



The bridge to possible

No More Groundhog Days

UCS X-Series and Intersight save you from endless
Day-2 drudgery (and other days too)

Scott Garee - UCS TME

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Cisco Webex App

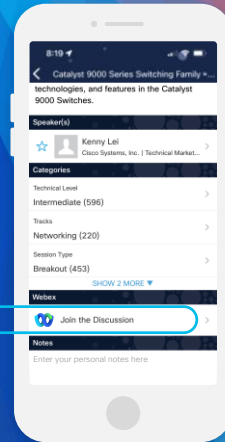
Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click "Join the Discussion" —————
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 9, 2023.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCOM-2002>

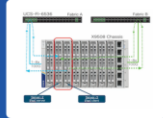
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Agenda

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Join at
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Passcode:
UCSX



- Day 0 – Set the stage
- Day 1 – I got you babe!
- Day 2 – Getting through the long cold winter
- Springtime in the datacenter!

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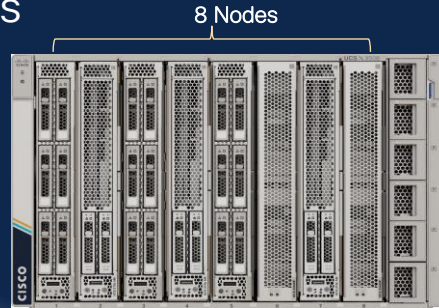
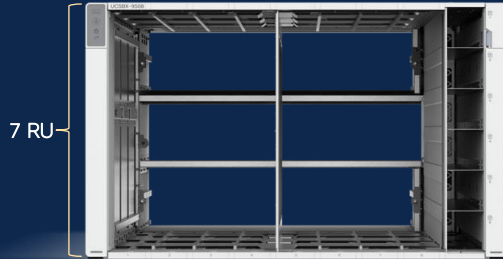
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UCS X-Series

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UCS X9508 Modular Chassis



Compute Node

PCIe Node for GPU

6x 2800W PSU

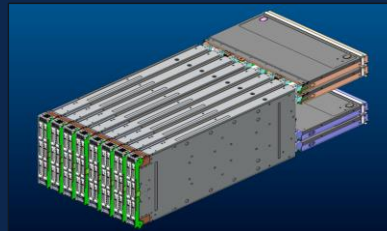
Intelligent Fabric Modules



Flexible X-Fabric



Midplane-less design for fabric flexibility



Power and Cooling Innovation!

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The chassis is the scaffolding for our modular innovations built on top of over a decade of the original UCS innovation.

- Starting from the front the chassis support 8 nodes
- nodes are different from blades
- compute nodes, pcie nodes, and 6 power supplies
- Moving to the back where we have power in, cooling, and 2 fabrics
- First, our Unified fabric provided by the IFMs. 2x provide redundant paths
- X-fabric connections through XFM. 2x provide fabric capacity
- No technology dependency on the chassis
- Orthogonal direct connections (look square) from nodes to fabrics
- Leaving room for state-of-the-art fans, part of our power and cooling innovations

Compute Nodes

X-Series Compute Nodes



UCS X210C M6
(2-socket)

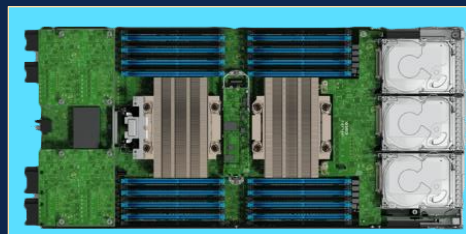


UCS X210C M7
(2-socket)



UCS X410C M7
(4-socket)

Run any app with
adaptable system



Modular Options

- Front storage mezzanines (4)
- Rear mLOM network (2)
- Rear X-Fabric Mezzanine (2)
- Boot optimized RAID module (2)

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Complete 2 and 4 socket servers, but want to point out

- Inter-changeable front storage mezzanine
- Inter-changeable VIC mLOM and X-Fabric mezzanine
- Fabric connections are part of mLOM and Mezz, not the compute node

X440p PCIe Node



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Off-the-shelf PCIe GPUs

- Up to two dual width GPUs
 - NVIDIA A16, A40, A100, H100
 - Intel Flex170
- Up to 4 single width GPUs
 - NVIDIA T4, L4
 - Intel Flex140
- Up to 6x T4s supported when combined with compute node



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2x FHFL double wide or 4x HHL single wide GPU

NVIDIA T4, L4, A16, A40, A100-80, H100

Intel Flex140, Flex170

Simplify with an Adaptable System

Open, modular design

New nodes

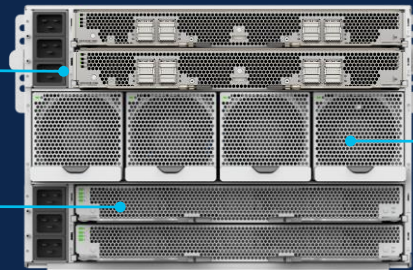
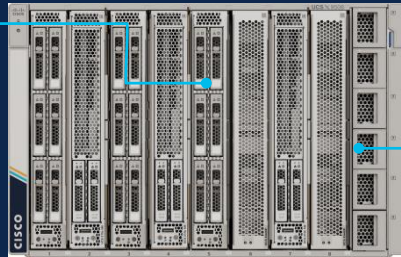
- Compute Nodes
- PCIe GPU nodes
- Future options

Faster I/O

- 100Gb End-to-end

UCS X-Fabric Technology

- Internal PCIe Fabric



Power and Cooling Margins

- Ready for high-watt CPUs and GPUs
- Liquid colling enabled

Architecture which enables:

- Modularity for seamless integration of Next Innovations
- Efficiency of power and cooling
- Balanced Compute and Drive Ratios
- Optimal Failure Domains
- High Performance

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- Quick chassis recap
 - Good look at node flexibility
 - Let's What we mean by modular
 - Multiple independent sub-systems: compute, acceleration, Unified fabric, X-Fabric, power, cooling

Next we'll see how the chassis is connected into the datacenter

With UCS X-Series, we have created a modular system that can adapt to almost any workload. The compute, accelerator, storage nodes in the front connect directly to the I/O and fabric nodes in the rear of the chassis. This is a true midplane-less design with no fixed decision or tradeoffs. The design allows for the adoption of new

technologies without any forklift upgrades. As new fabric interconnects emerge (i.e. PCIe gen 5/6 and CXL), It's as simple as installing a new module. We have evolved the packaging and power and cooling systems to enable larger nodes for more memory and drive and support for higher power CPUs and GPUs.

As new technologies come to fruition and are incorporated into UCS X-Series, they don't bring increase complexity. Through a constant stream of software-as-a-service improvements Cisco Intersight will evolve and continually introduce new innovations and support for emerging technology. This means no forklift upgrades are needed to take advantage of new technology, and no new management tools that require learning and training. It's all done through Cisco Intersight.

