2016 Data Center version on the CO node is installed.
- Hyper-V service in the Windows Server configuration is enabled.
- VxFlex OS SDC on the Windows CO node is installed.

1.1 Terminology

Table 1 Terms and definitions

Term	Definition
WAC	Windows Admin Center
CO	Compute Only VxFlex Node
SDS	Storage Data Server (component of VxFlex OS)
SDC	Storage Data Client (component of VxFlex OS)
VxFM	Dell EMC VxFlex Manager
VM	Virtual Machine
OS	Operating System

1.2 VxFlex Manager

VxFlex Manager provides IT operations management for VxFlex integrated rack and VxFlex appliance systems. It increases efficiency by reducing the number of time-consuming manual tasks that are required to manage VxFlex integrated and appliance systems operations. Using VxFlex Manager, you can deploy and manage new and existing VxFlex integrated and appliance systems environments.

1.3 Windows Admin Center

Windows Admin Center is a browser-based management tool that lets you manage your Windows servers.

For more information about WAC, see [Windows Admin Center Overview](#).

2 Configuration details

2.1 Prerequisites

Ensure to complete the following pre-requisites before deploying:

- Deploy windows CO node using VxFlex Manager 3.3 or above either on VxFlex integrated rack or VxFlex appliance.
- Download and install WAC onto any Windows management server.

For more information see, [Technical support and resources](#).

2.2 Configure Microsoft Hyper-V instances using WAC

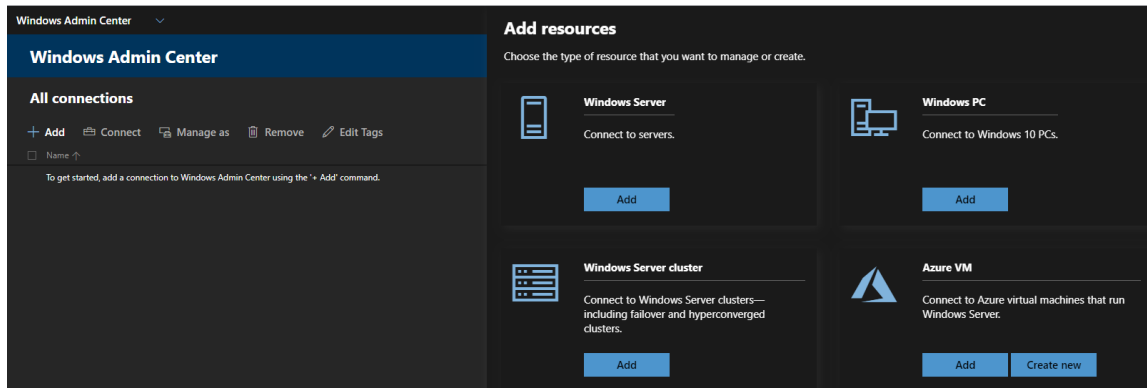
These steps help the user to configure Hyper-V instances onto a Windows CO node and then to present the VxFlex Storage Volumes to those Hyper-V instances.

1. [Add Hyper-V host in WAC](#)
2. [Prepare your Hyper-V Windows Server 2016 for WAC](#)
3. [Present the VxFlex storage volumes to the Hyper-V Host using VxFlex OS UI](#)
4. [Initialize and create the volume using WAC](#)
5. [Configure Hyper-V instances and install an OS using WAC](#)
6. [Verify VxFlex OS storage volume](#)

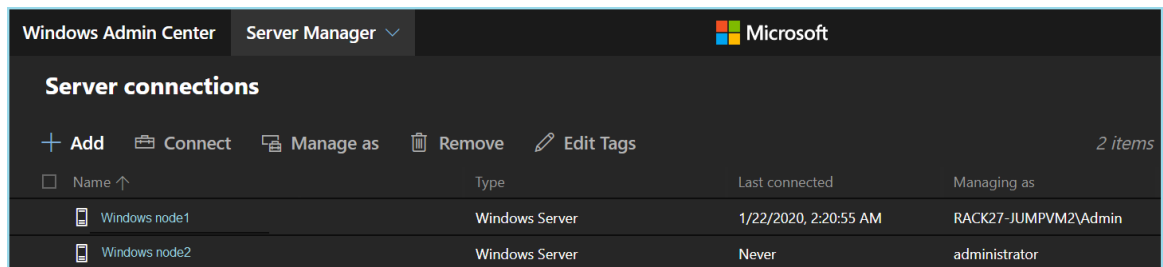
2.2.1 Add Hyper-V host in WAC

After WAC is installed, complete the following steps to add the Windows host:

1. Open WAC in browser and provide the credentials, if prompted.
2. Click **+Add** under **All connections**. The **Add resources** pane is displayed on the right-side.



