# Cisco IMC Supervisor Release Notes, Release 2.4

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## 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 S3260 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

# Revision History

| Release | Date | Description |
|---------|------|-------------|
| 2.4 | May 7, 2024 | Created Release Notes for Cisco IMC Supervisor, Release 2.4. See the following sections:<br>• Upgrading Cisco IMC Supervisor , on page 6<br>• New and Changed Features, on page 7<br>• Open Bugs, on page 8<br>• Resolved Bugs, on page 8 |

# Minimum System Requirements

**Supported Server Models**

- UCS C-220 M3, M4 and M5

- UCS C-240 M3, M4 and M5

- UCS C-460 M4

- UCS C-480 M5

- UCS C-22 M3

- UCS C-24 M3

- UCS C-420 M3

- UCS E-160S M3

- UCS C3160

- UCS S3260 M3, M4 and M5

- UCS EN120E M2

- UCS EN120S M2

- UCS EN140N 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

- UCS E-1120D M3

- UCS E-180D M3

- ENCS 5406

- ENCS 5408

- ENCS 5412

- HX220C-M5S

- HX220C-M4

- HX240C-M5SX

- HX240C-M4

- HXAF240C-M5SX

- HXAF220C-M5S

- HXAF240C-M4SX

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

**Minimum Firmware Versions**

| Servers | Minimum Firmware Version |
|---|---|
| UCS C-series Servers | 1.5(4) |
| UCS E-series Servers | 2.3.1 |
| UCS S3260 Servers | 2.0(13e) |

**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

- Cisco UCS VIC 1455

- Cisco UCS VIC 1457

### Supported Hypervisor versions

- ESXi 7.0

- ESXi 7.0 U1

- ESXi 7.0 U2

- ESXi 7.0 U3

- ESXi 8.0

- ESXi 8.0 U1

- ESXi 8.0 U2

- Windows 2016 with Hyper-V Role

- Windows 2019 with Hyper-V Role

- Windows 2022 with Hyper-V Role

### 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 |
| Primary Disk (Hard Disk 1) | 100 GB |
| Secondary Disk (Hard Disk 2) | 100 GB |
| Minimum write speed for storage | 10 MB/sec |

# Supported Browser Versions

Cisco IMC Supervisor supports the following browser versions:

For HTML-5

- Microsoft Edge version 120.x.x.x or higher

- Firefox version 120.x or higher

- Safari 17.x or higher

• Google Chrome version 120.x.x.x or higher

# 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 |
| Database 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/bin/` and open the `inframgr.env` file using vi editor.

2. Edit the values MEMORY_MIN and MEMORY_MAX.

    For example, if you are managing 1000 rack servers then inframgr memory allocation must be set to 10 GB. Hence, the MEMORY_MIN and MEMORY_MAX must be set to 10240m.

**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 Database Buffer Pool

InnoDB buffer pool is the internal memory used by the mariadbd 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.

# Upgrading Cisco IMC Supervisor

Supported Upgrade Paths for Cisco IMC Supervisor Release 2.4(0.0)

- From Release 2.3(8.0) to Release 2.4(0.0)
- From Release 2.3(7.0) to Release 2.3(8.0) to Release 2.4(0.0)
- From Release 2.3(6.0) to Release 2.3(8.0) to Release 2.4(0.0)
- From Release 2.3(5.0) to Release 2.3(8.0) to Release 2.4(0.0)
- From Release 2.3(4.0) to Release 2.3(8.0) to Release 2.4(0.0)
- From Release 2.3(3.0) to Release 2.3(8.0) to Release 2.4(0.0)
- From Release 2.3(2.1) to Release 2.3(8.0) to Release 2.4(0.0)

- From Release 2.3(2.0) to Release 2.3(8.0) to Release 2.4(0.0)

- From Release 2.3(1.0) to Release 2.3(2.0) to Release 2.3(8.0) to Release 2.4(0.0)

- From Release 2.3(0.0) to Release 2.3(2.0) to Release 2.3(8.0) to Release 2.4(0.0)

- From Release 2.2(1.4) to Release 2.3(2.0) to Release 2.3(8.0) to Release 2.4(0.0)

- From Release 2.2(1.3) to Release 2.3(2.0) to Release 2.3(8.0) to Release 2.4(0.0)

From Release 2.2(1.3) or Release 2.2(1.4), migrate to Release 2.3(8.0), Post which migrate to 2.4(0.0)

# New and Changed Features

This section provides an overview of the significant new and changed features in this release. This section does not provide an exhaustive list of all enhancements included in this release.