Introducing the 5th Generation UCS Fabric



Simplify

Cloud-operated infrastructure management
Reduces adapters and cables
Lowers server and network TCO



Scalable and Resilient

Converged fabric for modern applications
Dual path active-active 200Gb per server



Future-ready

to address growing compute bandwidth needs
Single-flow 32G FC and 100G Ethernet



6536 Fabric Interconnect



9108-100G IFM



15231 VIC

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Future-ready performance and bandwidth

1600G BW per X-series Chassis

14.8 Tb BW per FI domain

Industry-first End-to-End 100G fabric for blades pushing performance envelope

single-flow 32G FC and 100G ethernet

Simplify and save by consolidating multiple traffic types

Consolidate multiple generation of UCS fabric & servers under a single fabric

Flexible server connectivity speeds of 25/40/100G and uplink connectivity at 1/10/25/40/100G

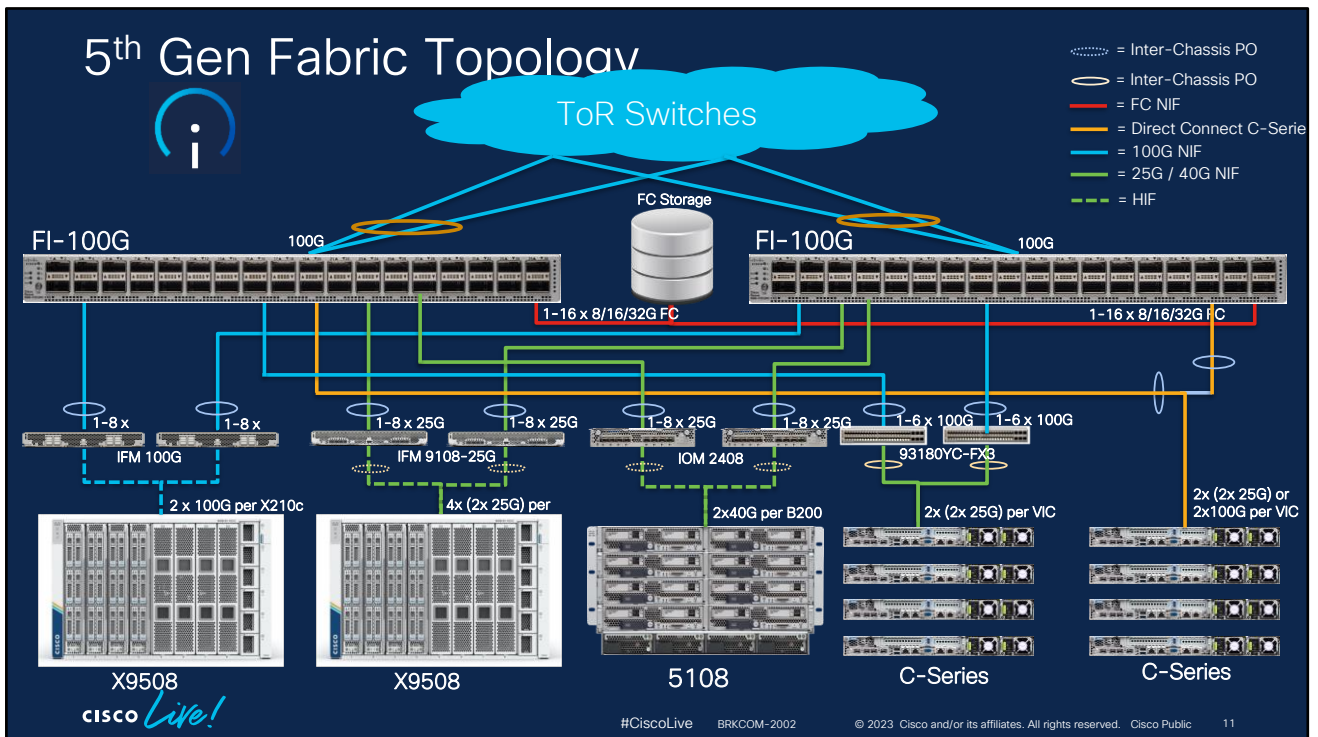
Reduces adapters and cables

Lowers server and networking TCO

One VIC replaces multiple NICs, HBAs, and management adapters

- UCS did a 25G *fabric* refresh back in 2018 and after 4 years we are refreshing the fabric to enable end-to-end 100G for UCS workloads.
- With this we are the first in the market to enable end-to-end 100G for blade-chassis.
- Inline with our launch of UCS 2.0 in 2021 with UCS X-series and in 2022 we are bringing our next wave of innovations with the new 5th Gen UCS unified Fabric

- For 5th Gen Fabric UCS is launching three futuristic HW components, the 36 port 6536 fabric interconnect, 8 port 100G IFM for the X-series chassis and the 5th generation VIC to enable 10/25/40/100/200G connectivity for UCS server.
 - With 5th Gen the idea is take forward this awesomeness of UCS fabric and simplify the entire landscape with a single-FI, 36 ports of 100G to enable 25, 40 and 100G connectivity for the workload of your choice
 - The 5th Gen Fabric UCS would be the first in the market to enable 100G E2E for the blade workloads
 - The market has started transitioning in the 100G journey, and we want to enable customers for 100G and at the same time we want to consolidate the various 25 & 40G workloads as well under this single fabric.
 - Highly scalable with each 36 ports which can break-out for 10/25G connectivity
 - Transition and consolidate the previous generations of servers under this new fabric.
 - 100G-IFM Will enable E2E 100G for the workloads, 1.6Tbps of BW for X-series chassis.
 - PCIe Gen 4 VIC card with its higher forwarding throughput and combined with the various HW offload and acceleration features is optimized for greater performance
 - We envision this to be a single fabric to host multiple of your bandwidth hungry application
 - Be it the VDI, CI, HCI, SDS, backup solutions, Big-data, Databases like Oracle, video-conferencing etc
 - With PCIe Gen 4/5/6 and the CXL evolution, be rest-assured this is the fabric to address all these future compute evolution.



- That brings us to an overall look at the UCS topology
 - The unified fabric integrates our X-Series to SAN fabrics and upstream networks
 - Continues to offer broad UCS platform support
 - All managed by Intersight

Cisco Intersight

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Intersight helps to answer Critical Questions

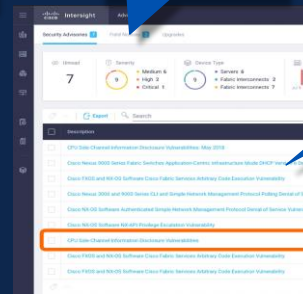
Is anything broken or predicted to fail?



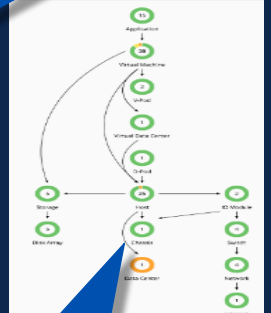
Am I impacted by any advisories?

Title	Level	Category	Date
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10

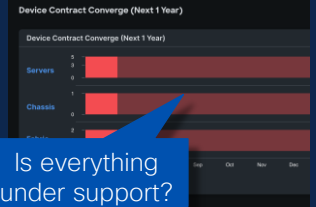
Am I secure?



