



Cisco TechClub webinář



Novinky v UCS portfoliu a integracích se storage ekosystémem

Pepa Venzhöfer

Technology Solution Specialist – CCIE DC#59794

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Agenda

- Integrace storage s výpočetní platformou
 - Vytváření a správa
 - Viditelnost a analytika
 - Platformy
- Novinky v HW portfoliu UCS
 - Intel
 - AMD

Integrace storage s výpočetní platformou

Vytváření a správa

Správa celé DC infrastruktury je rozsáhlé téma

Apps



Traditional



Hybrid



Cloud-native

DevOps



Service Management



Support



Governance and Security



Serverless



Containers



Virtual Machines



Bare Metal



CISCO
INTERINSIGHT

Infra



Edge



Branch



Data center

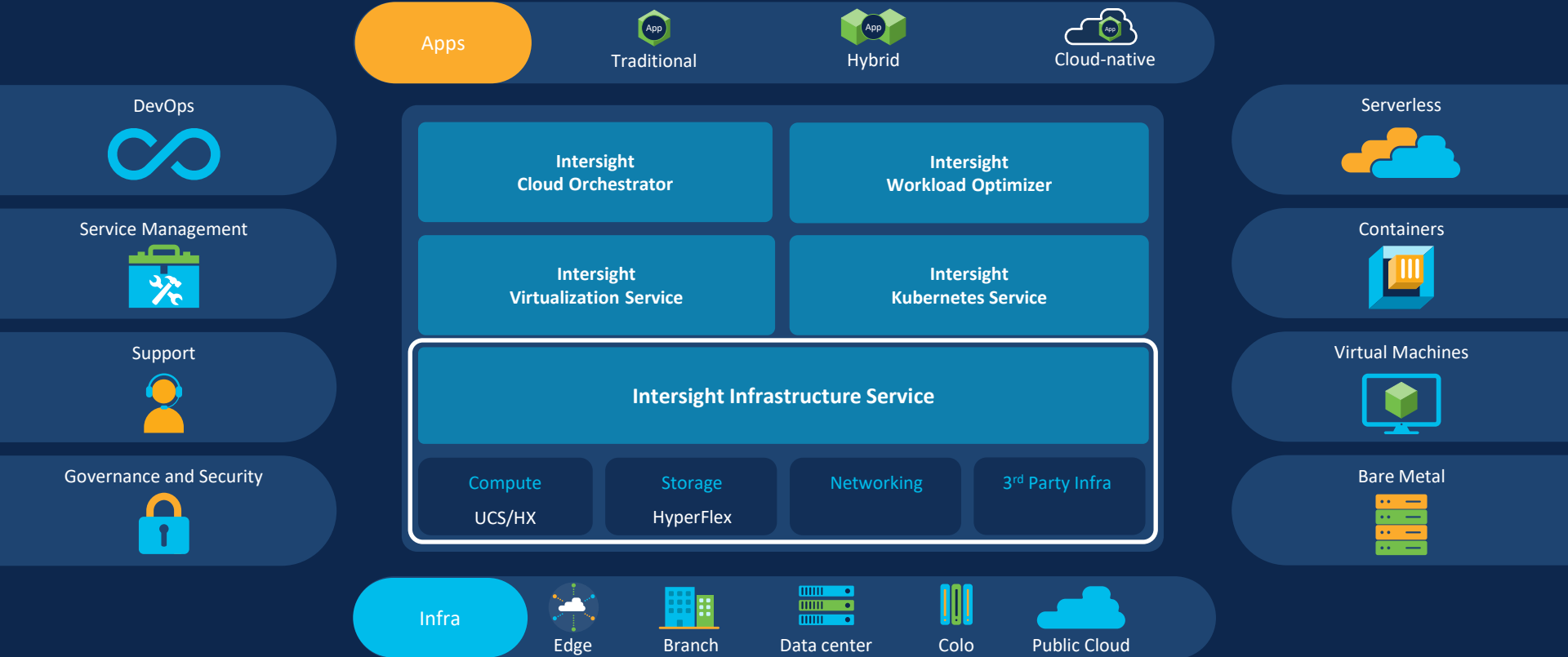


Colo



Public Cloud

Správa celé DC infrastruktury pod jednou střešou



Provisioning výpočetního výkonu

Intersight CONFIGURE > Create UCS Server Profile

MONITOR

OPERATE

- Servers
- Chassis
- Fabric Interconnects
- Networking Sites
- HyperFlex Clusters
- Storage
- Virtualization
- Kubernetes