## New and Changed Features in Release 2.4(0.0)

### Data Migration

This release introduces support for migrating data from Cisco IMC Supervisor, Release 2.3.8.0 to Cisco IMC Supervisor, Release 2.4.

In Cisco IMC Supervisor, Release 2.4, all the configuration and data from Cisco IMC Supervisor, Release 2.3(8.0) appliance are migrated to Cisco IMC Supervisor, Release 2.4 appliance except for the following:

- Server Diagnostics ISO Images

- Local Firmware Upgrade ISO Images

- IMC Supervisor Patch Images

- Host Image Mapping Images

- Server Diagnostics Report

- Techsupport Report

Documented in the Cisco IMC Supervisor Installation Guide for VMware vSphere and Microsoft Hyper-V, Release 2.4

### Support for Downloading Images and Receiving Automated Updates

Starting with Cisco IMC Supervisor Release 2.4(0.0), Offline configuration of Cisco credentials under Cisco.com User configuration page for software downloads from Cisco is discontinued.

For enhanced security, you should activate your device first using Activate Device action under Images- Local page or Update IMCS page in order to download Standalone Rack server firmware and newer version of Cisco IMC Supervisor patch updates from Cisco.com

**Note** Device activation done once stays active for an hour allowing secure downloads post which you have to re-activate your device again with the Activate Device action to download software from Cisco.com for enhanced security.

# Open and Resolved Bugs

The open and resolved bugs for this release are accessible through the Cisco Bug Search Tool. This web-based tool provides you with access to the Cisco bug tracking system, which maintains information about bugs and vulnerabilities in this product and other Cisco hardware and software products.

**Note** You must have a Cisco.com account to log in and access the Cisco Bug Search Tool. If you do not have one, you can register for an account.

For more information about the Cisco Bug Search Tool, see the Bug Search Tool Help & FAQ.

# Open Bugs

All open bugs for this release are available in the Cisco Bug Search Tool through the following searches.

The results of that search include workarounds for the open bugs, if any.

### Open Bugs in Release 2.4

You can find detailed information about all open bugs in Release 2.4 through the open bug search for Release 2.4. This search uses the following parameters:

**Open Bugs** *format="dita" scope="local" type="reference"*

| Field | Parameter |
|---|---|
| **Product** drop-down list | Choose Series/Model and **Enter `Cisco IMC Supervisor 2.x`**. |
| **Releases** drop-down list | Choose **Affecting or Fixed in these Releases** and **Enter `2.4`**. |
| **Filter** | Choose **Open** from the **Status** drop-down list. |

# Resolved Bugs

All resolved bugs for this release are available in the Cisco Bug Search Tool through the following searches.

### Resolved Bugs in Release 2.4

You can find detailed information about all fixed bugs in Release 2.4 through the fixed bug search for Release 2.3. This search uses the following parameters:

| Field | Parameter |
|---|---|
| **Product** drop-down list | Choose **Series/Model** and enter `Cisco IMC Supervisor 2.x`. |
| **Releases** drop-down list | Choose **Affecting or Fixed in these Releases** and enter `2.4`. |
| **Filter** | Choose **Fixed** from the **Status** drop-down list. |

# Communications, Services, and Additional Information

- To receive timely, relevant information from Cisco, sign up at Cisco Profile Manager.

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- To obtain general networking, training, and certification titles, visit Cisco Press.

- To find warranty information for a specific product or product family, access Cisco Warranty Finder.

### Cisco Bug Search Tool

Cisco Bug Search Tool (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.