Cisco IMC Supervisor Installation Guide for VMware vSphere and Microsoft Hyper-V, Release 2.1

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Preface

This preface contains the following sections:

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- Conventions, page v
- Documentation Feedback, page vii
- Obtaining Documentation and Submitting a Service Request, page vii

Audience

This guide is intended primarily for data center administrators who use and who have responsibilities and expertise in one or more of the following:

- Server administration
- Storage administration
- Network administration
- Network security
- Virtualization and virtual machines

Conventions

Text Type	Indication
GUI elements	GUI elements such as tab titles, area names, and field labels appear in **this font**. Main titles such as window, dialog box, and wizard titles appear in **this font**.
Document titles	Document titles appear in *this font*.
TUI elements	In a Text-based User Interface, text the system displays appears in `this font`.

Text Type	Indication
System output	Terminal sessions and information that the system displays appear in `this font`.
CLI commands	CLI command keywords appear in **this font**. Variables in a CLI command appear in *this font*.
[ ]	Elements in square brackets are optional.
{x | y | z}	Required alternative keywords are grouped in braces and separated by vertical bars.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
< >	Nonprinting characters such as passwords are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the document.

Caution Means *reader be careful*. In this situation, you might perform an action that could result in equipment damage or loss of data.

Tip Means *the following information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information, similar to a Timesaver.

Timesaver Means *the described action saves time*. You can save time by performing the action described in the paragraph.

Warning IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

SAVE THESE INSTRUCTIONS

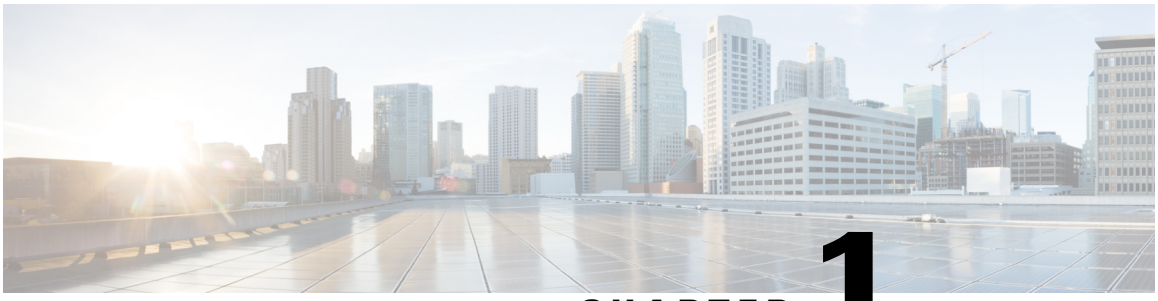
Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to ucs-director-docfeedback@cisco.com. We appreciate your feedback.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly What's New in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation.

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.



CHAPTER 1

Overview

This chapter contains the following topics:

- About Cisco IMC Supervisor, page 1
- Minimum System Requirements, page 2
- Cisco IMC Supervisor Deployment and Scalability, page 4
- Supported Firewall Ports, page 5
- About Licenses, page 6

About Cisco IMC Supervisor

Cisco IMC Supervisor is a management system that allows you to manage rack-mount servers on a large scale. It allows you to create groups of rack-mount servers for monitoring and inventory purposes.

You can use Cisco IMC Supervisor to perform the following tasks:

- Logically grouping servers and viewing summary per group
- Collecting inventory for the managed servers
- Monitoring servers and groups
- Managing firmware including firmware download, upgrade, and activation
- Provide Northbound REST APIs to discover, monitor and manage servers and perform firmware upgrades programmatically.
- Managing standalone server actions including power control, LED control, log collection, KVM launch, and CIMC UI launch.
- Restricting access using Role Based Access Control (RBAC)
- Configuring email alerts
- Configuring server properties using policies and profiles
- Defining schedules to defer tasks such as firmware updates or server discovery
- Diagnosing server hardware issues using UCS Server Configuration Utility

- Cisco Smart Call Home provides proactive diagnostics, alerts, and remediation recommendations
- Managing Cisco UCS C3260 Dense Storage Rack Server
- Configuring the DNS server and other network settings through the Network Configuration policy
- Assigning physical drives to server through the Zoning policy
- Setting up multiple diagnostic images across different geographic locations
- Customizing email rules to include individual servers within a group

Minimum System Requirements

Supported Server Models

- UCS C-220 M3 and M4
- UCS C-240 M3 and M4
- UCS C-460 M4
- UCS C-22 M3
- UCS C-24 M3
- UCS C-420 M3
- UCS C3160
- UCS C3260
- UCS EN120E M2
- UCS EN120S M2
- UCS E-140S M2
- UCS E-160D M2
- UCS E-180D M2
- UCS E-140S M1
- UCS E-140D M1
- UCS E-160D M1
- UCS E-140DP M1
- UCS E-160DP M1

Important Cisco IMC Supervisor supports up to 1000 UCS C-Series and E-Series servers. For more information about scalability, see Cisco IMC Supervisor Deployment and Scalability, on page 4.