CONFIGURE

- Orchestration
- Profiles**
- Templates

Progress

- General**
- Server Assignment
- Compute Configuration
- Management Configuration
- Storage Configuration
- Network Configuration
- Summary

Step 1
General
Enter a name, description, tag and select a platform for the server profile.

Organization *
default

Name *
TechClub-server_profile

Target Platform

UCS Server (Standalone) UCS Server (FI-Attached)

Set Tags

Description

< 1024

Provisioning výpočetního výkonu

The image displays two overlapping screenshots of the Cisco Intersight web interface. The background screenshot shows the 'Create UCS Server Profile' configuration page, with a 'Progress' sidebar listing steps from 'General' to 'Summary'. The foreground screenshot shows the 'Create HyperFlex Cluster Profile' configuration page, also with a 'Progress' sidebar. The main content area of the foreground screenshot is titled 'Step 1 General' and includes instructions for naming the cluster and selecting the organization, data platform version, and server firmware version. The 'Name' field is populated with 'TechClub-HX'.

Step 1 General

Add a name for the HyperFlex Cluster, select the Organization, HyperFlex Data Platform Version and Server Firmware version (for Standard Cluster)

Prior to creating a HyperFlex Cluster profile, ensure that you go through the pre-installation checklist and the detailed HyperFlex installation instructions, [here](#).

Standard / ESXi / HyperFlex Data Platform

Organization *
default

Name *
TechClub-HX

HyperFlex Data Platform Version *
4.5(1a)

Server Firmware Version *
4.1(2b)

Provisioning výpočetního výkonu

The image displays three overlapping screenshots of the Cisco Intersight provisioning interface, illustrating the steps for creating a UCS Server Profile, a HyperFlex Cluster Profile, and a SAN Connectivity Policy.

Top Left Screenshot: Create UCS Server Profile

- Progress bar: 1 General, 2 Server Assignment, 3 Compute Configuration, 4 Management Configuration, 5 Storage Configuration, 6 Network Configuration.

Top Right Screenshot: Create HyperFlex Cluster Profile

- Progress bar: 1 General, 2 Nodes Assignment, 3 Cluster Configuration, 4 Nodes Configuration, 5 Summary.

Bottom Screenshot: Create SAN Connectivity Policy

- Section: Add vHBA
- Form fields: Name *, WWPN Address, WWPN Address Pool * (with Pool and Static buttons).
- Dropdown menu: vHBA Type (fc-initiator, fc-nvme-initiator, fc-nvme-target, fc-target).

HyperFlex Cluster Profile Configuration Details:

- Step 1 General: Add a name for the HyperFlex Cluster, select the Organization, HyperFlex Data Platform Version and Server Firmware version (for Standard Cluster).
- Information box: Prior to creating a HyperFlex Cluster profile, ensure that you go through the pre-installation checklist and the detailed HyperFlex installation instructions, [here](#).
- Option: Standard / ESXi / HyperFlex Data Platform
- Organization *: default
- Name *: TechClub-HX
- HyperFlex Data Platform Version *: 4.5(1a)
- Server Firmware Version *: 4.1(2b)

