



Installing the Compute Node

This chapter contains the following topics:

- [Removing a Compute Node Blank, on page 1](#)
- [Installing a Compute Node Blank, on page 2](#)
- [Compute Node Installation Guidelines and Limitations, on page 4](#)
- [Removing a Compute Node, on page 6](#)
- [Installing a Compute Node, on page 7](#)
- [Compute Node Configuration, on page 9](#)

Removing a Compute Node Blank

Do not operate the Cisco UCS X9508 chassis with an empty compute node slot. Fill any empty compute node slots with either a blank or a compute node.

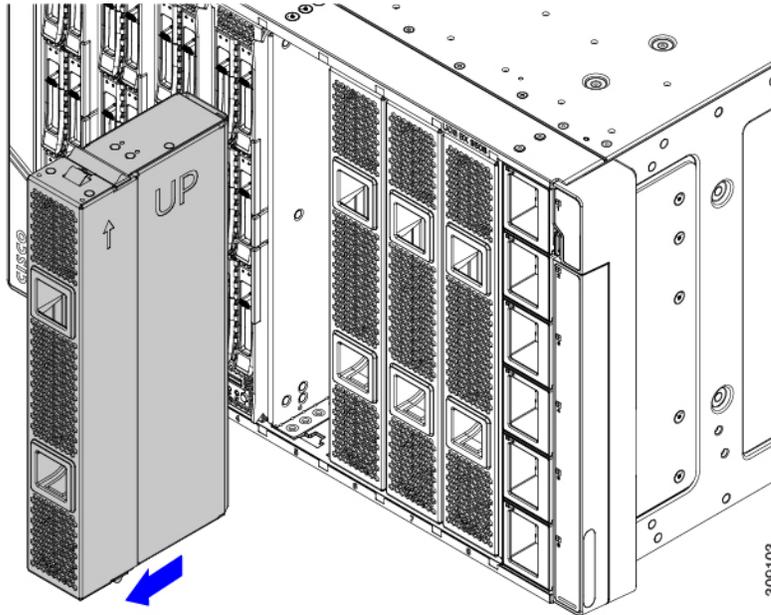
Use this task to remove a compute node blank.

Procedure

Step 1 Grasp the compute node blank by the finger holds.

Step 2 Pull the blank towards you until it is completely removed from the chassis.

Notice that the module blank has indicators that show how to orient the blank. You will use this information when you install a blank.

Figure 1: Removing a Compute Node Blank

Installing a Compute Node Blank

If you remove a compute node, and you will not be installing another compute node, you must install a node blank (UCSX-9508-FSBK). Do not operate the UCS X9508 chassis with an empty compute node slot. The minimum configuration is 1 installed compute node, so in this configuration you need 7 module blanks installed.

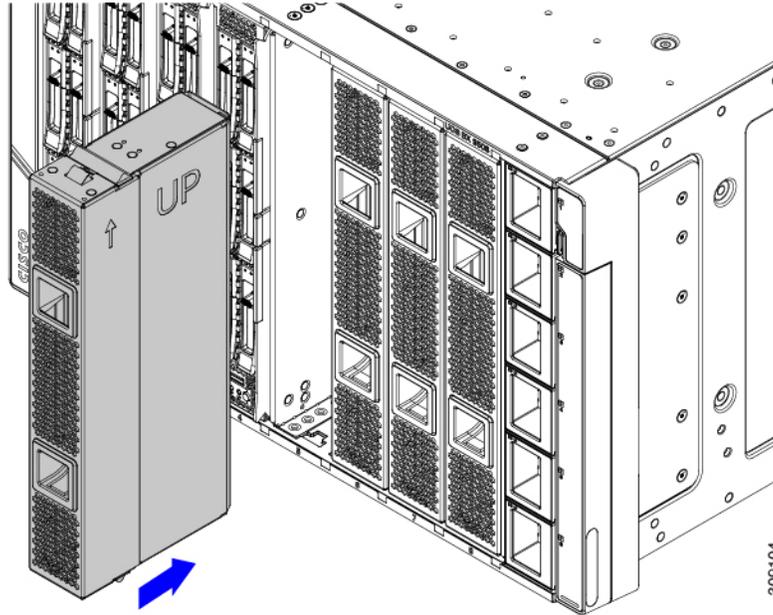
Compute node blanks are interchangeable within the same chassis or other Cisco UCS X9508 chassis.