Minimum Firmware Versions

Servers	Minimum Firmware Version
UCS C-series Servers	1.5(4)
UCS E-series Servers	2.3.1
UCS C3260 Servers	2.0(13e) onwards

Supported PCiE Cards

- Cisco UCS VIC 1225
- Cisco UCS VIC 1225T
- Cisco UCS VIC 1227
- Cisco UCS VIC 1227T
- Cisco UCS VIC 1385
- Cisco UCS VIC 1387

Supported Hypervisor versions

- ESXi 5.1
- ESXi 5.5
- ESXi 6.0
- Windows 2008 R2 with Hyper-V Manager version 6.1.7
- Windows 2012 R2 with Hyper-V Manager version 6.3.9

Minimum Hardware Requirements

The Cisco IMC Supervisor environment must meet at least the minimum system requirements listed in the following table.

Element	Minimum Supported Requirement
vCPU	4
Memory	12 GB
Hard Disk	100 GB
Minimum write speed for storage	10 MB/sec

Cisco IMC Supervisor Deployment and Scalability

Configuring Inframgr properties

1 Modify the following properties and values from the `/opt/infra/inframgr/service.properties` file:

- threadpool.maxthreads.inventory=50
- cimc.inventory.max.thread.pool.size=100

2 Go to Shell Admin and restart the services by stopping and starting the Cisco IMC Supervisor services.

Deployment Recommendations

Cisco IMC Supervisor recommends the following based on the scale of rack servers you manage:

Element	Small Deployment (1 - 250 rack servers)	Medium Deployment (251 - 500 rack servers)	Large Deployment (501 - 1000 rack servers)
vCPUs	4	4	8
CPU Reservation	10000 MHz	10000 MHz	10000 MHz
Cisco IMC Supervisor VM Memory Allocation	12 GB	16 GB	20 GB
Cisco IMC Supervisor VM Memory Reservation	12 GB	16 GB	20 GB
Inframgr Memory Allocation	6 GB	8 GB	10 GB
Mysql InnoDB BufferPool Config	1GB	2 GB	3 GB
Disk write Speed (Direct IO)	10 MB/sec	10 MB/sec	15 MB/sec

Allocating Inframgr Memory

1 Go to `/opt/infra/inframgr/` and open the `run.sh` file using vi editor.

2 Navigate to -Xms6144m -Xmx6144m and replace it with -Xms10240m -Xmx10240m.

Xms stands for minimum and Xmx stands for maximum. This is where inframgr memory is allocated. For example, if you are managing 1000 rack servers then inframgr memory allocation must be set to 10 GB.

Note Inframgr memory allocation must be increased only if the memory allocated to the VM is increased. If not, this process may crash due to high load. Hence, increase memory for the IMCS VM using vCenter UI, reserve the whole memory, and then change this parameter.

3 Go to Shell Admin and restart the services by stopping and starting the Cisco IMC Supervisor services.

Configuring Mysql Buffer Pool

InnoDB buffer pool is the internal memory used by the mysqld process inside the Cisco IMC Supervisor VM. You must increase the memory based on the load. To modify this pool size, perform the following procedure:

1 Go to `/etc/` and open the `my.cnf` file.

2 Navigate to the innodb_buffer_pool_size parameter.

For example, if you are managing 1000 servers, then the value must be innodb_buffer_pool_size=3072M.

3 Go to Shell Admin and restart the services and database by stopping and starting the Cisco IMC Supervisor services and database.

Determining Direct Disk Input/Output Speed

1 After Cisco IMC Supervisor VM is deployed, go to the command prompt and enter the dd if=/dev/zero of=test.img bs=4096 count=256000 oflag=direct command. The following output for example, is displayed:

```
[root@localhost ~]# dd if=/dev/zero of=test.img bs=4096 count=256000 oflag=direct
256000+0 records in
256000+0 records out
1048576000 bytes (1.0 GB) copied, 44.0809 s, 23.8 MB/s
```

Note In the above example, 23.8 MB/s is the disk input/output speed.

Supported Firewall Ports

The list of applicable services and ports are listed in the following table.

Service	Port Number
Servers	Minimum Firmware Version
SSH Port	22
HTTP (S)	80/443
DHCP	UDP 67 & 68
Active Directory	TCP / UDP 389/636 & TCP 3268/3269
DNS	TCP/UDP 53

Service	Port Number
NTP	TCP/UDP 123
MySQL	3306
Cisco IMC Supervisor ↔ IMC Connectivity	TCP 80/443

Note If these ports and protocols are blocked by a firewall, you may experience timeouts or internal error when you are upgrading Cisco IMC Supervisor.