3. Click **Add** under **Windows Server** option in the **Add resources** pane.
4. Enter a **Server name** and provide the credentials to use, if prompted and then select **Add**. The server is added and displayed in WAC as shown here:



2.2.2 Prepare your Hyper-V Windows Server 2016 for WAC

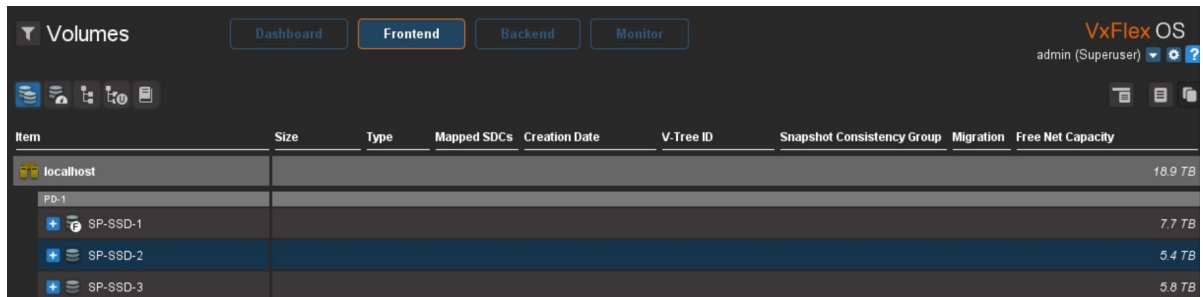
Once the servers have been added into WAC, ensure that the following roles are installed and enabled:

- Remote Management
- File Server Role
- Hyper-V Module for PowerShell

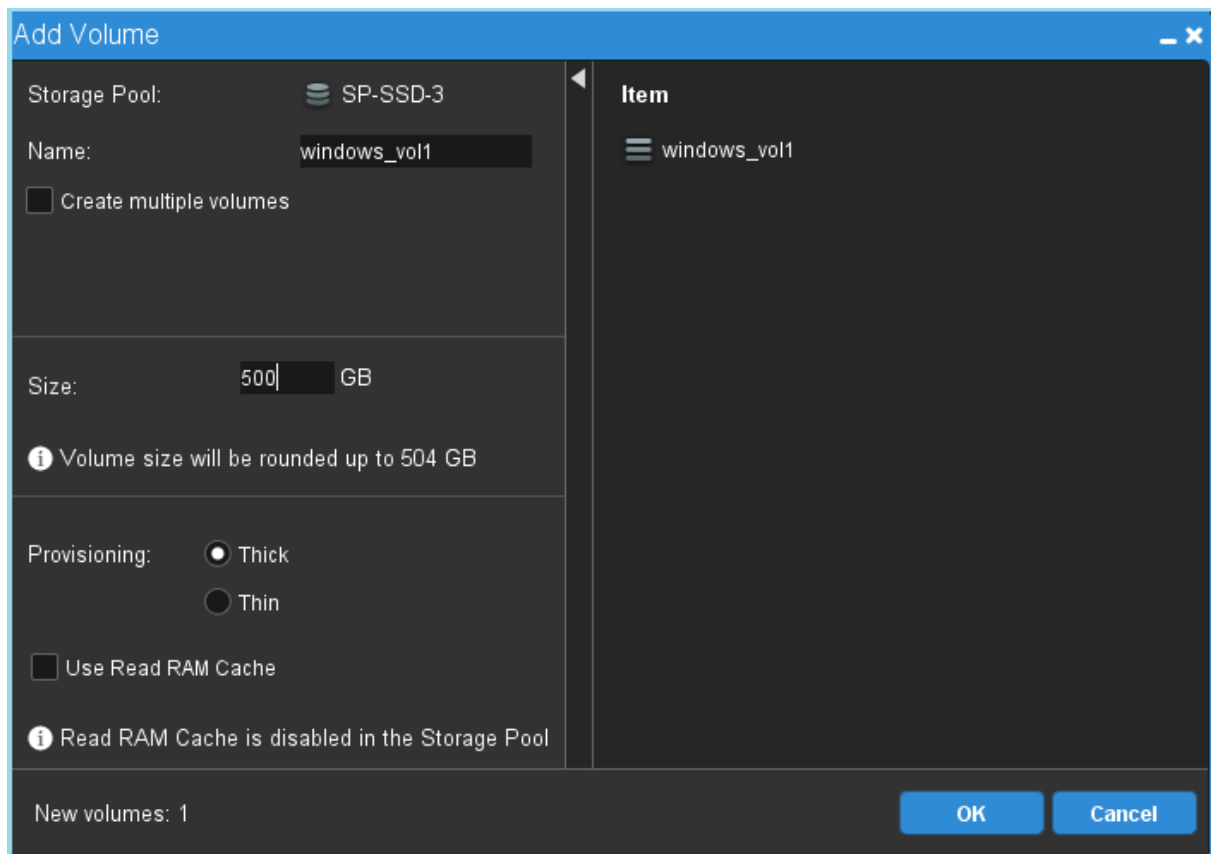
For more information about preparing your environment, see [Prepare your environment](#).