Storage plug-iny

Integrují správu a orchestraci storage do společného nástroje

Hlavní přínosy

- Vhled do storage systémů
- Bohatá knihovna úkonů
- Tvorba a spouštění workflow



HITACHI
Inspire the Next

NetApp

Orchestrace provisioningu a správa storage prostředků

The screenshot displays the Cisco Intersight interface for task management. The left sidebar shows navigation options: MONITOR, OPERATE (with a sub-menu for Servers, Chassis, Fabric Interconnects, Networking Sites, HyperFlex Clusters, Storage, Virtualization, and Kubernetes), and CONFIGURE (with a sub-menu for Orchestration). The main content area is titled 'CONFIGURE > Orchestration' and has tabs for Workflows, Tasks (selected), and Data Types. Under the 'Tasks' tab, there are sub-tabs for 'My Tasks', 'System Tasks', and 'All Tasks' (which is active and has a lock icon). A search bar shows 'category Storage' with an 'Add Filter' button. Below the search bar, there are three summary cards: 'Top 5 Task Categories' showing 53 tasks for 'Storage', 'System Defined' showing 'Yes 53', and 'Top 5 Distribution by Targets' showing a total of 77 tasks, with a breakdown: Pure Storage FlashArray (41), NetApp Active IQ Unified Ma... (20), and Hitachi Virtual Storage Platf... (16). At the bottom, a table lists tasks with columns for checkboxes, Display Name, Description, Last Update, and System Defined.

<input type="checkbox"/>	Display Name	Description	Last Update	System Defined
<input type="checkbox"/>	Add Hosts to Storage Host Group	Add host members to host group with a l...	Apr 30, 2021 4:08 AM	Yes
<input type="checkbox"/>	Add Host to Storage Host Group	Add a single host to a host group with ho...	Apr 30, 2021 4:08 AM	Yes
<input type="checkbox"/>	Remove Storage Volume	Remove Storage Volume with Volume na...	Apr 30, 2021 4:08 AM	Yes
<input type="checkbox"/>	Remove Hosts from Storage Host Group	Remove host member(s) from a host gro...	Apr 30, 2021 4:08 AM	Yes
<input type="checkbox"/>	Remove Storage Host Group	Remove a host group with host group na...	Apr 30, 2021 4:08 AM	Yes

Orchestrace provisioningu a správa storage prostředků

The screenshot displays the Cisco Intersight interface for the 'Orchestration' section. At the top, there is a navigation bar with the Cisco Intersight logo, the title 'Orchestration', and user information 'Khaled Rawashdeh'. A notification banner at the top states: 'New features have recently been added! Learn More'. Below this, a warning banner reads: 'This is a feature preview for testing and feedback purposes only. Please do not use this on production systems.' The main content area features a search bar and a table with 9 items found. The table columns are: Name, Description, Executions, Last Execution Status, Validation Information, and Last Update. The tasks listed include updating and removing VMFS datastores and storage hosts, as well as creating new VMFS datastores, virtual machines, and storage host groups.

<input type="checkbox"/>	Name	Description	Executions	Last Execution Status	Validation Infor...	Last Update	
<input type="checkbox"/>	Update VMFS Datast...	Expand a datastore on hypervisor manager by exte...	2	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	Update Storage Host	Update the storage host details. If the inputs for a ...	2	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	Remove VMFS Datast...	Remove VMFS datastore and remove the backing ...	1	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	Remove Storage Host...	Remove storage host group. If hosts are provided ...	2	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	Remove Storage Host	Remove storage host. If host group name is provid...	2	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	New VMFS Datastore	Create a storage volume and build VMFS datastor...	16	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	New Virtual Machine	Create a new virtual machine on the hypervisor fro...	4	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	New Storage Host Gr...	Create a new storage host group. If hosts are provi...	2	🟢	🟢	January 9, 2020 05:5...	...
<input type="checkbox"/>	New Storage Host	Create a new storage host. If host group is provide...	2	🟢	🟢	January 9, 2020 05:5...	...