About Licenses

Cisco IMC Supervisor requires you to have the following valid licenses:

- A Cisco IMC Supervisor base license.
- A Cisco IMC Supervisor bulk endpoint enablement license that you install after the Cisco IMC Supervisor base license.
- A Cisco IMC Supervisor advanced license. You can add, edit, and delete policies and profiles with the base license but you cannot apply a policy or a profile to a server without the advanced license. An error occurs if this license is unavailable when you apply a policy.
- A default embedded Cisco IMC Supervisor evaluation license. The evaluation license is generated automatically when the end user installs Cisco IMC Supervisor and all the services start for the first time. It is applicable for 50 servers.

Important

- If you are using an evaluation license for Cisco IMC Supervisor, note that when this license expires (90 days from the date the license is generated), retrieving inventory and system health information, such as faults, will not work. You will not be able to refresh system data, or even add new accounts. At that point, you must install a perpetual license to use all features of Cisco IMC Supervisor.
- If the number of servers you have added during evaluation exceeds the number of server license purchased, inventory collection will go through fine for the servers already added during evaluation, but will prevent you from adding new servers. For example, if you have added about 100 servers during evaluation and you have purchased a 25 server license, once the evaluation license expires, you will be unable to add new servers. Also, you will be unable to perform configuration related operations without an advanced license.
- While discovering and importing servers, if the number of imported servers exceed the license utilization limit, Cisco IMC Supervisor imports servers only until the limit and displays an error for additional servers.

The process for obtaining and installing the licenses is the same. For obtaining a license, perform the following procedures:

1. Before you install Cisco IMC Supervisor, generate the Cisco IMC Supervisor license key and claim a certificate (Product Access Key).
2. Register the Product Access Key (PAK) on the Cisco software license site, as described in Fulfilling the Product Access Key, on page 7.
3. After you install Cisco IMC Supervisor, update the license as described in Updating the License, on page 25.
4. After the license has been validated, you can start to use Cisco IMC Supervisor.

For various other licensing tasks you can perform, see Licensing Tasks, on page 8.

Fulfilling the Product Access Key

Perform this procedure to register the Product Access Key (PAK) on the Cisco software license site.

Before You Begin

You need the PAK number.

Procedure

Step 1 Navigate to the Cisco Software License website.

Step 2 If you are directed to the Product License Registration page, you can take the training or click **Continue to Product License Registration**.

Step 3 On the Product License Registration page, click **Get New Licenses from a PAK or Token**.

Step 4 In the **Enter a Single PAK or TOKEN to Fulfill** field, enter the PAK number.

Step 5 Click **Fulfill Single PAK/TOKEN**.

Step 6 Complete the additional fields in **License Information** to register your PAK:

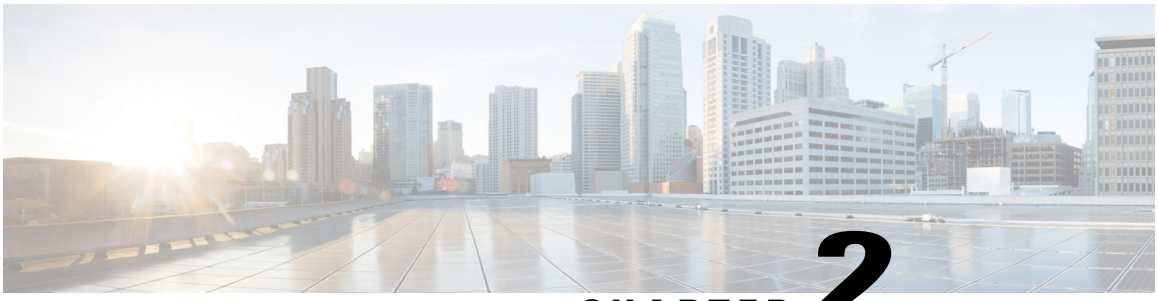
Field	Description
Organization Name	The organization name.
Site Contact Name	The site contact name.
Street Address	The street address of the organization.
City/Town	The city or town.
State/Province	The state or province.
Zip/Postal Code	The zip code or postal code.
Country	The country name.

Step 7 Click **Issue Key**.
The features for your license appear, and an email with the Digital License Agreement and a zipped license file is sent to the email address you provided.

Licensing Tasks

You can use the License menu to view the license details and the usage of resources. The following licensing procedures are available from **Administration** > **License** menu.

Tab	Description
License Keys	This tab displays the details of the license used in Cisco IMC Supervisor. You can also use this tab to upgrade the license. You can upgrade the license when a new version of Cisco IMC Supervisor is available,
License Utilization	This tab shows the licenses in use and details about each license, including license limit, available quantity, status, and remarks. License audits can also be run from this page.
Resource Usage Data	This tabs displays the details of the various resources used.