2.2.3 Present VxFlex storage volumes to the Hyper-V Host using VxFlex OS UI

1. Log in to the **VxFlex OS UI** using the admin credentials.
2. Click **Frontend > Volumes**.

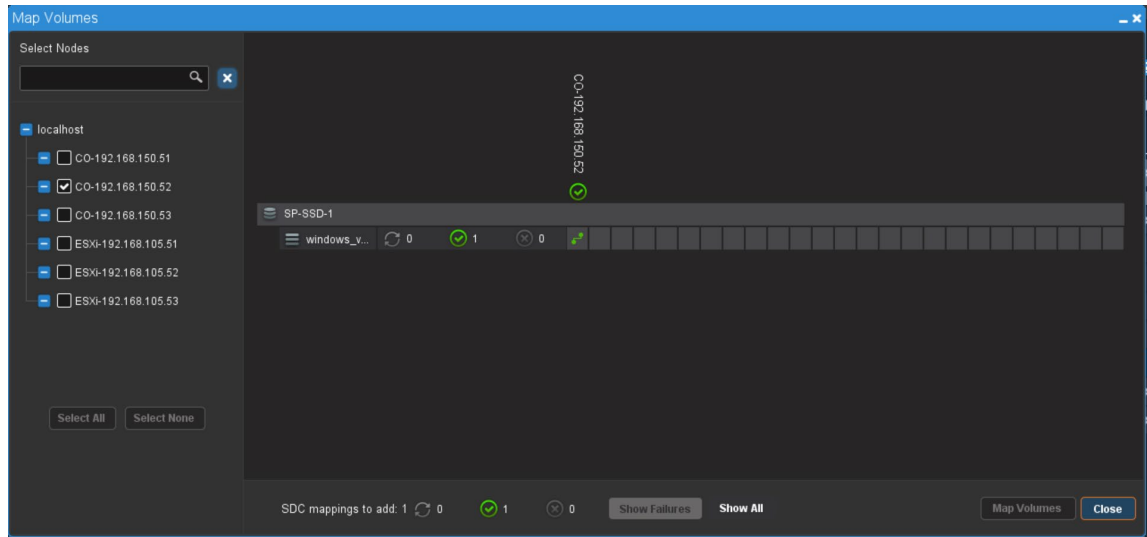


3. Right-click a storage pool of your choice and select **Add volume**.



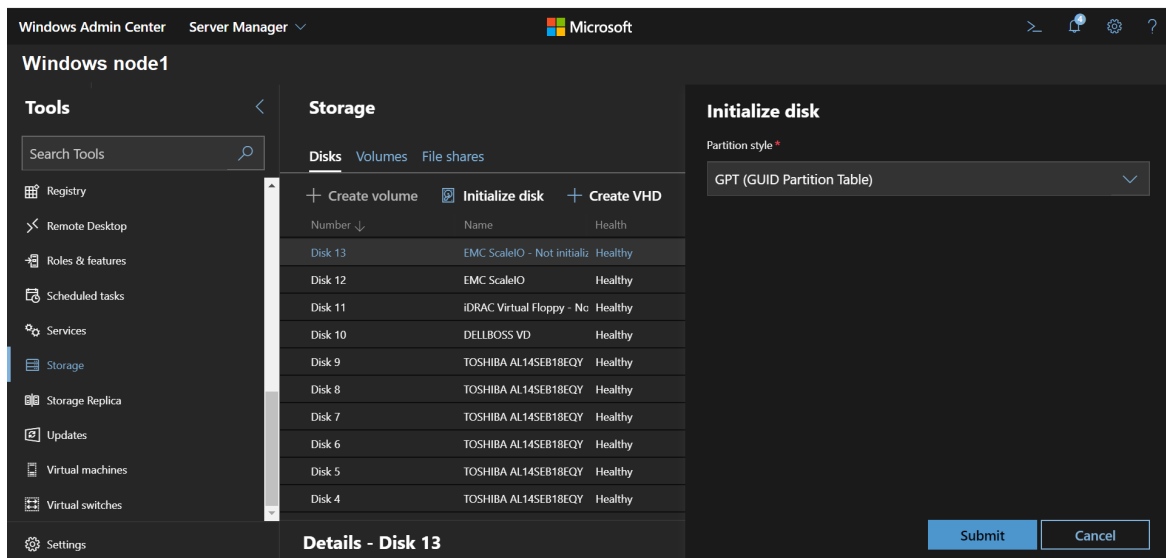
4. Provide all the necessary details for the new volume:
 - Name
 - Size in GB
 - Provisioning
 - Use Read RAM Cache (if needed)
5. Select **OK** to proceed.
6. Right-click the volume that has been created (windows_vol1 as shown in example here) and select **Map**.

- In the Select Nodes panel, select one or more SDCs to which you want to map the volume to and then select **Map Volumes**.