Orchestrace provisioningu a správa storage prostředků

The screenshot displays the Cisco Intersight Orchestrator interface. On the left, the navigation pane shows the 'Orchestration' section. A table lists various tasks, with 'New VMFS Dataspace' highlighted in green. The main workspace shows a workflow diagram with the following steps:

- Start
- New Storage Volume (NewStorageVolume)
- Connect Volume to Storage Host (ConnectVolumeToStorageHost)
- Connect Volume to Storage Host Group (ConnectVolumeToStorageHostGroup)
- New VMFS Dataspace (NewVMFSDataspace)
- Completed
- Failed

The JSON View panel on the right displays the following metadata for the workflow:

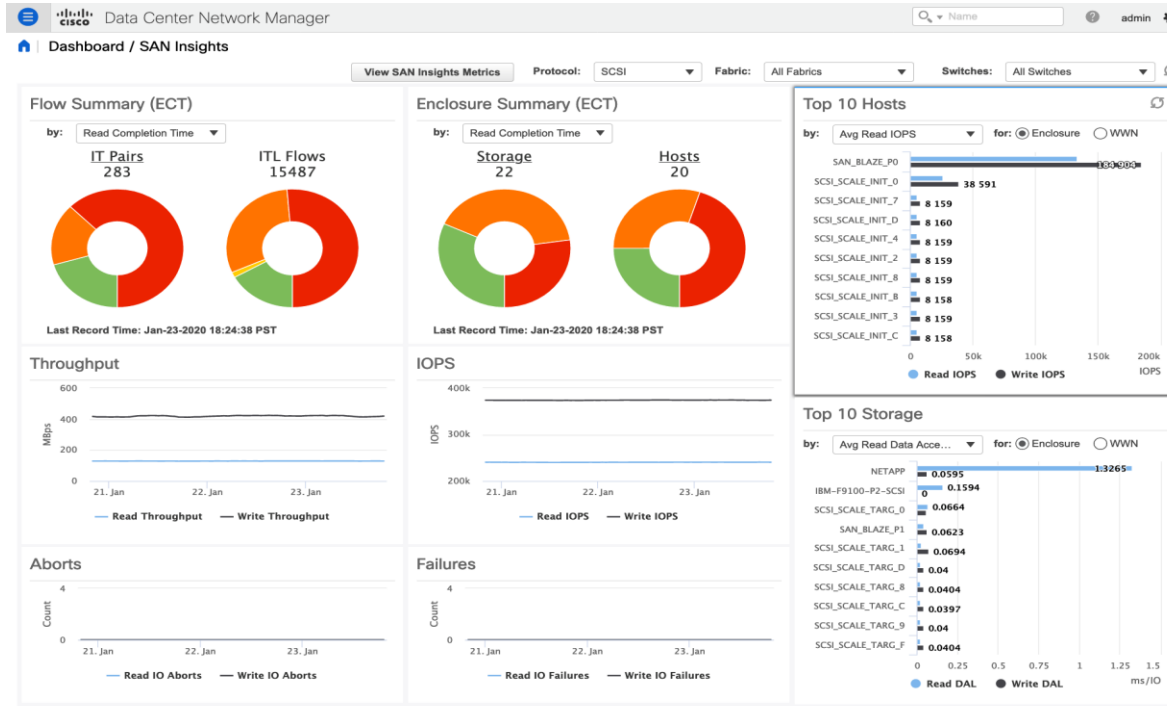
```
1 {
2   "AccountMoid": "5c4a74693935687776d94f98",
3   "Ancestors": [],
4   "Catalog": {
5     "Moid": "5c81e342696f6e2d309e5ddd",
6     "ObjectType": "workflow.Catalog",
7     "link": "https://www.intersight.com/api/v1/workflow/Catalogs/5c81e342696f6e2d309e5ddd",
8   },
9   "CreateTime": "2019-07-12T00:30:43.186Z",
10  "DefaultVersion": true,
11  "Description": "Create a storage volume and build VMFS datastore on the volume",
12  "DomainGroupMoid": "5c4a74693935687776d94f99",
13  "InputDefinition": [
14    {
15      "Default": null,
16      "Description": "Storage device for this workflow execution.",
17      "Label": "Storage Device",
18      "Name": "StorageDevice",
19      "ObjectType": "workflow.TargetDataType",
20      "Properties": [
21        {
22          "DisplayAttributes": [
23            "DeviceHostname",
24            "Vendor"
25          ],
26          "ObjectType": "workflow.MoReferenceProperty",
27          "Selector": "/api/v1/asset/DeviceRegistrations?filter=PlatformType=eq",
28        }
29      ]
30    }
31  ]
32 }
```