CHAPTER 2

Installing Cisco IMC Supervisor on VMware vSphere

- Installing Cisco IMC Supervisor on VMware vSphere, page 9
- Reserving System Resources, page 11

Installing Cisco IMC Supervisor on VMware vSphere

Before You Begin

You need administrator privileges to connect to VMware vSphere or vCenter.

Note If you do not want to use DHCP, you need the following information: IP address, subnet mask, and default gateway.

Procedure

Step 1 In the **VMware vSphere Client** login dialog box, enter your login credentials.

Step 2 Click **Login**.

Step 3 In the **Navigation** pane, choose **Data Center** for Cisco IMC Supervisor deployment.

Step 4 Choose **File** > **Deploy OVF Template**.
The **Deploy OVF Template** window appears.

Step 5 In the **Source** pane, do one of the following to choose your OVF source location:

- Browse to the location, choose the file, and click **Open**.

- Deploy from a URL on your local area network. Replace *FQDN* (Fully Qualified Domain Name) with the IP address or domain name, and click **Next**.

Step 6 In the **OVF Template Details** pane, verify the details and click **Next**.

Step 7 In the **End User License Agreement** pane, read the license agreement, and click **Accept**. Click **Next**.

Step 8 In the **Name and Location** pane, do the following:

a) (Optional) In the **Name** field, edit the VM name.

b) Choose the **Data Center** where Cisco IMC Supervisor is being deployed, and click **Next**.

Note If Data Center was chosen in a previous step, option b is not available.

Step 9 In the **Host/Cluster** pane, choose the required host, cluster, or resource pool, and click **Next**.

Step 10 In the **Datastore** pane, choose the location to store Cisco IMC Supervisor VM files, and click **Next**.

Step 11 In the **Disk Format** pane, choose one of the following radio buttons and click **Next**:

- **Thin Provisioned** format—To allocate storage on demand as data is written to disk.
- **Thick Provisioned (Lazy Zeroed)** format —To allocate storage immediately in thick format.
- **Thick Provisioned (Eager Zeroed)** format —To allocate storage in thick format. It might take longer to create disks using this option.

Step 12 In the **Network Mapping** pane, choose your network and click **Next**.

Step 13 In the **Properties** pane, enter the following information and click **Next**:

- Root Password

  Note The root password is not configured with any default value if left unspecified. You must use the shell admin credentials to enter as root.

- Shelladmin Password

  Note Shelladmin password is configured with a default value even if it is left unspecified.

- Management IP Address
- Management IP Subnet Mask
- Gateway IP Address

The management IP address and management IP subnet mask are set to 0.0.0.0 to use DHCP by default.

Step 14 In the **IP Address Allocation** pane, click **Next**.
The DHCP check box is checked by default.

Step 15 In the **Ready to Complete** pane, verify the options selected, and click **Finish**.

Step 16 Make sure you have sufficient vCPU and memory to power on the VM.

Step 17 Power on the VM.

Step 18 When the appliance starts up, do the following when you are prompted to configure a static IP:

- If you want to use DHCP, enter n to ensure that IP addresses are assigned automatically.
- **Note** Even though you are prompted to select IPV4 or IPV6, IPV6 is not yet supported by Cisco IMC Supervisor.

If you want to use static IP address, enter y and then you will be prompted to select IPV4 or IPV6. Enter V4 to configure IPV4 and then enter the following information:

- IP address
- Gateway
- Netmask
- DNS server

Note Currently, only IPv4 is supported for configuring static IP addresses.

Step 19 When you are prompted to continue with the configuration, enter y.
Wait for the appliance to boot up before you continue.

Step 20 After the appliance has booted up, transfer the Cisco IMC Supervisor IP address (from the IP address that is shown) into a supported web browser to access the **Login** page.

Step 21 On the **Login** page, enter `admin` as the username and `admin` for the login password.

Note Change your admin password after this initial login.

What to Do Next

Update your license.

Reserving System Resources

For optimal performance, we recommend reserving extra system resources for Cisco IMC Supervisor beyond the minimum system requirements.

Note For more information about how to reserve system resources, see the VMWare documentation.

Procedure

Step 1 Log into VMware vCenter.