Use this task to install a compute node blank

Procedure

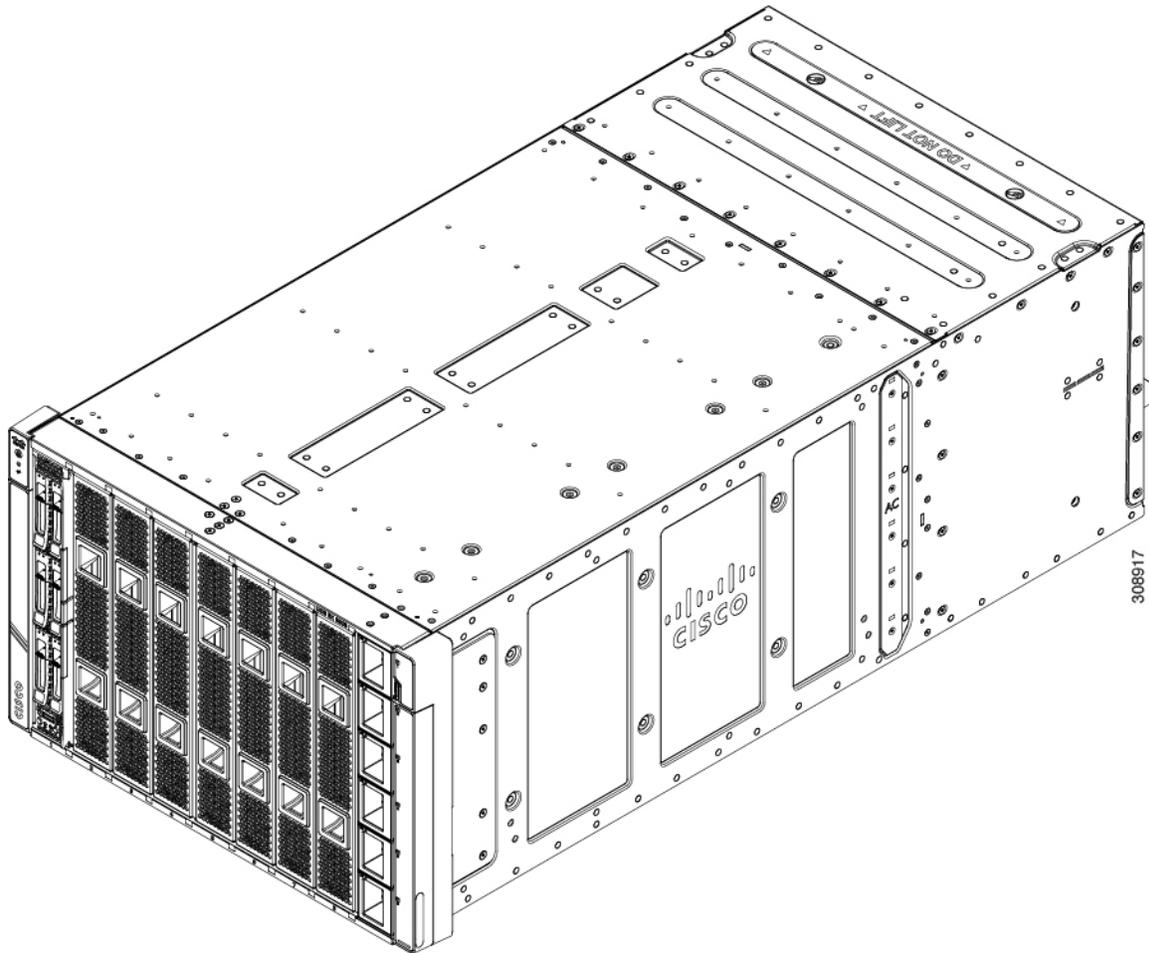
- Step 1** Grasp the blank by the finger holds.
- Step 2** Hold the module blank vertically and align the module blank with the slot.

The module blank has indicators that show how to orient the blank.



Step 3 Keeping the compute node blank vertical, slide it into the slot until the blank is flush with the face of the chassis.