Are my systems up to date and compliant?



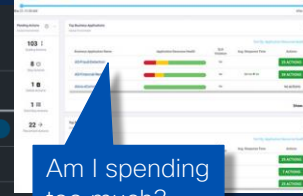
Is everything under support?



Any pending EoS?

Title	Level	Category	Date
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10
Cisco Intersight Advisories	High	Security	2023-01-10

Am I spending too much?



What resources am I using?

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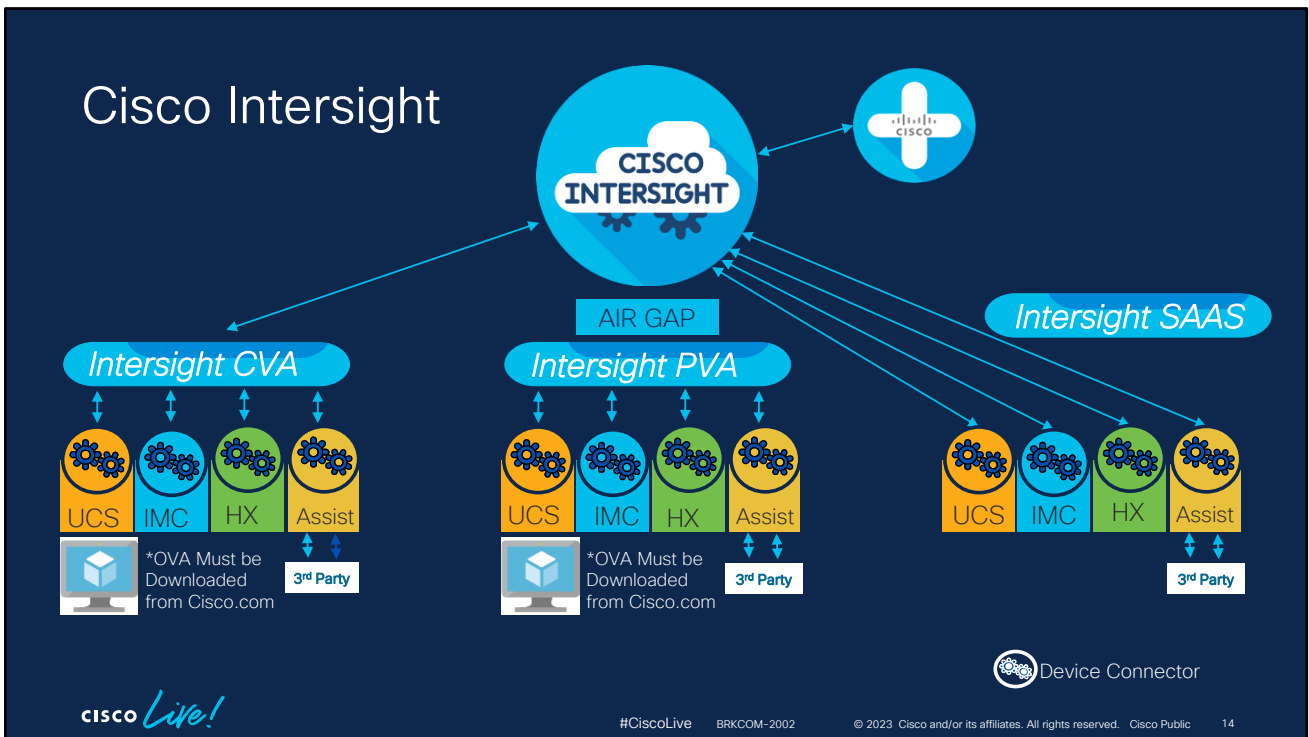
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Avoid surprises, which almost always come with undesirable impacts.



- InterSight is our hybrid cloud management platform meant to bring cloud level efficiency to on premises infrastructure.
- It is offered as a cloud hosted set of API driven microservices with an HTML based user interface.
- Some customers are not able to manage from the cloud. For them we offer the exact same microservices and UI packaged as a virtual appliance in two modes, either connected or fully air gapped.
- The connected appliance can open cases, send logs, and download firmware, appliance updates,

and other metadata.

- Since Intersight is software, I'll stop talking, and start clicking

Day 1 – I got you babe!



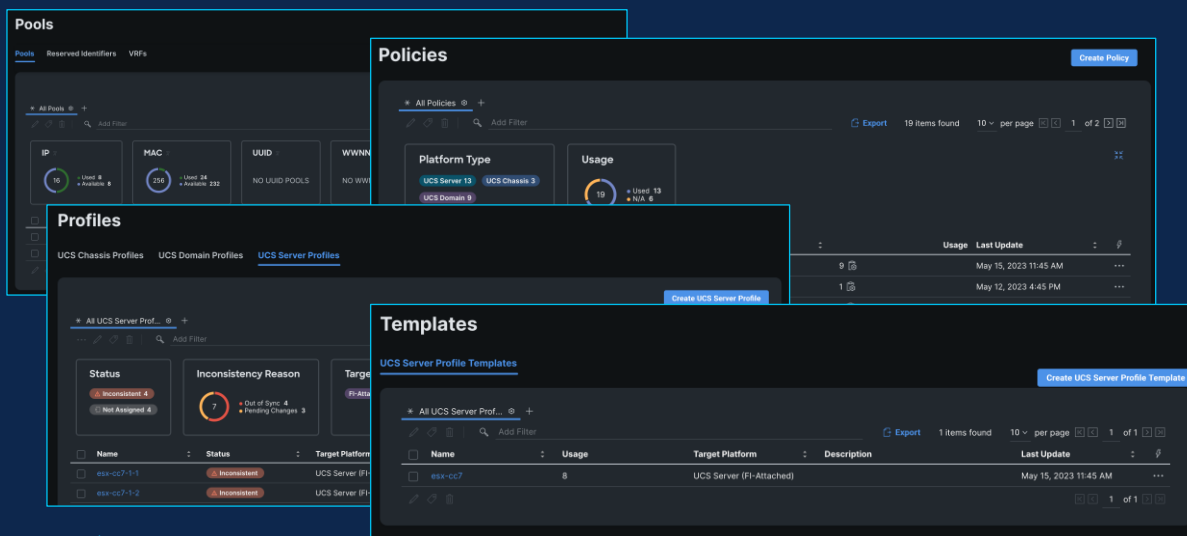
Even though it only happens once, standing up the hardware can take weeks or more.

UCS and Intersight can help compact the timeline to get to production.

Take a quick look at our demo setup.

- Look at server actions
 - Firmware bundles show correctly
 - New things: SEL, tunneled KVM
 - Inventory: PIDs, delete VD
- Per-item “...” vs group “...”
- FI port enable/disable
- Decommissioned equipment
- Chassis FI/IFM port connections

Pools, policies, profiles, templates, oh my!