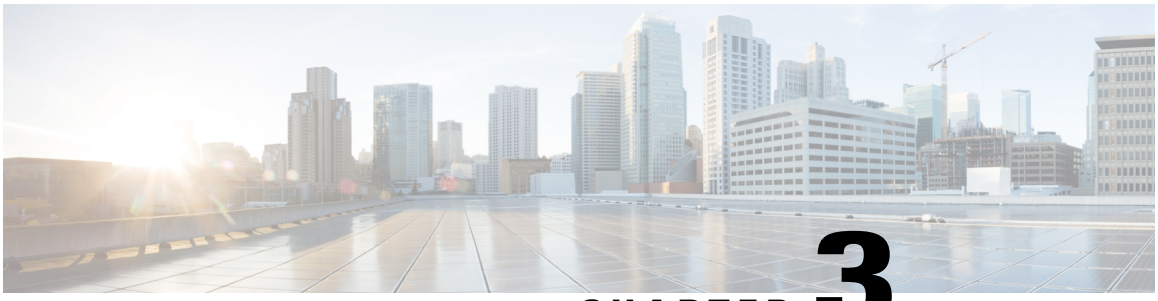
Step 2 Choose the VM for Cisco IMC Supervisor.

Step 3 Shut down the VM.

Step 4 In VMware vCenter, click the **Resource Allocation** tab to view the current resource allocations, and click **Edit.**

Step 5 In the **Virtual Machine Properties** pane, edit resource allocations by choosing a resource and entering the new values.

Step 6 Verify that the new resource allocations have been made.



CHAPTER 3

Installing Cisco IMC Supervisor on Microsoft Hyper-V

- About Cisco IMC Supervisor for Hyper-V, page 13
- Prerequisites, page 13
- Installing Cisco IMC Supervisor on Microsoft Hyper-V for Windows 2012 R2, page 14
- Installing Cisco IMC Supervisor on Microsoft Hyper-V 2008 R2, page 16
- Configuring the Network Interface using Shelladmin, page 18

About Cisco IMC Supervisor for Hyper-V

Deploying Cisco IMC Supervisor in a Hyper-V environment is supported.

Note We recommend deploying Cisco IMC Supervisor on the Hyper-V Manager host, rather than the SCVMM console.

Prerequisites

- Installation of Hyper-V Manager
- Configured system administrator privileges
- Cisco IMC Supervisor installed on Hyper-V host

Installing Cisco IMC Supervisor on Microsoft Hyper-V for Windows 2012 R2

Before You Begin

- System administrator privileges for Hyper-V are required.
- Windows 2012 R2 with Hyper-V Manager version 6.3.9

Note

- You will be creating a standard VM with the wizard. Accept the defaults and at the end you will be editing the VM.
- By default, this version of Microsoft Hyper-V uses DHCP. If you want to use a static IP address instead of DHCP, you can change this configuration through the shelladmin.

Procedure

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 **New** > **Virtual Machine**.

Step 4 In the **Before You Begin** pane, click **Next**.

Step 5 In the **Name and Location** pane, in the **Name** field, edit the VM name and click **Next**.

Step 6 In the **Specify Name and Location** pane, check the **Store the virtual machine in a different location** checkbox and specify the alternate location or the virtual machine is stored in the default folder.

Step 7 Choose **Generation 1** for this virtual machine.

Step 8 Click **Next**.

Step 9 In the **Assign Memory** pane, enter the amount of memory to allocate to this VM (recommended12 GB) and click **Next**.

Step 10 In the **Configure Networking** pane, do not make any changes to the settings specified for the **Connection** field and click **Next**.

Step 11 In the **Connect Virtual Hard Disk** pane, select use an existing virtual hard disk or attach a virtual hard disk later and click **Next**.

Step 12 In the **Completing the New Virtual Machine Wizard** pane, verify the settings and click **Finish**.

Step 13 In the **Navigation** pane, right-click the new VM and choose **Settings**.

Step 14 In the **Navigation** pane, choose **IDE Controller 0**.

Step 15 In the **IDE Controller** pane, choose **Hard Drive** and click **Add.**

Step 16 In the **Hard Drive** pane, choose the downloaded Cisco IMC Supervisor .vhd file and click **OK.**

Step 17 Review the virtual hard drive properties.

Step 18 In the **Navigation** pane, choose **Memory.**

Step 19 In the **Memory** pane, enter the recommended value (minimum 12 GB).

Step 20 In the **Navigation** pane, choose **Processor**.

Step 21 In the **Processor** pane, enter the recommended value (4 vCPU).

Step 22 Remove the network adapter that was created when you created the new VM.

Step 23 In the **Navigation** pane, choose **Add Hardware**.

Step 24 In the **Add Hardware** pane, choose **Legacy Network Adapter** or **Network Adapter** and click **Add**.

Step 25 In the **Navigation** pane, choose the legacy network adapter.

Step 26 In the **Legacy Network Adapter** pane, in the **Network** field, choose **Local Area Connection - Virtual Network** and click **Apply**.

Step 27 Verify that you have sufficient vCPU and Memory resources allocated.
For the minimum system requirements, see Minimum System Requirements, on page 2.

Step 28 Power on the VM.