Figure 2: Installing a Compute Node Blank

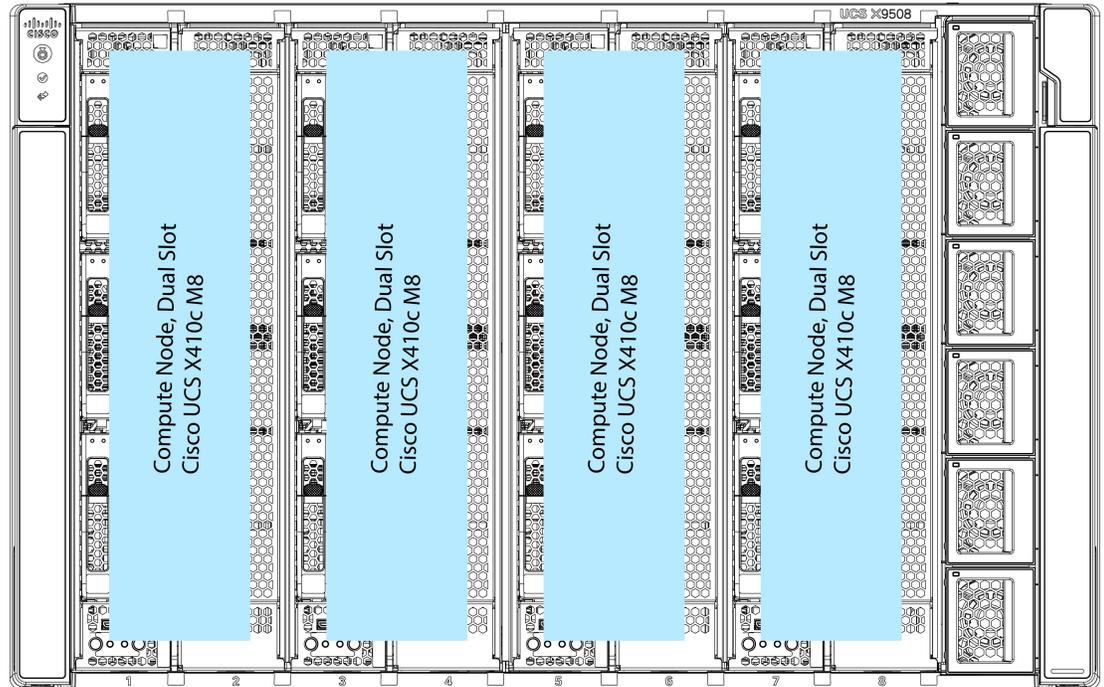


Compute Node Installation Guidelines and Limitations

Be aware of the following limitations when installing the Cisco UCS X410c M8 compute node into the Cisco UCS X9508 chassis:

- Because the compute node is double-wide, it occupies two slots in the UCS X9508 chassis.
- No Cisco UCS X410c M8 compute nodes are supported in slots 4 and 8. Slot 4/5 has a sheetmetal wall that prevents physical installation, and slot 8 is the last single slot, so it cannot accept the double-wide node.
- The UCS X410c M8 Compute Node is designed for pure high-volume compute. The node has no on-board PCIe connectivity to support additional GPUs either on the node itself or through connectivity to additional GPU/PCIe nodes, such as the Cisco UCS X580p PCIe Node or the Cisco UCS X440p PCIe Node, that are in the same Cisco UCS X9508 chassis.