- What's special about UCS?
 - Some terms we use: Stateless Servers, intent-based configuration, virtual NICs and HBAs
 - Navigate to them as discussed: The intended configuration is defined in pools, policies, templates, and profiles.
 - You can define and instantiate the domain and server configuration before you even have any hardware.
 - Story: Why do I want to know identifiers ahead of time?
 - Demo: Domain profile, chassis profile
 - Show pre-defined chassis numbering
 - Reserved VLAN range in switch control

Pools provide the unique properties for each server

Policies provide device settings with some level of commonality, separated

by various concepts

Profiles gather pools and policies together and have a 1:1 device association

Templates provide a way to scale server profiles

Notice some of the naming conventions used here, but don't worry, you can change them!

The profile menu now supports basic server operations.

They did it my way (policies define your intent)

Create

Filters

Platform Type

- ☒ UCS Server
- ☐ UCS Domain
- ☐ UCS Chassis

Search

- ☐ Adapter Configuration
- ☐ BIOS
- ☐ Boot Order
- ☐ Certificate Management
- ☐ Device Connector
- ☐ Drive Security
- ☐ Ethernet Adapter
- ☐ Ethernet Network
- ☐ Ethernet Network Control
- ☐ Ethernet Network Group
- ☐ Ethernet QoS
- ☐ FC Zone
- ☐ Fibre Channel Adapter
- ☐ Fibre Channel Network
- ☐ Fibre Channel QoS
- ☐ Firmware
- ☐ IMC Access
- ☐ IPMI Over LAN
- ☐ iSCSI Adapter
- ☐ iSCSI Boot
- ☐ iSCSI Static Target
- ☐ LAN Connectivity
- ☒ LDAP
- ☐ Local User
- ☐ Network Connectivity
- ☐ NTP
- ☐ Persistent Memory
- ☐ Power
- ☐ SAN Connectivity
- ☐ SD Card
- ☐ Serial Over LAN
- ☐ SMTP
- ☐ SNMP
- ☐ SSH
- ☐ Storage
- ☐ Syslog
- ☐ Virtual KVM
- ☐ Virtual Media

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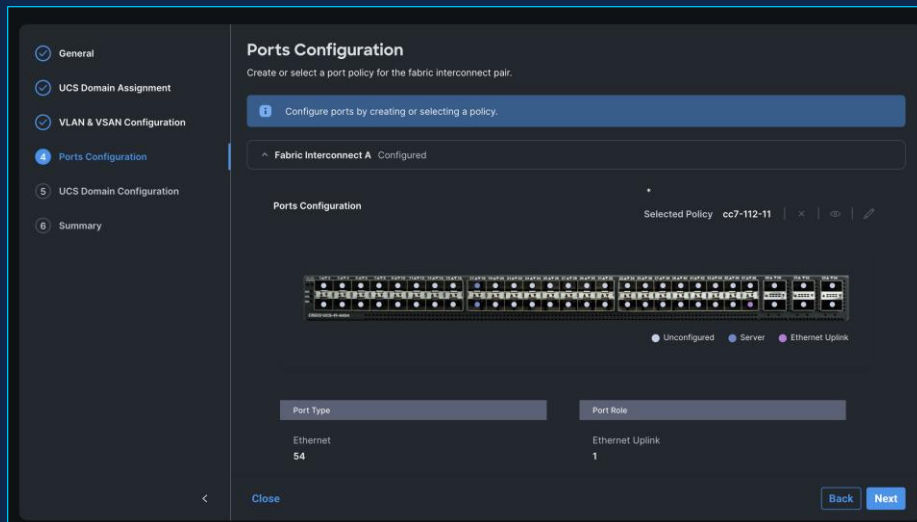
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Some policies configure the hardware for the intended workload. Others adapt the hardware to the needs of your datacenter or other infrastructure services.

New firmware policies

Eminent domains



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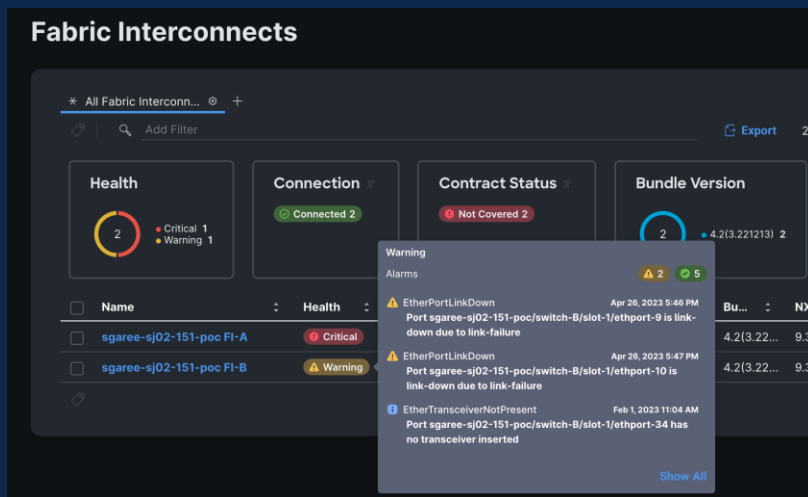
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The domain profile brings policy-based configuration to the Fabric Interconnect

Sets expectations for how things are cabled together and basic network properties.

Easily cloned for scaling out across multiple domains.

Missed by that much!



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Knowing the logical and physical configurations are consistent will avoid potential headaches down the road.

If a port you have put into the logical configuration isn't connected or doesn't establish link up, Intersight will help you find it right away, rather than sometime in the future.

It's always best to start from the beginning

☒ Manual Chassis/Server Numbering ⓘ

☐ Auto-Fill Numbering ⓘ

i

If a discovered device's type is different from the **Port Roles** Connected Device Type or the Device Number conflicts with an existing device's number the discovered device will be auto-numbered according to the actual device type. Device numbering can also be set when recommissioning a decommissioned device

port 17	<div>Connected Device Type *</div> <div>Chassis</div>	<div>Device Number *</div> <div>1</div>
		> = 1
port 18	<div>Connected Device Type *</div> <div>Chassis</div>	<div>Device Number *</div> <div>1</div>
		> = 1

Establish expectations for port to chassis mapping and how you want chassis and rack servers numbered.

A little less conflict

System Reserved VLANs

i By default, the reserved VLAN Start ID is 3915 and a range of 128 VLANs starting from this ID is blocked for internal use. This range of VLAN IDs cannot be used in any VLAN policy. To change the default range, configure a new Reserved VLAN Start ID.

Reserved VLAN Start ID *	Reserved VLAN End ID
3915	4042
2 - 3915	

Are you already using VLANs in the reserved range in your datacenter? Use this policy to move the system VLANs to an unused range.

Power, more power! (and AC)

Edit UCS Chassis Profile (cc7-112-11-1)

- ✓ General
- ✓ Chassis Assignment
- 3 Chassis Configuration
- 4 Summary

Chassis Configuration

Create or select existing policies that you want to associate with this chassis profile.