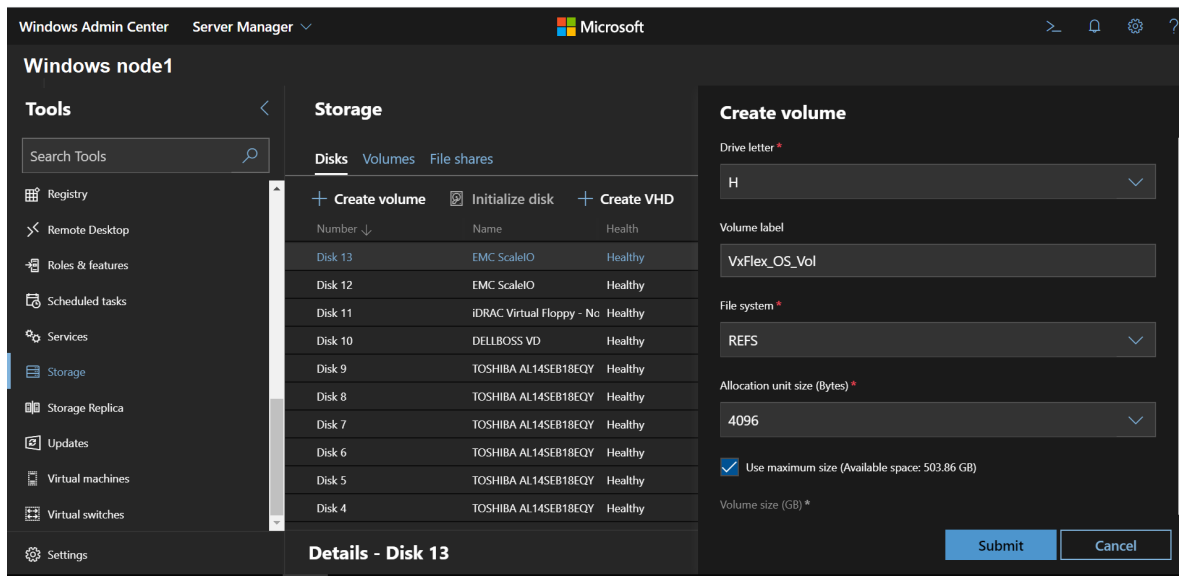


2.2.4 Initialize and create the volume using WAC

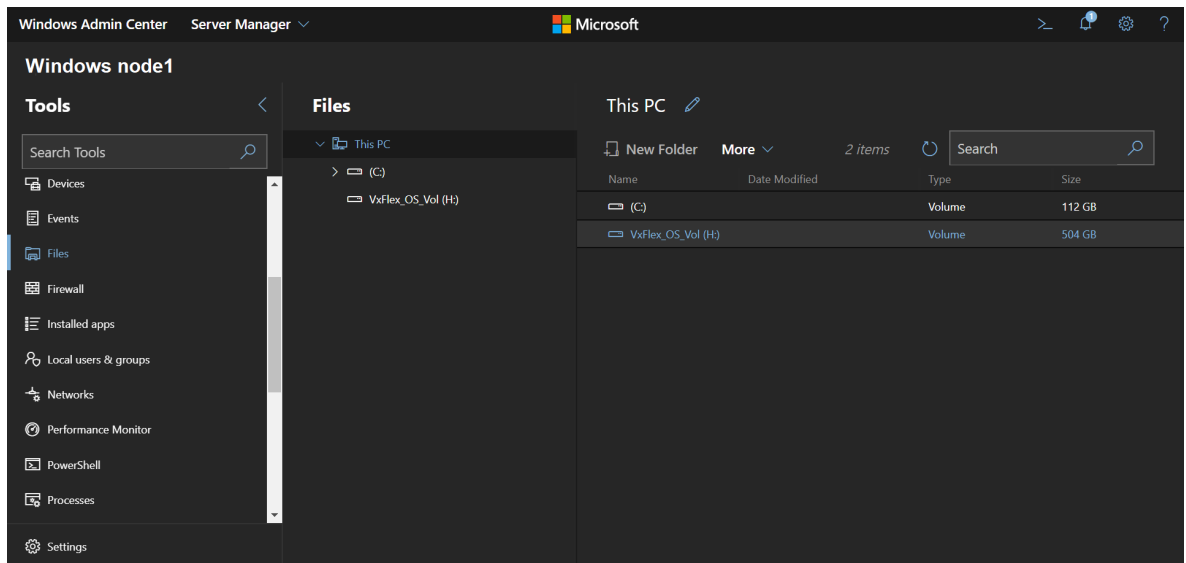
- Click the newly added server.
- Click **Storage** on the left navigation pane, then select the newly created (uninitialized) disk.