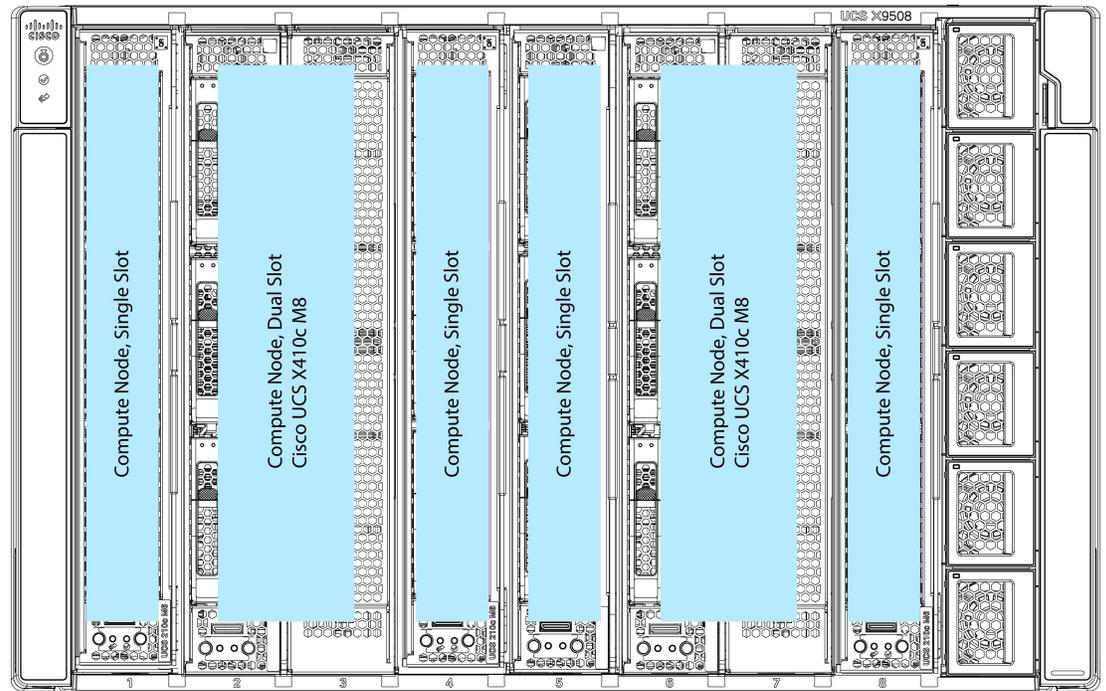
- With the exception of the previously documented restrictions, the compute node can be installed in any two adjacent slots in the Cisco UCS X9508 Chassis:
 - For chassis fully populated with X410c M8 Compute Nodes: Slots 1 / 2, 3 / 4, 5 / 6, and 7 / 8 can accept the X410c compute node. Due to a metal wall between slots 4 and 5, the dual-slot compute node cannot be physically installed to span those slots.



494052

- For a chassis populated with a mix of different types of compute nodes: Any mix of two adjacent slots (1 / 2, 3 / 4, 5 / 6, and 7 / 8 can accept the X410c compute node, with the exception of slots 4/5 which cannot accept the dual-width compute node because of a sheetmetal wall. Any of the remaining slots can accept single-slot nodes, such as the Cisco UCS X215c M8, Cisco UCS X210c M8, Cisco UCS X210c M7, and Cisco UCS X210c M6 compute nodes.

The following example shows the X410c M8 Compute Node installed in slot 2/3 and 6/7 with single-slot compute nodes installed in slots 1, 4, 5, and 8.



494053

Removing a Compute Node

You must decommission the compute node using Cisco Intersight before physically removing the compute node.

Do not operate the chassis with an empty compute node slot. If you will not be installing a compute node in an empty slot, install a compute node blank (UCSX-9508-FSBK) to cover the empty slot.



Caution

A fully populated compute node is heavy! Full populated, the compute node weighs 36 lb (16.3 kg). Always take appropriate care and use safe lifting procedures when handling the compute node. While sliding the compute node out of the chassis, use both hands to support the bottom of the node.

Procedure

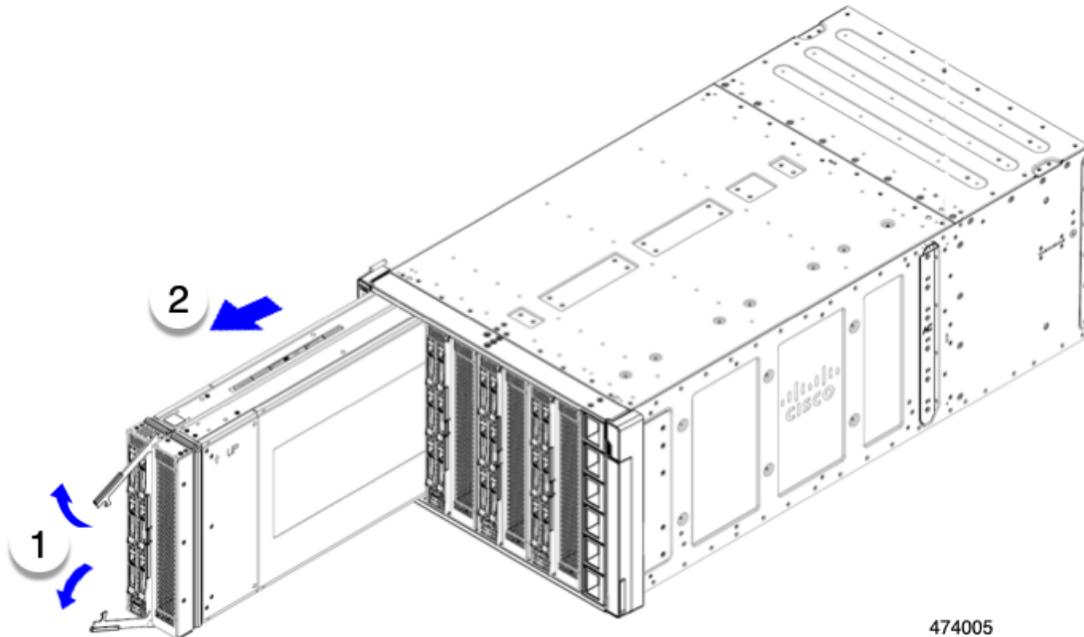
- Step 1** Turn off the compute node by using Cisco Intersight.
- Step 2** Press the release button at the center of the compute node's faceplate to disengage the ejector handles.
- Step 3** Grasp the ejector handles and pull them outward so that they arc vertically away from each other.