Step 29 Optionally, you can configure network properties from the shelladmin. For more information about configuring network properties, see Configuring the Network Interface using Shelladmin, on page 18.

Step 30 After the appliance restarts, copy and paste the Cisco IMC Supervisor IP address that is displayed into a supported web browser to access the **Login** page.

Step 31 At the login prompt, enter `admin` for username and `admin` for the password to log into Cisco IMC Supervisor.

Note Change your administrator password after this initial login.

What to Do Next

Update your license.

Installing Cisco IMC Supervisor on Microsoft Hyper-V 2008 R2

Before You Begin

System administrator privileges for Hyper-V are required.

Note If you do not want to use DHCP, you need the following information: IP address, subnet mask, and default gateway.

Procedure

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 **New** > **Virtual Machine**.

Step 4 In the **Before You Begin** pane, choose the custom configuration option and click **Next**.

Step 5 In the **Specify Name and Location** pane, in the **Name** field, edit the VM name and click **Next**.

Step 6 In the **Specify Name and Location** pane, check the **Store the virtual machine in a different location** checkbox and specify the alternate location or the virtual machine is stored in the default folder.

Step 7 Click **Next**.

Step 8 In the **Assign Memory** pane, enter the amount of memory to allocate to this VM (recommended12 GB) and click **Next**.

Step 9 In the **Configure Networking** pane, do not make any changes to the settings specified for the **Connection** field and click **Next**.

Step 10 In the **Connect Virtual Hard Disk** pane, select use an existing virtual hard disk or attach a virtual hard disk later and click **Next**.

Step 11 Click **Next**.

Step 12 In the **Completing the New Virtual Machine Wizard** pane, verify the settings and click **Finish**.

Step 13 In the **Hyper-V Manager** pane, right-click the new VM and choose **Settings**.

Step 14 In the **Navigation** pane, choose **IDE Controller 0**.

Step 15 In the **IDE Controller** pane, choose **Hard Drive** and click **Add.**

Step 16 In the **Hard Drive** pane, click **Browse**, choose the downloaded Cisco IMC Supervisor .vhd file and click **Open.**

Step 17 Click **Apply**.

Step 18 Review the virtual hard drive properties.

Step 19 In the **Navigation** pane, choose **Memory.**

Step 20 In the **Memory** pane, enter the recommended value (minimum 12 GB) and drag the **Memory weight** to **High**.

Step 21 In the **Navigation** pane, choose **Processor**.

Step 22 In the **Processor** pane, choose the recommended value (4 vCPU) and in the **Resource Control** pane, enter 100 in the **Virtual machine reserve (percentage)** field.

Step 23 In the **Navigation** pane, choose **Network Adapter**.

Step 24 Click **Remove** to remove the network adapter that was created when you created the new VM.

Step 25 In the **Navigation** pane, choose **Add Hardware**.

Step 26 In the **Add Hardware** pane, choose **Legacy Network Adapter** and click **Add**.

Step 27 In the **Legacy Network Adapter** pane, in the **Network** field, choose **Local Area Connection - Virtual Network** and click **Apply**.

Step 28 Verify that you have sufficient vCPU and Memory resources allocated.
For the minimum system requirements, see Minimum System Requirements, on page 2.

Step 29 Click **OK**.

Step 30 Power on the VM.

Step 31 Optionally, you can configure network properties from the shelladmin. For more information about configuring network properties, see Configuring the Network Interface using Shelladmin, on page 18.

Step 32 After the appliance restarts, copy and paste the Cisco IMC Supervisor IP address that is displayed into a supported web browser to access the **Login** page.

Step 33 At the login prompt, enter `admin` for username and `admin` for the password to log into Cisco IMC Supervisor.

Note Change your administrator password after this initial login.

What to Do Next

Update your license.

Configuring the Network Interface using Shelladmin

This procedure is optional.

Procedure

Step 1 Log in to the Cisco IMC Supervisor VM console with the following credentials:

a) User—shelladmin

b) Password—changeme

If you have already logged into the shelladmin and changed the default password, use your new password instead.

After you have logged in, you can choose `Change shelladmin password` to change the default password.

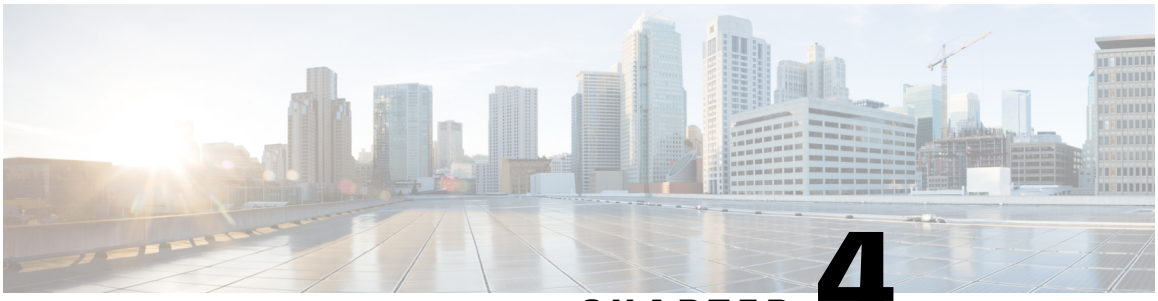
Step 2 Choose `Configure Network Interface`.