Integrace storage s výpočetní platformou

Viditelnost a analytika

Cisco DCNM 11.3.1

Hnací síla SAN analytiky



- SAN Insights Dashboard
- Celkový pohled na SAN fabric
- Detailní pohledy na fabric i switche
- Analýza Initiator-Target párů a ITL toků

MDS 32G produktová řada

Zdroj detailní telemetrie



MDS9700 32GB Line Card



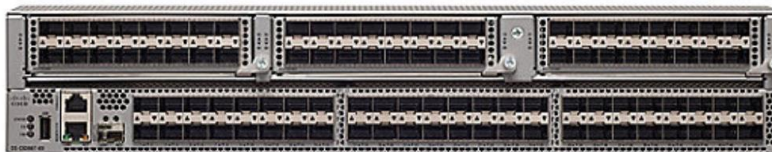
MDS 9132T 32GB 1U Switch



MDS 9148T 32GB 1U Switch



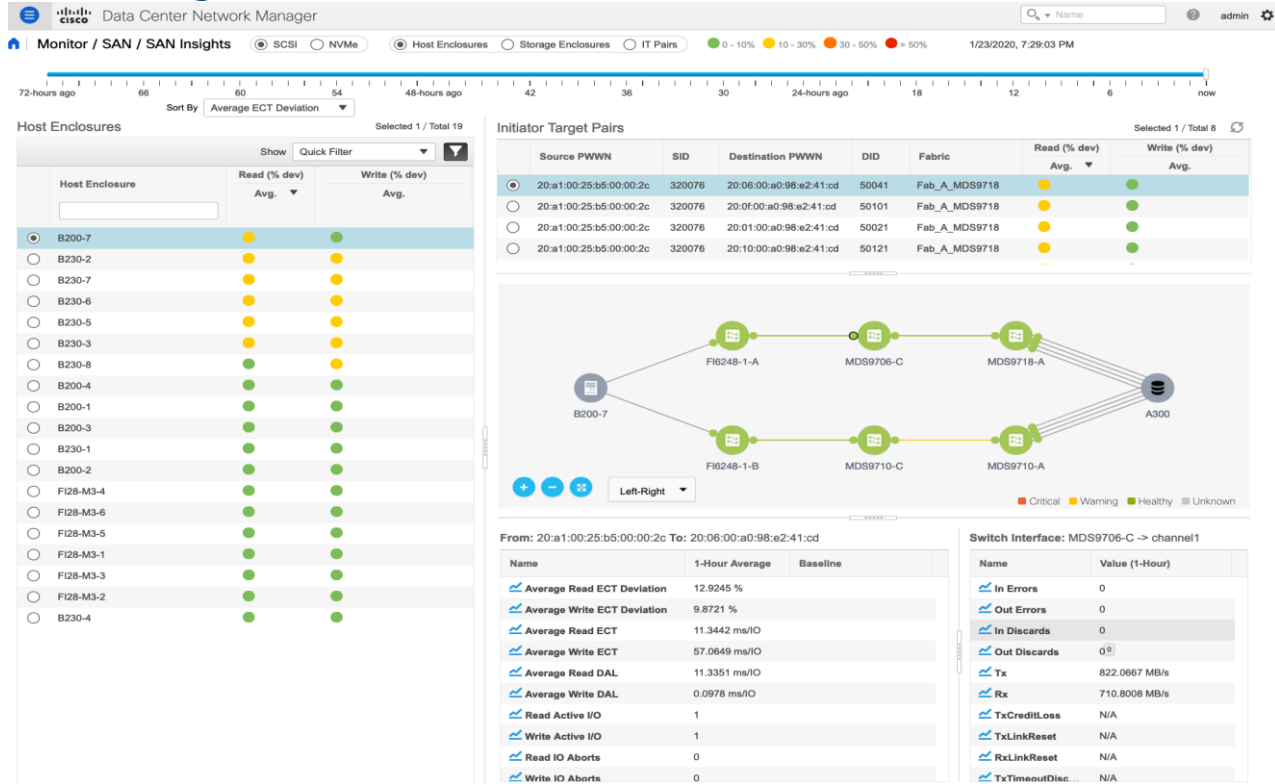
MDS 9396T 32GB 2U Switch



- Integrovaná HW telemetrie
- Podpora v celé 32G produktové řadě
- End-to-end metriky
- Sběr v kterémkoliv místě sítě
- Jakákoliv rychlost portu

Cisco DCNM 11.3.1

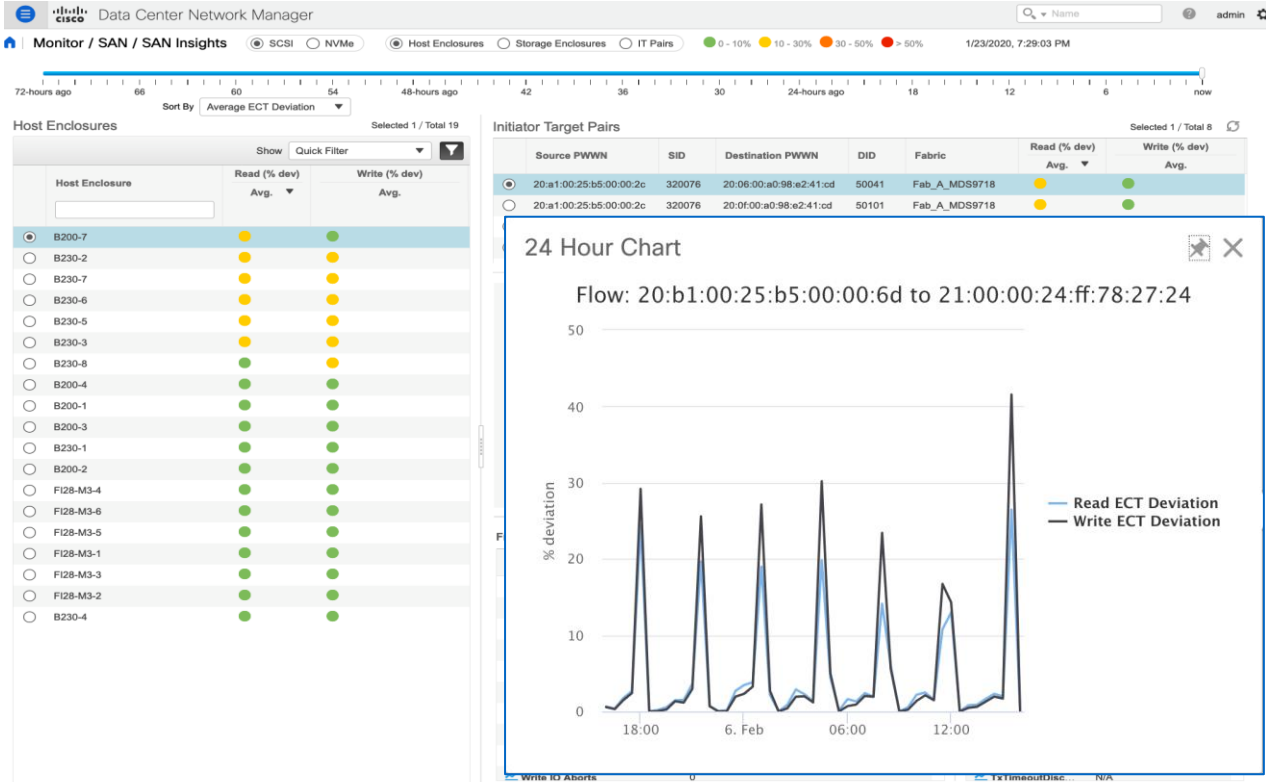
SAN Insights



- Interaktivní topologické zobrazení
- Metriky rozhraní a toků s us časovým rozlišením
- Analytika metrik přenášených protokolů SCSI i NVMe