- Click **Initialize disk** under **Disks**.
- Select **Partition style** from **drop-down** list and click **Submit**.



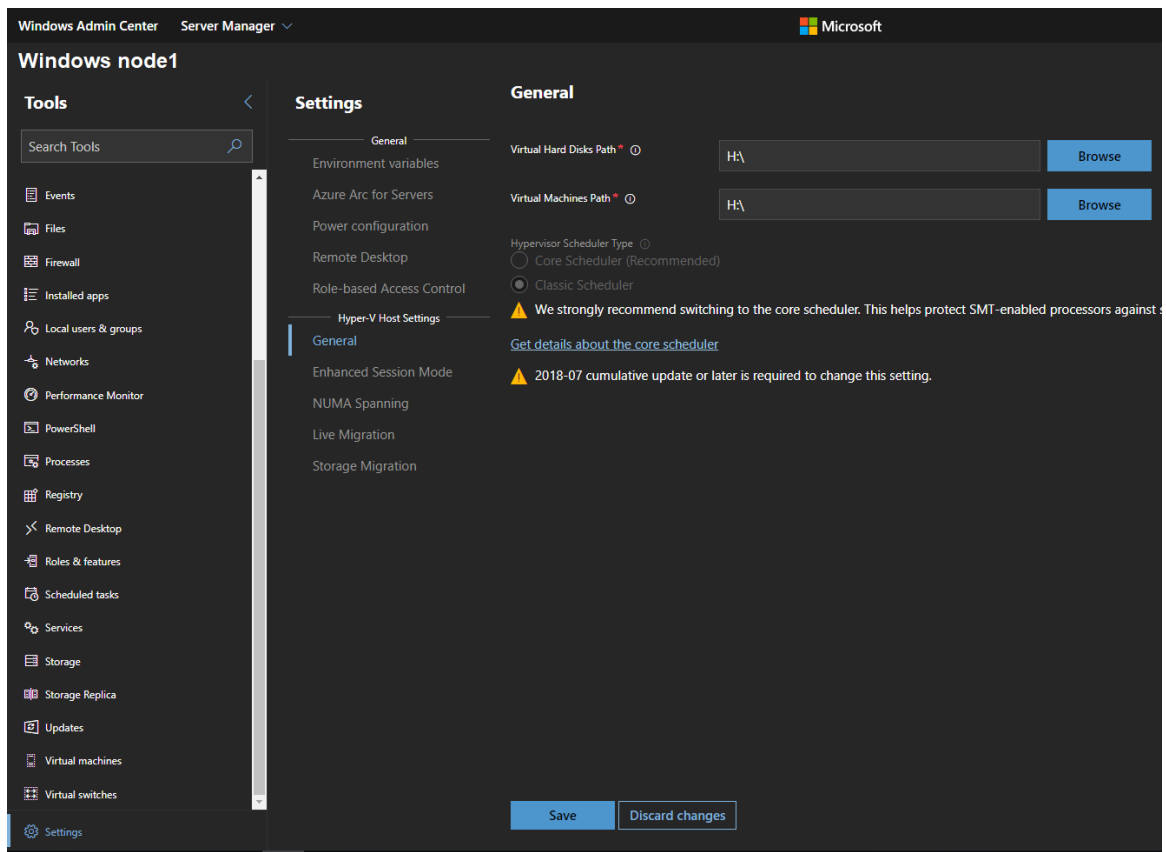
- Click **+ Create volume** under **Disks**
- Enter all the necessary details and click **Submit** to create the VxFlex OS storage volume.