Step 3 At the `Do you want to Configure DHCP/STATIC IP [D/S]` prompt, enter one of the following choices:

- If DHCP is enabled, enter D (IP addresses are assigned automatically)
- To configure static IP, enter S, and then choose the interface you want to configure at the next prompt followed by the option to select IPv4 or IPv6. This is followed by the confirmation of the interface selected and the version of IP for which you select **Y** to continue. Then enter the following details:
  - IP address
  - Netmask
  - Gateway
  - (Optional) DNS Server 1

- (Optional) DNS Server 2

Step 4 Confirm when prompted.



CHAPTER 4

Migrating Cisco IMC Supervisor

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Migrating to Cisco IMC Supervisor 2.1

Cisco IMC Supervisor 2.1 is available as an appliance. You can upgrade from a 2.0 version to 2.1 using the **Apply Patch** option in the Shell Admin menu. For information about upgrading, see Upgrading Cisco IMC Supervisor, on page 22.

You cannot upgrade from version 1.0 or 1.1 of Cisco IMC Supervisor to version 2.1. Any version prior to 2.0 must first be migrated to 2.0 and then upgraded to 2.1. For more information about migrate paths and migrating, see Migrating Cisco IMC Supervisor, on page 21.

Important Cisco IMC Supervisor 2.1 OVF and VHD zip files are created using zip 3.x in CentOS 6.x. For Linux systems, you can extract the zip files with unzip 6.x or higher or with the latest version of the 7-Zip archiving tool. For Windows systems, you can extract the zip files with the native Extract All in Windows Explorer for Windows 10 and Windows Server 2012 R2 or with the latest versions of archiving tools such as 7-Zip or WinRAR.

Migrating Cisco IMC Supervisor

Follow the procedure given below to migrate Cisco IMC Supervisor versions prior to 2.0.

Procedure

Step 1 Set up the Cisco IMC Supervisor 2.0 appliance. For more information, see Installing Cisco IMC Supervisor on VMware vSphere, on page 9,Installing Cisco IMC Supervisor on Microsoft Hyper-V for Windows 2012 R2, on page 14, or Installing Cisco IMC Supervisor on Microsoft Hyper-V 2008 R2, on page 16.

Step 2 Login as root via the shelladmin console. Choose option 20.

Note The root password should not have any spaces.

Step 3 Run /opt/infra/migration/performMigration.sh.

Step 4 Point it to an existing appliance 1.1.x.x. All existing data will be imported.

Note The migration script will display an error if you point to a 1.0.0.x appliance.

Step 5 Test the 2.0 appliance and validate the data.

Step 6 Decommission the old 1.1.x.x appliance.

Upgrading Cisco IMC Supervisor

The following procedure allows you to upgrade Cisco IMC Supervisor.

Procedure

Step 1 Open your SSH application and enter the Cisco IMC Supervisor appliance IP address and port number.

Step 2 Log in to Cisco IMC Supervisor with your credentials.

Step 3 From the Cisco IMC Supervisor Shell Menu, choose **3) Stop Services**.

Step 4 To verify that all services are stopped, choose **2) Display Services Status**.

Step 5 (Optional) If desired, you can choose **7) Backup Database** to back up the Cisco IMC Supervisor database.

Step 6 To upgrade, choose **16) Apply Patch**.

Step 7 When prompted, enter the location of the patch. For example, *<transfer protocol type>: // username : password @ hostname|IP_address / software_location_and_name*

Note Supported transfer protocol types are FTP, HTTP, and Local File System. You can use the following examples:

- FTP (hostname) — **ftp://test:test123@test.cisco.com/opt/infra/external/uploads/imcs/<filename.zip>**
- FTP (IP address) — **ftp://test:test123@10.10.10/opt/infra/external/uploads/imcs/<filename.zip>**
- HTTP — **http://test.cisco.com/downloads/<filename.zip>**
- Local File System — file:///opt/infra/uploads/<filename.zip>

Step 8 Wait for the download and installation to complete.

Step 9 Choose **5) Stop Database** and then **6) Start the Database**.

Step 10 When prompted, choose **4) Start Services** and complete the upgrade process.

