

Installing Cisco UCS Director on Microsoft Hyper-V

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for Microsoft Hyper-V

can be deployed in a Hyper-V environment.



Note

- We recommend to deploy on the Hyper-V managed host, rather than the SCVMM console.
- The appliance and bootup logs are located in the /var/log/ucsd directory. install.log contains the one time appliance installation logs. bootup.log contains the appliance boot-up sequence information, such as startup messages for the database and infrastructure services.

Prerequisites

Before you install Cisco UCS Director for Microsoft Hyper-V, complete the following steps:

- Install Microsoft System Center Virtual Machine Manager (SCVMM).
 If you only have a Hyper-V environment, must be deployed on a Hyper-V host.
- Configure an SCVMM user account with administrator privileges for Cisco UCS Director.
- Download the Cisco UCS Director software from the Download Software area on Cisco.com.
- Extract the Cisco UCS Director VHD and db files from the digitally signed zip file to your local disk. See Digitally Signed Images.

Minimum System Requirements for a Single Node Setup on Microsoft Hyper-V

The minimum system requirements depend upon how many VMs you plan to manage. We recommend deploying a VM on a local datastore with a minimum of 25 Mbps I/O speed, or on an external datastore with a minimum of 50 Mbps I/O speed.



- For optimal performance, reserve additional CPU and memory resources. We recommend that you reserve the following resources in addition to the minimum system requirements listed in the tables below: CPU resources of more than or equal to 3000MHz, and memory reservation of more than or equal to 1 GB. You should add more vCPUs if the VM's CPU usage is consistently high.
- The minimum memory required for the inframgr service is automatically set during deployment. However, if you want to modify the memory for the inframgr service, edit the inframgr.env file available in the following location:

/opt/infra/bin/inframgr.env

In this file, update the "MEMORY_MAX" parameter to the value you want. After changing this parameter, restart the service for the changes to take effect. The default memory settings are MEMORY_MIN=6144 m and MEMORY_MAX=6144 m.

For information about minimum system requirements for a multi-node setup, see Cisco UCS Director Multi-Node Installation and Configuration Guide.

Up to 2,000 VMs

If you plan to manage up to 2,000 VMs, the environment must meet at least the minimum system requirements in the following table.

Table 1: Minimum System Requirements for up to 2,000 VMs

Element	Minimum Supported Requirement
vCPU	4
Memory	16 GB
Primary Disk (Hard Disk 1)	100 GB
Secondary Disk (Hard Disk 2)	100 GB
Disk Read I/O Bandwidth	4 MBps
Disk Write I/O Bandwidth	4 MBps

Up to 5,000 VMs

If you plan to manage no more than 5,000 VMs, the environment must meet at least the minimum system requirements and recommended configurations in the following tables.

Table 2: Minimum System Requirements for up to 5,000 VMs

Element	Minimum Supported Requirement
vCPU	8
Memory	20 GB
Primary Disk (Hard Disk 1)	100 GB
Secondary Disk (Hard Disk 2)	100 GB
Disk Read I/O Bandwidth	4 MBps
Disk Write I/O Bandwidth	4 MBps

You must also edit the **MEMORY_MIN** and **MEMORY_MAX** setting in /opt/infra/bin/inframgr.env as follows:

MEMORY_MIN=8192m

MEMORY_MAX=8192m

Edit the following parameters in the /etc/my.cnf file.

Table 3: Minimum Database Configuration

Element	Minimum Supported Configuration
thread_cache_size	100
max_connections	1000
innodb_lock_wait_timeout	100
query_cache_size	128 MB
innodb_buffer_pool_size	2 GB
max_connect_errors	10000
connect_timeout	20
innodb_read_io_threads	64
innodb_write_io_threads	64



Note

After updating and saving the /etc/my.cnf file, you need to restart the database.

Installing on Microsoft Hyper-V

Before you begin

- System administrator privileges for Hyper-V are required.
- Microsoft Windows 2012 or Windows 2012 R2 are required to deploy this release of .

Step 1	Log into the Hyper-V host.	
Step 2	Choose Start > Administrative Tools to open Hyper-V Manager.	
Step 3	In the Hyper-V Manager dialog box, choose Action > New Virtual Machine .	
Step 4	In the Before You Begin pane, click Next .	
Step 5	In the Name and Location pane, do the following:	
•	a) In the Name field, edit the default VM name.	
	b) Check the Store the virtual machine in a different location checkbox and specify the alternate location.c) Click Next.	
Step 6	In the Select Generation pane, choose Generation1.	
	With Generation1 , this virtual machine provides the same virtual hardware to the virtual machine as in previous versions of Hyper-V.	
Step 7	In the Assign Memory pane, enter the amount of memory to allocate to this VM (16 GB minimum) and click Next .	
Step 8	In the Configure Networking pane, click Next to accept the default option in the Connection field.	
	The default option is Not Connected .	
Step 9	In the Connect Virtual Hard Disk pane, choose Attach a virtual disk later and click Next.	
Step 10	In the Completing the New Virtual Machine Wizard pane, verify the settings and click Finish.	
Step 11	In the Navigation pane, right-click the new VM and choose Settings .	
Step 12	In the Navigation pane, choose IDE Controller 0.	
Step 13	In the IDE Controller pane, choose Hard Drive and click Add.	
	Note You need to add two hard drives since we have two VHD files separately for OS and application, and for database.	
Step 14	In the Hard Drive pane, choose the downloaded .vhd file and click OK .	
Step 15	Inspect the virtual hard drive properties.	
Step 16	In the Navigation pane, choose Memory.	
Step 17	In the Memory pane, enter the recommended value (minimum 16 GB).	
Step 18	In the Navigation pane, choose Processor.	
Step 19	In the Processor pane, enter the recommended value (4 vCPU).	
Step 20	Remove the network adapter that was created when you created the new VM.	

In the Navigation pane, choose the network adapter.

In the Navigation pane, choose Add Hardware.

In the Add Hardware pane, choose Network Adapter and click OK.

Step 21

Step 22

Step 23

- Step 24 In the Network Adapter pane, in the Network field, choose your network and click OK.
- Verify that you have allocated sufficient vCPU and Memory resources. For the minimum resource requirements, see Minimum System Requirements for a Single Node Setup on Microsoft Hyper-V, on page 2.
- **Step 26** Power on the VM.

Optionally you can configure network properties from the shelladmin.

By default, this version of Microsoft Hyper-V uses DHCP for address allocation. If you want to use a static IP address instead of DHCP, you can change this configuration through ShellAdmin.

- **Step 27** After the appliance has booted up, copy and paste the IP address that is displayed into a supported web browser to access the **Login** page.
- Step 28 At the login prompt, enter admin for username and admin for the password to log into .

Note We recommend that you change the default admin password after this initial login.

What to do next

Update your license.

Installing on Microsoft Hyper-V