IMC Access

Power

cc7-esx

SNMP

Thermal

acoustic

Policies > Thermal

Create

- ✓ General
- 2 Policy Details

Policy Details

Add policy details

This policy is applicable only for UCS Chassis

Fan Control

Fan Control Mode

Balanced

Low Power

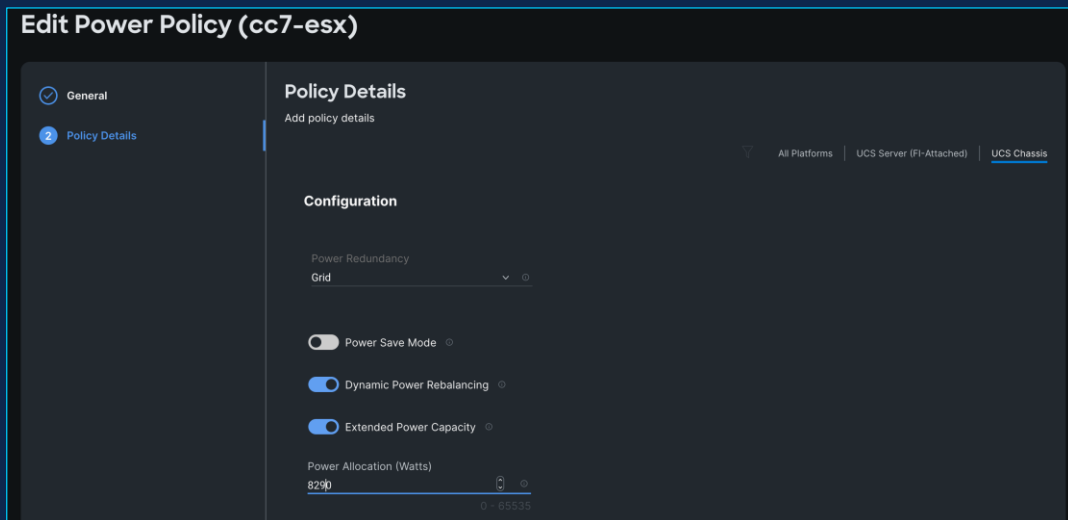
High Power

Maximum Power

Acoustic

Manage power and thermal settings. Make sure equipment is protected and monitored.

Steady as she goes



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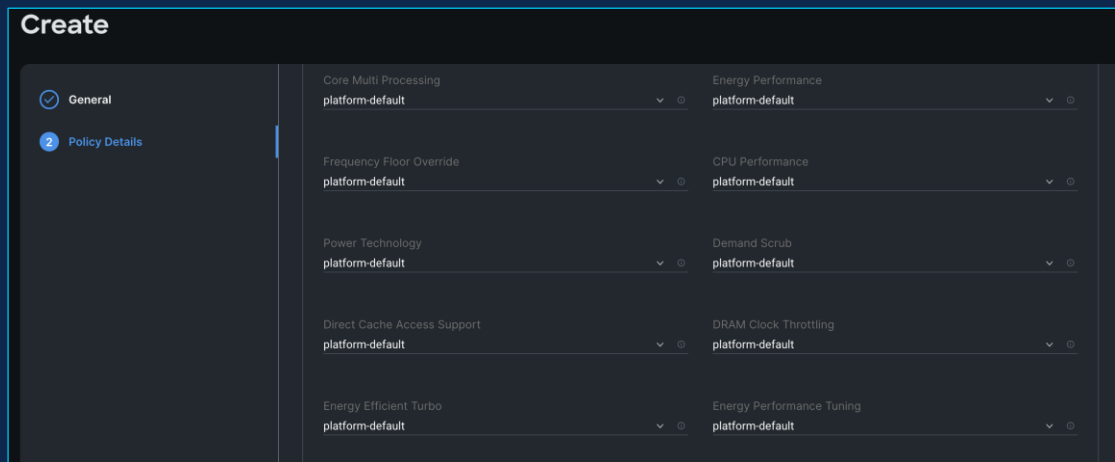
Power save mode will place unneeded (based on power demand and redundancy mode) PSUs into standby mode.

Dynamic Power Rebalancing will move power allocation between blades as workload demand changes.

Extended Power Capacity allows the power budget to increase by 20% in Grid mode when both grids are online.

If a grid is lost a hardware signal will throttle blades to bring power demand to within single grid range.

Best practices are baked right in



[UCS white papers - tuning guides](#)

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It is not necessary to create every profile or tune every setting to achieve high performance.

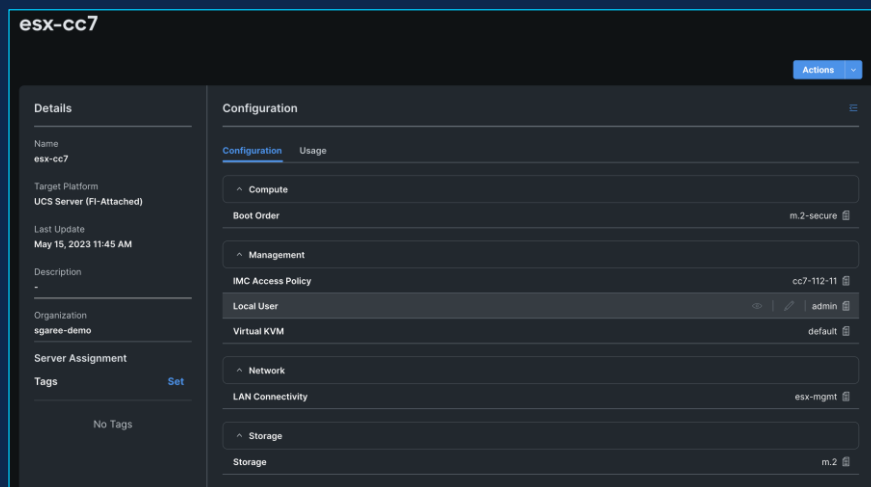
Just a few policies, with most settings at default, are required to deploy high performing servers.

Most of these are settings to adopt the hardware to datacenter requirements.

Tuning guides are available for a variety of power/performance/workload scenarios and to help understand the purpose and use of many BIOS settings.

<https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-b-series-blade-servers/performance-tuning-guide-ucs-m6-servers.html>

We have certain policies around here



Six policies, with four additional policies referenced by them, and two pools will do it.

Visions of future hardware

Server Assignment

Choose to assign a specific server, from a resource pool, by chassis slot location, by serial number or assign a server later.

Specific Server From a Resource Pool **Chassis Slot Location** Serial Number Assign Later

i If a server is not available in the designated slot, assignment will be automatically completed when the server is subsequently discovered in that location. Once server is assigned to the profile, profile will lose the pre-assignment configuration.

Domain Name * Chassis ID * Slot ID *

1 1

1 - 40 1 - 8

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Server profile pre-assignment from pools, by chassis/slot, or serial#
Create pools for allocation to groups and then place servers in pools as needed

All the things (Complete bare metal deployment)

The screenshot shows the 'Install Operating System' configuration page in the Cisco Intersight interface. On the left is a sidebar with a list of steps: General, Operating System, Configuration (highlighted with a blue circle), Server Configuration Utility, Installation Target, and Summary. The main panel is titled 'Install Operating System' and contains a 'Select Configuration Source' section with tabs for 'Cisco', 'Custom', and 'Embedded'. Below this is a blue information box stating: 'You can use Cisco validated templates for selected Operating System version. Learn more about Cisco validated templates at [cisco.com](#).' The 'Configuration File' is set to 'ESX8.0ConfigFile'. Under 'Set Configuration', there is a dropdown menu showing 'sj7-cc7-sg-0454-1-1-1'. Below this are two tabs: 'Static IP' (selected) and 'DHCP'. The 'IP Configuration' section has radio buttons for 'IPv4' (selected) and 'IPv6'. There are input fields for 'IP Address *', 'Netmask *', and 'Gateway *', each with a help icon.