7. Click **Files** on the left navigation pane.
8. Verify that the **VxFlex_OS_Vol(H:)** volume that has been created is now visible in the list under **This PC**.



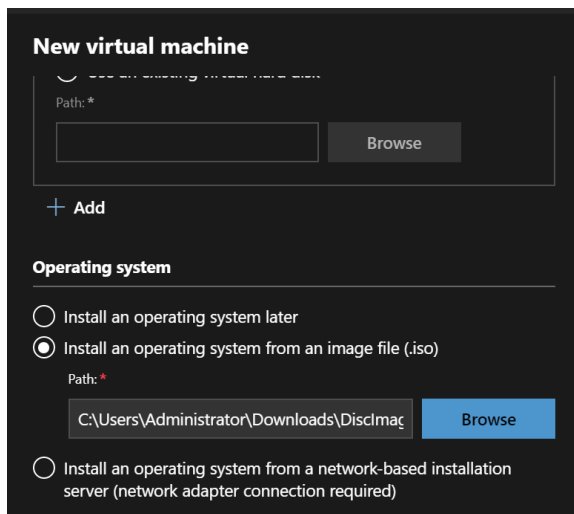
9. Click **Settings** in the left navigation pane at the bottom.
10. Select **General** under Hyper-V Host Settings.
11. Click **Browse** and select the path for both **Virtual Hard Disks Path** and **Virtual Machines Path** to the newly created volume (VxFlex_OS_Vol(H:\)) as shown in in example here).



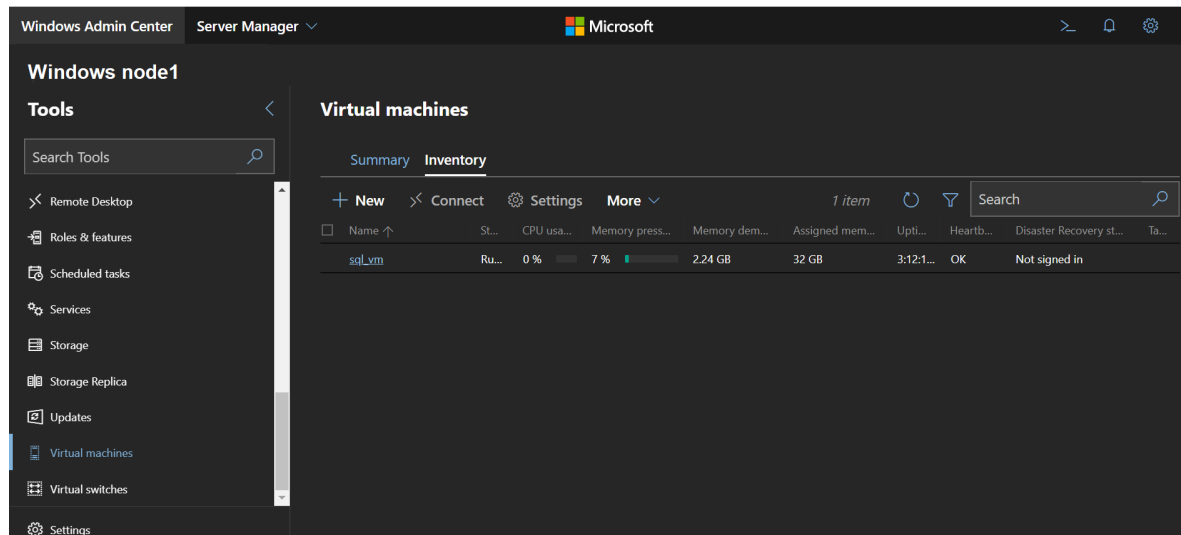
12. Click **OK** and then **Save**.