Note The upgrade process is not complete or successful until the Cisco IMC Supervisor services have started, Cisco IMC Supervisor is available, the login screen is displayed, and the admin user can log in to Cisco IMC Supervisor. All services must be started before you attempt to perform other shelladmin procedures, such as apply additional patches, take a database backup, or restore a database from a backup.

Step 11 When the upgrade is complete, choose **11) Show Version** in shelladmin to verify the current version of Cisco IMC Supervisor.

Note
- To view the status of services, choose **2) Display Services Status**.
- After you upgrade Cisco IMC Supervisor and apply a policy or profile, you will be unable to view the list of existing rack accounts in the available servers. Once the patch upgrade is complete, go to **Administration-** > **System** > **System Tasks** > **Rack Server Tasks**, select **Group Rack Server Inventory Task**, and click **Run Now**.

Supported Upgrade/Migrate Paths for Cisco IMC Supervisor

The upgrade path to Cisco IMC Supervisor, Release 2.1 depends upon your current version of Cisco IMC Supervisor. The following are the supported upgrade/migrate paths for Cisco IMC Supervisor, Release 2.1.

Note The upgrade checks for valid target paths and will upgrade only if the upgrade path from the appliance version and target version is supported.

Current Release	Direct Upgrade/Migrate Supported	Upgrade Path
1.0.0.0, 1.0.0.1	No	1.1.0.1 > 1.1.0.0 > 2.0.0.0 **Note** For upgrading Cisco IMC Supervisor from 1.0 to 1.1, see *Cisco IMC Supervisor Installation and Upgrade on VMware vSphere, Release 1.1*
2.0	Yes	2.1 .
2.0.0.1	Yes	2.1
2.0.0.2	Yes	2.1

Migrating Cisco IMC Supervisor

Follow the procedure given below to migrate Cisco IMC Supervisor versions prior to 2.0.

Procedure

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Step 2 Login as root via the shelladmin console. Choose option 20.

Note The root password should not have any spaces.

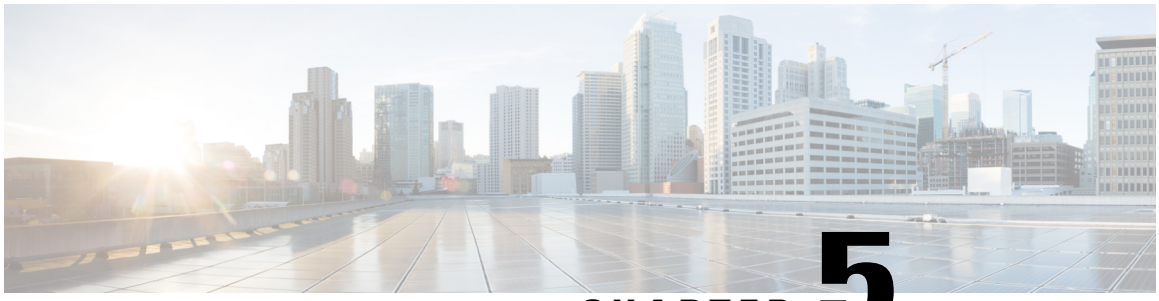
Step 3 Run /opt/infra/migration/performMigration.sh.

Step 4 Point it to an existing appliance 1.1.x.x. All existing data will be imported.

Note The migration script will display an error if you point to a 1.0.0.x appliance.

Step 5 Test the 2.0 appliance and validate the data.

Step 6 Decommission the old 1.1.x.x appliance.



CHAPTER 5

Post-Installation Tasks

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Changing the Default Password

Procedure

Step 1 From the menu choose **Administration** > **Users**.

Step 2 Click the **Login Users** tab.

Step 3 Choose **admin** from the list of Login Users.

Step 4 Click **Change Password**.

Step 5 In the **Change Password** dialog box, enter the new password and confirm it.

Step 6 Click **Save**.

Updating the License

You must perform the following procedure to update the license before you start using Cisco IMC Supervisor. For the list of valid licenses, see About Licenses, on page 6. You must generate a license key, claim and register the Product Access Key. After installing Cisco IMC Supervisor, the license is validated and you can start using Cisco IMC Supervisor.

Before You Begin

If you received a zipped license file by email, extract and save the **.lic** file to your local machine.

Procedure

Step 1 From the menu bar, choose **Administration** > **License**.

Step 2 Select the **License Keys** tab.

Step 3 Click **Update License**.

Step 4 In the **Update License** dialog box, do one of the following:

- To upload a **.lic** file, click **Browse**, navigate to and select the **.lic** file, then click **Upload**.
- For a license key, check the **Enter License Text** check box then copy and paste the license key only into the **License Text** field. The license key is typically at the top of the file, after Key ->.

  You can also copy and paste the full text of a license file into the **License Text** field.

Step 5 Click **Submit**.
The license file is processed, and a message appears confirming the successful update.