Once the server has been fully configured the host OS can also be deployed at scale using OS Install.

Multiple servers can be installed using a CSV file containing the settings.

It's a bit of a learning curve, but once you have a working file it's easy to iterate.

Intersight help points to sample files in dev-net.

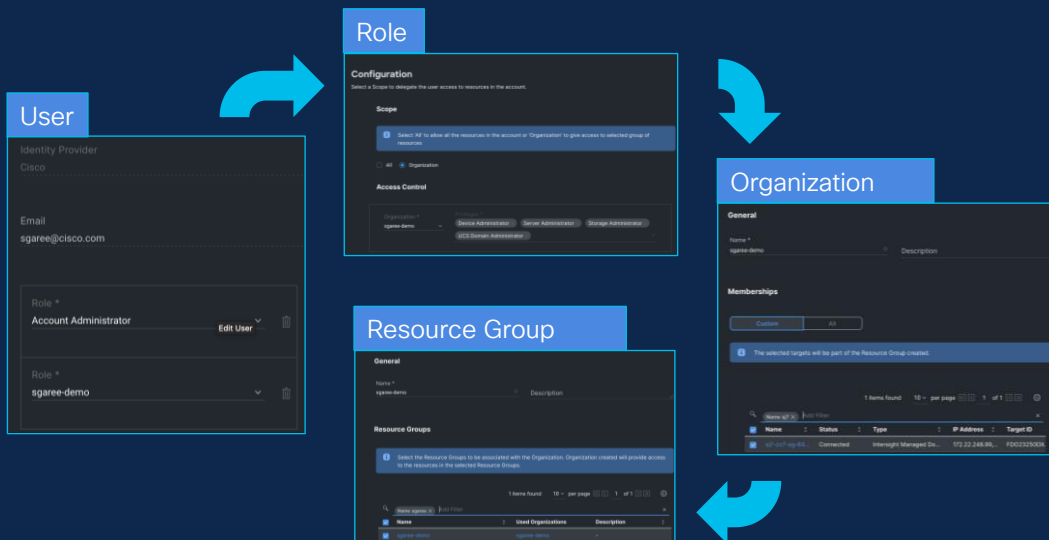
Stop the meddling

The screenshot displays the HCL Validation page for a specific server. The left sidebar shows the navigation menu with options like General, Inventory, UCS Server Profile, HCL, and Statistics. The main content area is divided into two sections: HCL Validation and Details. The HCL Validation section shows a table of hardware components with their status and firmware versions. A warning message indicates an incompatible component firmware and driver for one or more components.

Model	Hardware Status	Software Status	Firmware Version	Driver Protocol	Driver Version
UCS-M2-HWRAID	Validated	Validated	2.3.171014		
UCSX-V4-Q25GME	Validated	Incompatible Firmware	5.2(2b)	netic	1.0.42.0-10EM
UCS-NVMEI4-I1920	Validated	Validated	2CVIC033	nvme_pcie	1.2.3.16-1vmw.7

Firmware and settings cannot be modified from the OS or console. Intersight policies are the only settings path.

Who do you think you are?



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RBAC supports assignment of permissions to organizations containing templates, profiles, pools, and policies and linked to resource groups containing equipment.

User or groups are assigned permissions to organizations via roles.

Day 2 – Getting through the long cold winter

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And now for something slightly different (cloning)

The screenshot shows the 'Clone' configuration page in the Cisco Policy Center. The breadcrumb trail at the top is 'Policies > LAN Connectivity > sj2-151-b17-289-esx'. The page title is 'Clone'. Under the 'General' section, it says 'Select the name, description and tags for the clone.' The 'Source Policy' section contains the following fields: 'Organization' with value 'default', 'Policy Name' with value 'sj2-151-b17-289-esx', 'Platform Type' with value 'UCS Server', and 'Type' with value 'LAN Connectivity'. Below these are 'Tags' and 'Description', both with a '-' icon. The 'Clone Details' section at the bottom has 'Policy Name *' with value 'sj2-151-b17-289-esx_CLONE' and 'Organization *' with value 'default'.

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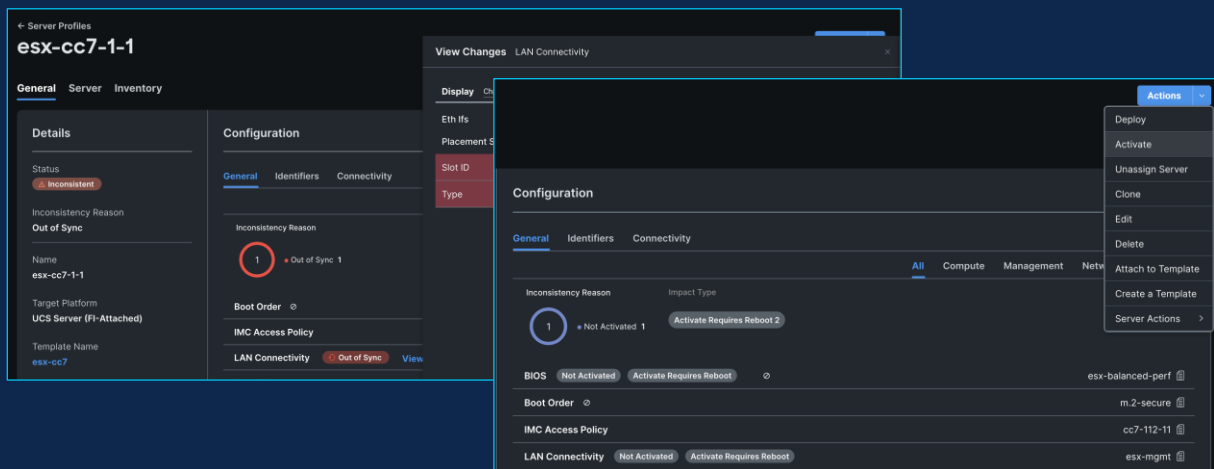
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What if you want to test a change without impacting multiple servers?