Cisco DCNM 11.3.1

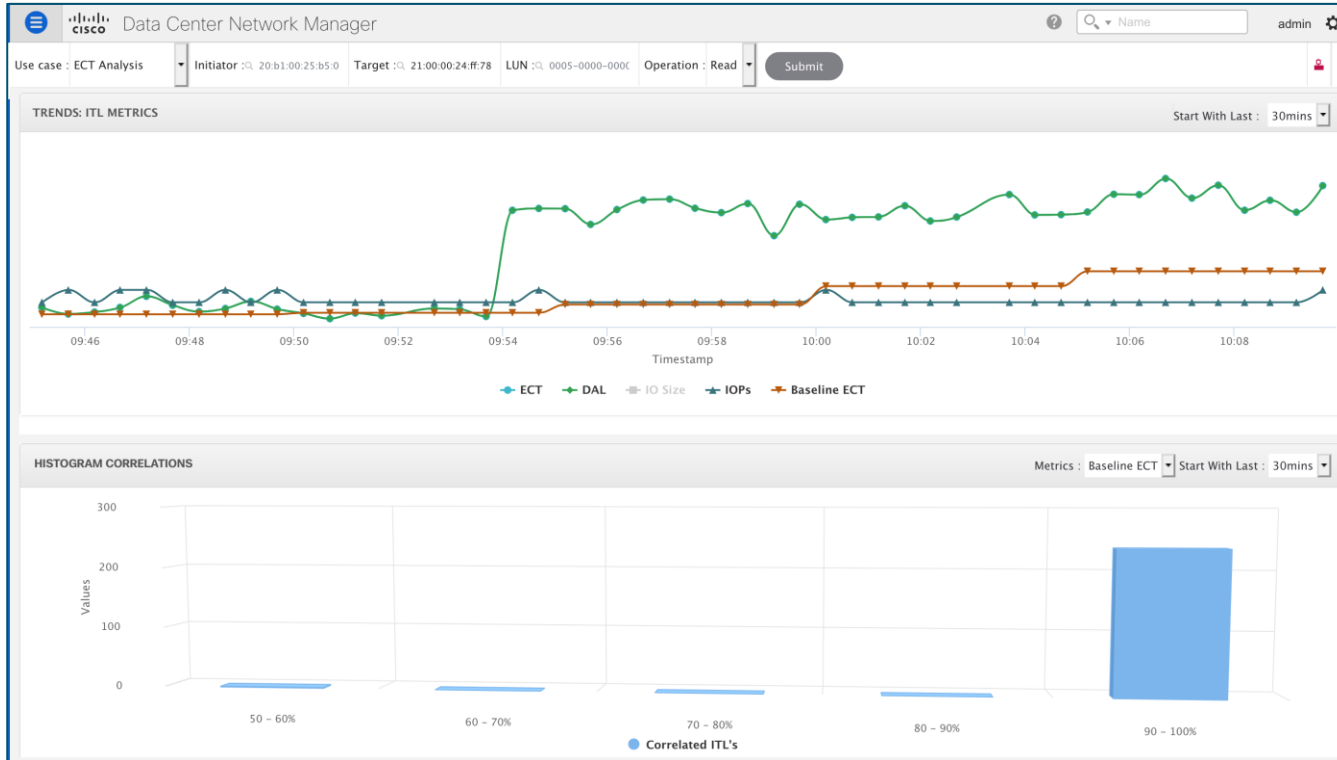
SAN Insights



- Interaktivní topologické zobrazení
- Metriky rozhraní a toků s us časovým rozlišením
- Analytika metrik přenášených protokolů SCSI i NVMe

Cisco DCNM 11.3.1

Analýza Exchange Completion Time



- Průběžné stanovování baseline
- Alerting při odchýlení od baseline
- Možnost korelace více metrik

Cisco SAN Insights Discovery

Products Assess Fabric Health Webinars Services Software Subscriptions Resources For Partners Contact Cisco

Cisco SAN Insights Discovery (SID) Tool

Meet your new storage fabric sidekick.