While moving the compute node handles, you might feel some resistance. This resistance is normal. It occurs because the connectors at the rear of the compute node are unseating from the corresponding sockets in the chassis.

Also, when the compute node disconnects from the midplane, the compute node powers off.

- Step 4** Grasp the compute node handles and slide the node partially out of the chassis.
Make sure to keep the compute node vertical while removing it.

Figure 3: Removing a Cisco UCS x410c M8 Compute Node



- Step 5** Place your other hand underneath the compute node to support it and slide the compute node completely out of the chassis.
- Step 6** Once removed, place the compute node on an antistatic mat or antistatic foam if you are not immediately reinstalling it.
- Step 7** Do one of the following:
- If you will be installing another compute node, see [Installing a Compute Node, on page 7](#).
 - If the compute node slot is to remain empty, reinstall the compute node blank panels (UCSX-9508-FSBK) to maintain proper thermal temperatures and to keep dust out of the chassis.

Installing a Compute Node

Before you begin

The compute node must have its cover installed before installing it into the chassis to ensure adequate airflow.



Caution

A fully populated compute node is heavy! Full populated, the compute node weighs 36 lb (16.3 kg). Always take appropriate care and use safe lifting procedures when handling the compute node. While sliding the compute node out of the chassis, use both hands to support the bottom of the node.

Procedure

Step 1 Remove two compute node blanks.

See [Removing a Compute Node, on page 6](#).

Step 2 Press the release button at the center of the compute node faceplate to release the ejectors.

Note

While you are inserting the compute node, keep the ejectors open.

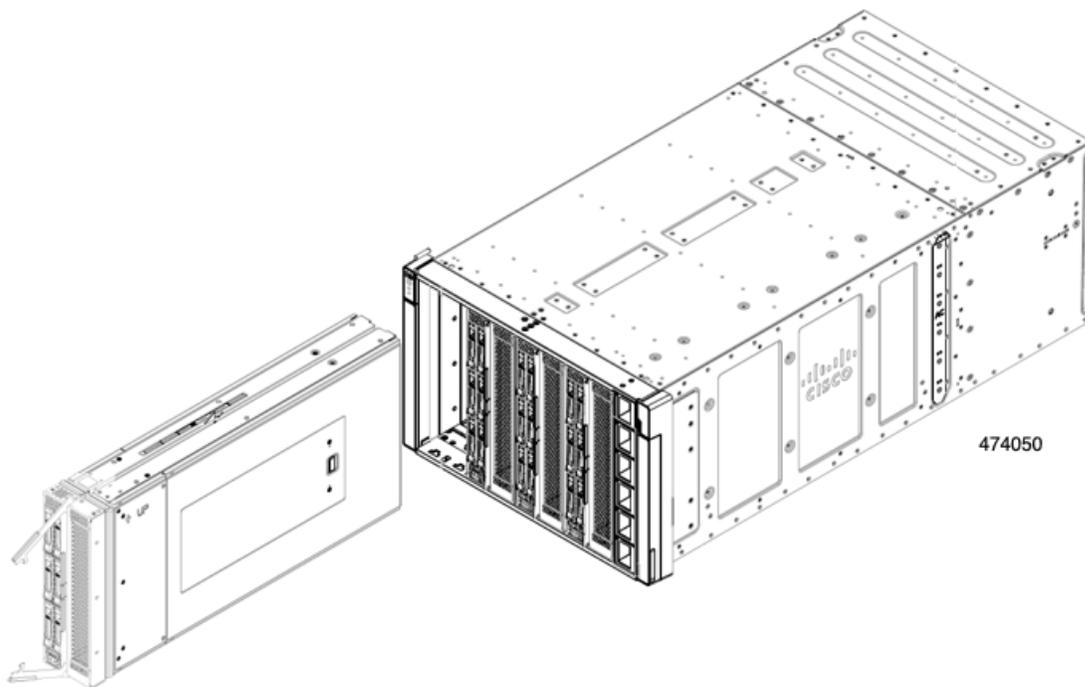
Step 3 Holding the compute node with both hands supporting the bottom, align the compute node vertically with the empty module bay in the chassis.