- Detach from template
- Clone policy (and any sub-policies, if needed)
- Adjust settings, deploy, and activate
- To undo just rebind to the template and deploy/activate
- Point template to new policy to roll out the change

Are you sure? Really, really sure? (activation)



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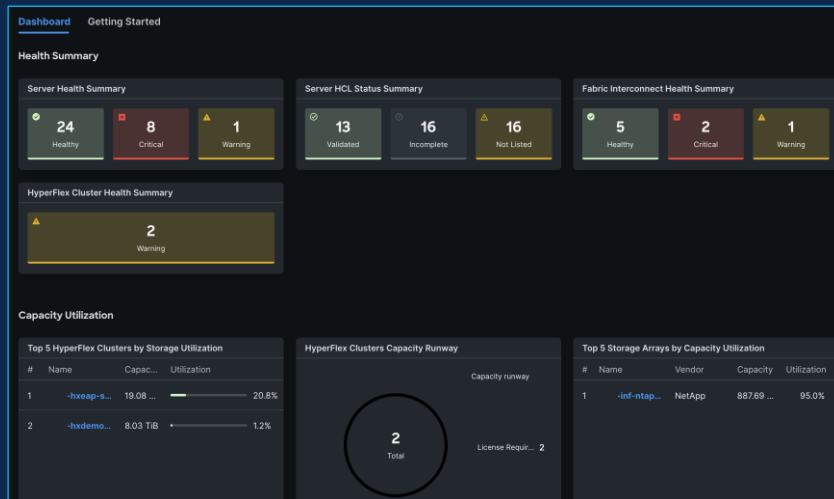
Activation is used when a change requires a host reboot.

For the most part, activation == reboot.

You can activate by using the activate action on the profile, by rebooting from the console, or rebooting the host OS.

Also works with server firmware upgrades.

Keeping your eyes on things (dashboards)



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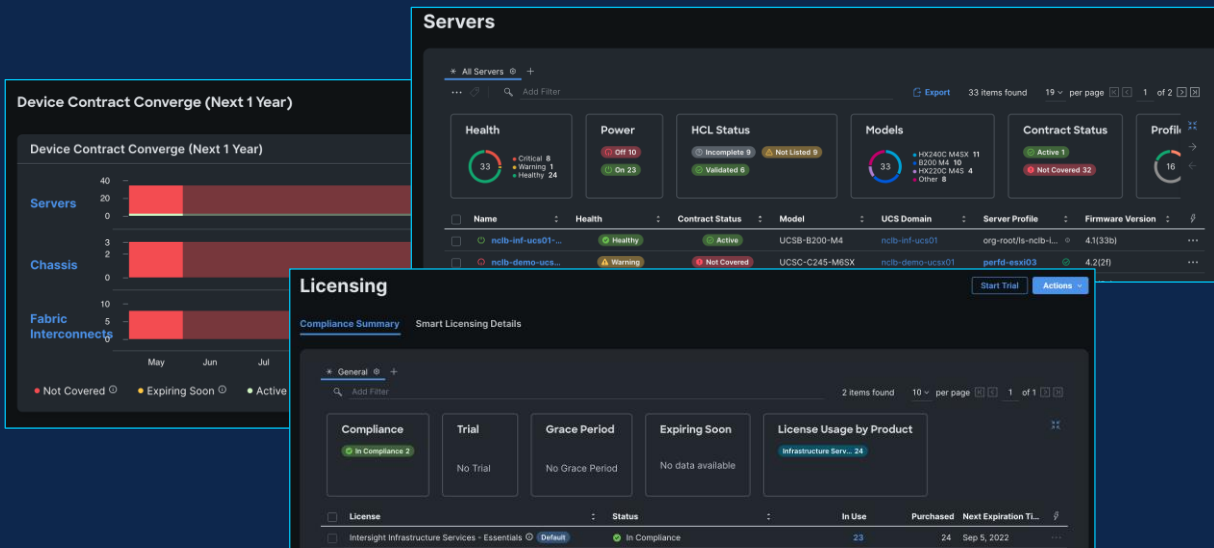
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One place for quick identification of issue.

Mind your business (contracts and licenses)



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Integration with CX services allows tracking of contract status for devices claimed in Intersight.

Upcoming expirations are clearly identified.

Are you vulnerable or just paranoid? (advisories)

Intel 2023.1 IPU - BIOS Advisory

Details

Severity: **High**

ID: Intel 2023.1 IPU - BIOS Advisory

CVEs: CVE-2022-26343, CVE-2022-30539, CVE-2022-32231, CVE-2022-26837, CVE-2022-30704, CVE-2021-0187, CVE-2022-36348, CVE-2022-36794, CVE-2021-33124,

General

Intel 2023.1 IPU - BIOS Advisory

Summary

Potential security vulnerabilities in the BIOS firmware and Intel® Trusted Execution Technology (TXT) Secure Initialization (SINIT) Authenticated Code Modules (ACM) for some Intel processors may impact the ability to mitigate these potential vulnerabilities.

- CVE-2022-26343 impacts only M5 servers.
- CVE-2022-32231 impacts both M5 and M6 servers.
- Rest all CVEs impact only M6 servers.

Affected Devices (1)

Advisories for the devices are processed every 6 hours. If you update the device, it can take up to 24 hours for the updated status to be displayed for the device. For more info see [Help Center](#)

1 items found 10 per page 1 of 1

Name	Type	Model / Type	Firmware / Version
sj7-cc7-sg-6454-1-1-2	Server	UCSX-210C-M6	5.0(4a)

Fixed Releases

Below firmware releases and later versions have fixes for the above mentioned vulnerabilities

UCS servers operating in Intersight Managed & Standalone Mode

Platform Model	First Fixed Release
ucs-x210c-m6	5.0(4b)

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Advisories for hardware and software components, Field Notices, and End of Sales/Support milestones.

Impacted equipment is clearly identified along with workarounds and remediation steps.

Escape the single glass of pain (Notifications)

Notifications

Stay current with notifications on relevant activities and important system updates. Learn more at [Help Center](#)

* All Notifications @ +

Add Filter

Name	Enabled	Email	Alarms	Last Updated
default	Yes	sgaree@cisco.com	Critical, Warning, Info... (3)	Oct 1, 2023 10:47 PM

Add Rule

Create a rule for a notification.

Notification emails may contain sensitive information.

☒ Enable

Name *
default

Email *
sgaree@cisco.com

Alarms @

Severity
☒ Critical ☒ Warning ☒ Info

Alarm Notifications for Account "TME-staging". Apr 26, 2023 10:47 PM (UTC +0).

From: Intersight <noreply-intersight@cisco.com>
To: @ Scott Garee (sgaree)

Alarm Notifications for Account "TME-staging"

Your account has one recent alarm.

EtherPortLinkDown Apr 26, 2023 10:47 PM

Port sgaree-sj02-151-poc/switch-B/slot 1/ethport 10 is link-down due to link failure

Source Type: Intersight Managed Domain

Source Name: sgaree-sj02-151-poc/switch-B/slot 1/ethport 10

[View Details](#)

This is an automated email. To unsubscribe from notifications, please contact the account administrator.

