# Overview

# About This Guide

This document describes how to upgrade an existing installation of Cisco HX Data Platform.

Cisco HyperFlex Systems has several components that may be upgraded depending on your environment. The core components in a HyperFlex system are:

- Cisco UCS server firmware (the UCS C-bundle, which consists of UCS server, BIOS, CIMC, NIC, and so on)

- Cisco HX Data Platform software

- VMware ESXi software

# Upgrade Modes

Cisco HyperFlex Systems upgrade deployment can be performed in either online or offline mode.

**Online Upgrade Mode**

Use the online upgrade mode if you cannot tolerate downtime and the maintenance window is permissible.

During an online upgrade, all virtual machines remain in a running state without service disruption. User intervention is not required after the upgrade starts, so long as DRS is licensed, enabled, and set to automatic mode. Cisco recommends performing the upgrade during a maintenance window whenever possible. Refer to the Online Upgrade Process Workflow for more details.

> **Note** To upgrade a nested VMware vCenter (a vCenter on an HX datastore) use the online upgrade mode only.

**Offline Upgrade Mode**

Use the offline upgrade mode if you desire a shorter time window and workload downtime is acceptable.

Offline upgrade mode means the Cisco HX Data Platform is offline. However, storage controller VMs are online and HX Data Platform management is viewable through both the `stcli` command-line access and the VMware vSphere Web Client. The `stcli cluster` command returns that overall storage cluster status is offline. Refer to the Offline Upgrade Process Workflow for more details.