2.2.5 Configure Hyper-V instances and install an OS using WAC

1. Click **Virtual machines** from the left navigation pane.
2. Select **Inventory** and select **+ New** from the list.
3. Provide the necessary details for name, virtual processors, memory, network, and storage. The user is presented with three options to install the OS. In our scenario, the second option has been chosen.

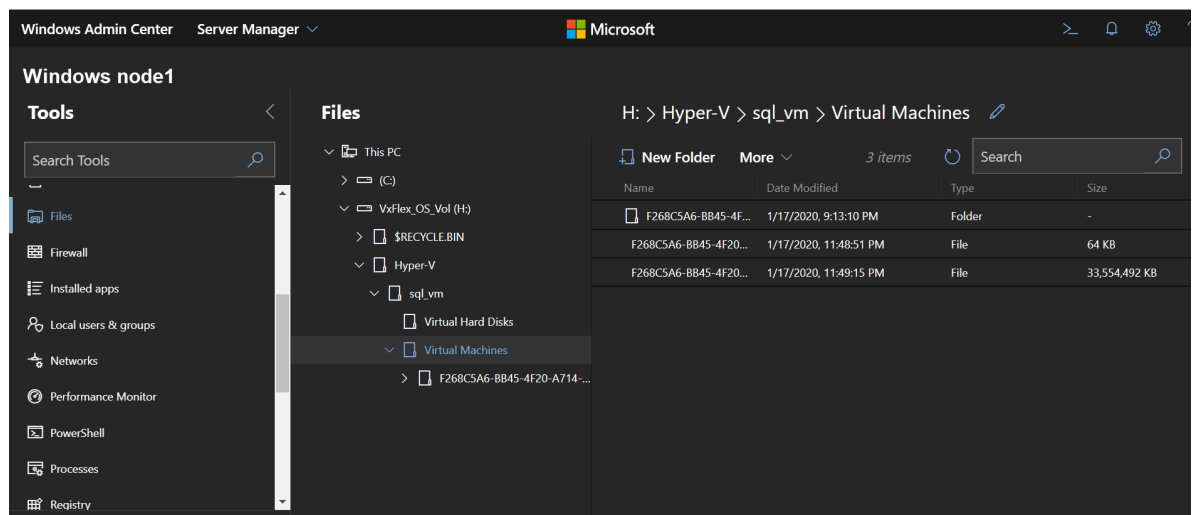


4. Ensure that the ISO image is present on the Windows server host then click **Browse**, choose the OS image and select **OK** and click **Create**. For more information about how to create a VM, see [Create a new virtual-machine](#).
5. Upon successful creation of VM, the following screen is displayed:



2.2.6 Verify VxFlex OS storage volume

1. Click **Files** from the left navigation pane.
2. Navigate to **This PC > VxFlex_OS_Vol(H)>Hyper-V>sql_vm>Virtual Machines** and verify that the storage volume is currently used by the Windows VM.



A Technical support and resources

A.1 Related resources

Note: Few links may require registration process.

- [Create a new virtual-machine](#)
- [Prepare your environment](#)
- [Install Windows Admin Center](#)
- [Windows Admin Center Overview](#)
- [Preparing Windows images for use with VxFlex Manager](#)
- [VxFlex Appliance Deployment guide](#)
- [VxFlex integrated rack - Field Logical Build guide](#)

A.2 Additional resources

- [Dell EMC Online Support site](#)
- [Storage technical documents and videos](#)