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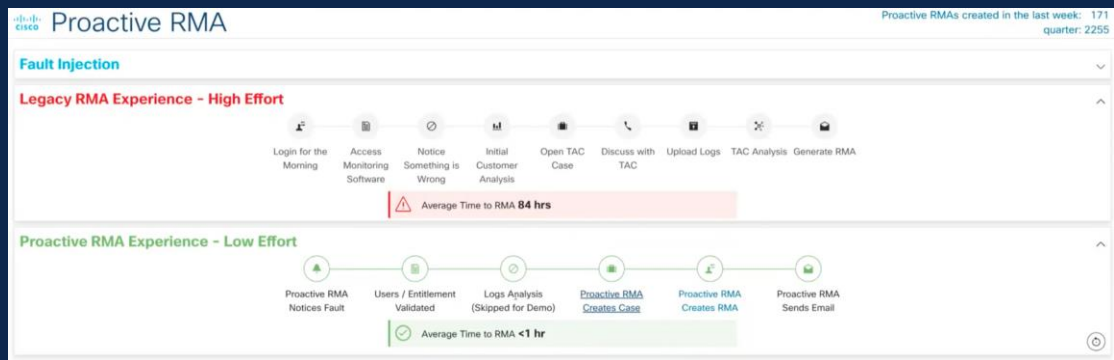
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Receive email when new alarms are raised.

The best work is no work (Proactive RMA)



Proactive RMA provides automated handling for specific faults for components.

Currently DIMMs and drives are supported.

Are the kids all right? (HCL)

The screenshot displays the Cisco Intersight HCL Validation interface for a specific server. The server ID is 'sj7-cc7-sg-6454-1-1-1' and its overall status is 'Healthy'. The 'HCL' tab is selected, showing a tree view of components. 'Server Hardware Compliance' and 'Server Software Compliance' are both 'Validated'. 'Adapter Compliance' is 'Not Listed' and is expanded, showing a warning: 'Incompatible component firmware and driver for one or more components. Learn more at [Help Center](#)'. Below this, a table lists 9 items found, with columns for Model, Hardware Status, Software Status, Firmware Version, Driver Protocol, and Driver Version. The first row shows 'UCS-M2-HWRAID' with 'Validated' hardware and software status and firmware version '2.3.17.1014'.

Model	Hardware Status	Software Status	Firmware Version	Driver Protocol	Driver Version
UCS-M2-HWRAID	Validated	Validated	2.3.17.1014		

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The UCS Hardware Compatibility List is digitized into Intersight.

Host based tools allow driver version checks along with the server firmware validation.

Marching to a different tune (vLCM HSM)

The screenshot displays the vSphere Client interface with the vLCM HSM (Host State Management) feature enabled. The main view shows the 'Updates' tab for a cluster named 'CC7'. A notification at the top states: 'Cluster is up to date! There are no new recommended cluster images available for this cluster 05/10/2023, 9:09:42 PM'. Below this, a table lists the recommended images for the cluster. The table has columns for 'Image', 'Host Version', and 'Image Version'. The recommended image is 'Cisco UCS-Addon-ESXi 4.2.2-a' with a version of '7.0 U3m - 21686933'. The current host version is '7.0 U2a - 17867351'. The table also shows the 'Vendor Addon' as 'Cisco UCS Addon ESXi-70U2-17867351 4.1.3-a' and the 'Firmware and Drivers Addon' as 'CR-5.0(4b) 5.0(4b)'. A 'CHECK COMPLIANCE' button is visible at the bottom right of the table.

Image	Host Version	Image Version
ESXi Version	7.0 U2a - 17867351	7.0 U3m - 21686933
Vendor Addon	Cisco UCS Addon ESXi-70U2-17867351 4.1.3-a	Cisco-UCS-Addon-ESXi 4.2.2-a
Firmware and Drivers Addon	None	CR-5.0(4b) 5.0(4b)

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Claiming a vCenter with the HSM feature enabled provides vLCM integration for UCS firmware updates.

Cisco provides curated addon packages for each release.

Cannot be used with firmware policies, as they would conflict with each other.

Bonus time!

Discovery troubleshooting

API reference

Feedback

Grabbing techsupport

Mobile App

Firmware upgrades

Questions?

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The API reference found in Help Center -> Getting Started

Device Console, GUI and shell

- Useful discovery troubleshooting commands
 - Connect to managed endpoints
 - nxos
 - show [run] interface [int]
 - show fex detail. (auto upgrade after enabling ports takes ~10 minutes)
 - show cdp neighbors (enable in domain Network Control policy)
 - cmc
 - Connects to IFM/IOM cabled to the FI you are logged into in the designated chassis
 - E.g. "FI-B# connect iom 1" connects to IFM 2 in chassis 1
 - show platform software cmcctrl blade inventory
 - show platform software cmcctrl thermal status

- Cimc
 - power
 - mrcout
 - network
 - Sensors

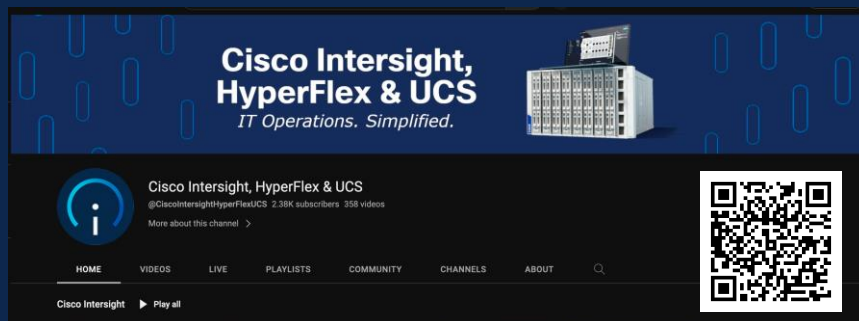
Techsupport from Actions menu. Files found in System -> Techsupport

Springtime in the datacenter!

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See also

- BRKCOM-3618: Blurring the Lines Between Rack and Blade
- BRKCOM-2295: UCS Server I/O with 5th Gen VIC
- UCS, Intersight, and HyperFlex on YouTube



<https://www.youtube.com/@CiscoIntersightHyperFlexUCS>

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Attendees who fill out a minimum of four session surveys and the overall event survey will get **Cisco Live-branded socks** (while supplies last)!



Attendees will also earn 100 points in the **Cisco Live Challenge** for every survey completed.



These points help you get on the leaderboard and increase your chances of winning daily and grand prizes



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- Book your one-on-one Meet the Engineer meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
- Visit the On-Demand Library for more sessions at www.CiscoLive.com/on-demand

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Thank you



Cisco Live Challenge

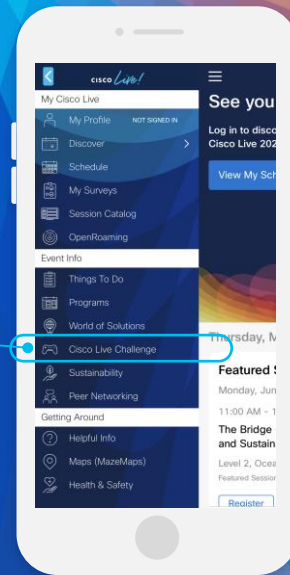
Gamify your Cisco Live experience!
Get points for attending this session!

How:

- 1 Open the Cisco Events App.
- 2 Click on 'Cisco Live Challenge' in the side menu.
- 3 Click on View Your Badges at the top.
- 4 Click the + at the bottom of the screen and scan the QR code:



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