The compute node is correctly aligned when the primary is pointing to the left. Also, check for an upward pointing arrow which is stamped onto the compute node to indicate correct orientation.

Caution

Before inserting the compute node make sure the ejector handles are not flush with the faceplate. The ejector handles must be open so that the ends can catch the sheet metal of the chassis.

Figure 4: Aligning a Cisco UCS X410c M8 Compute Node



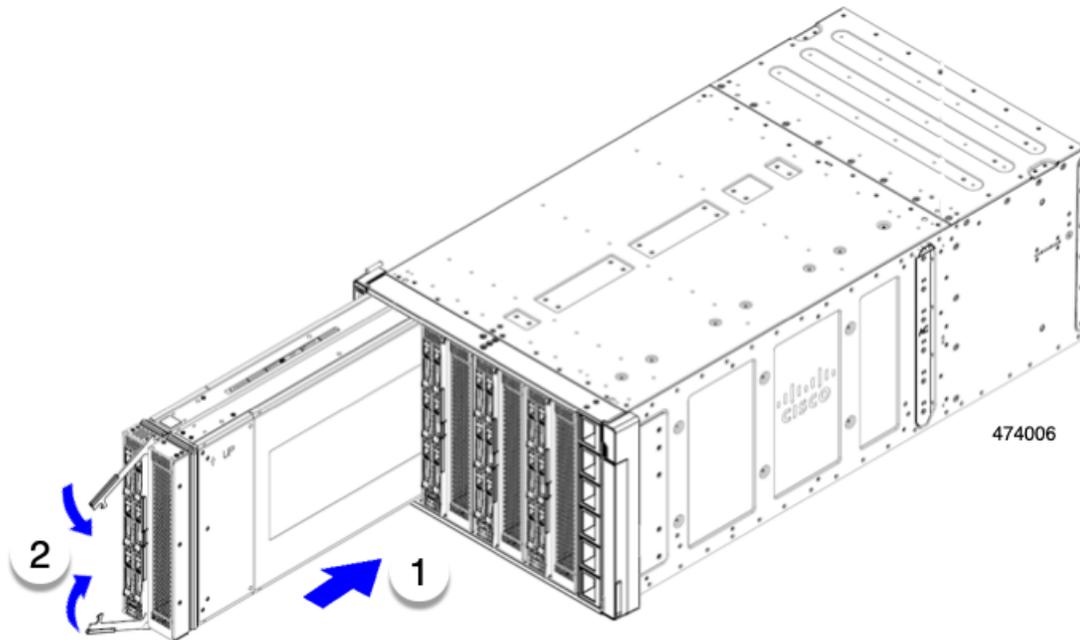
Step 4 Keeping the compute node level, slide it into the chassis.

Step 5 When the compute node is almost completely installed, grasp the ejector handles and arc them toward each other. This step seats the compute node into the connector. The compute node should power up.

Step 6 Push the ejectors until they are flush with the face of the compute node.

When the compute node is completely installed, the retention latches at the end of each handle click into place.

Figure 5: Installing a Cisco UCS X410c M8 Compute Node



- Step 7** Configure the compute node as needed through Cisco Intersight.
See [Compute Node Configuration, on page 9](#).

Compute Node Configuration

Cisco UCS M8 compute nodes, such as the Cisco UCS X410c M8, can be configured and managed using the Cisco Intersight management platform in Intersight Managed Mode (Cisco Intersight Managed Mode). For details, see the *Cisco Intersight Managed Mode Configuration Guide*, which is available at the following URL: [Cisco Intersight Managed Mode Configuration Guide](#).