What is the SID tool?

A free tool to assess the health of your MDS storage fabric.

- Stop escalations before they start**
Stay proactive with holistic health-check, inventory assessment and recommendations.
- Dial in performance with real-time data.**
Monitor port performance and access data at both the fabric and switch level.
- Refresh smarter, plan better.**
Stay ahead of the refresh curve with End-of-Life and End-of-Service notifications.
- Assess from anywhere.**
Create, access and share reports regardless of location from the secure, cloud-hosted portal.

[Solution overview](#) [Watch demo \(7:16\)](#)

How does it work?

Learn how to get started and use the tool in two simple steps.

- Step 1: Download collector**
Identify issues proactively with holistic health-check, inventory assessment and recommendations.
[Download collector](#)
- Step 2: Start assessing your SAN fabric.**
Sign into the SAN Insights Discovery analysis application to upload your data and begin your dashboard.
[Start assessment](#)

[Get support](#) [FAQs](#)

- Cloud portál <http://csid.cisco.com>
- Kolektor bez nutnosti instalace
- Data zabezpečena, RBAC
- Stav SAN fabric a jednotlivých switchů
- EoS/EoL
- Inventář, výkonnostní přehled
- Logické struktury (VSAN, zoning)
- <https://www.cisco.com/c/en/us/products/storage-e-networking/index.html#~assess-fabric-health>

Cisco SID – Report – switch

Cisco SAN Insights Discovery Collector Version: 2.0.1

[Back to Fabric](#) [Overview](#) [Alerts](#) [Inventory](#) [Utilization](#)

Switch Overview **FABRIC A** **MDS9718-A** Module Warning

Switch Info: ALIAS: MDS9718-A, VERSION: 8.4(2), #PORTS: 236, SWITCH STATUS: Module Warning, SWITCH HEALTH: OK, POWER USAGE: 3743(W), VENDOR: Cisco, MODEL: DS-C9718, SERIAL NUMBER: JPG19380099, NPV/AG: False

Alerts Total Alerts **22**

Critical: 0
Error: 20
Warning: 2
Info: 0

End of Service / Life Alerts Total Alerts **11**

Firmware: 0
Module: 11
Switch: 0

End Devices Total Devices **16**

Port Consumption 14238

Ports in Use

Modules					Filter table
Model	Description	Slot	Power Usage (W)	Status	
DS-X9648-1536K9	4/8/16/32 Gbps Advanced FC Module	1	235	✓	
DS-X97-SF1E-K9	Supervisor Module-3	10	138	✓	
DS-X9334-K9	1/10/40G IPS,2/4/8/10/16G FC Module	3	439	✓	
DS-X9334-K9	1/10/40G IPS,2/4/8/10/16G FC Module	5	443	✓	
DS-X9824-960K9	40 Gbps FCoE Module	6	546	✓	
DS-X9448-768K9	2/4/8/10/16 Gbps Advanced FC Module	7	385	✓	
DS-X9448-768K9	2/4/8/10/16 Gbps Advanced FC Module	8	394	✓	
DS-X97-SF1E-K9	Supervisor Module-3	9	148	✓	
DS-X9718-FAB1	Fabric Module 1	Xb1	--	✗	
DS-X9718-FAB1	Fabric Module 1	Xb2	159	✓	

Show 10 ▾ Page 1 ▾ of 3 << >>

Ports				Filter table
Port	Operating Speed	Max Speed	Status	
fc1/1	8G	320	✓	
fc1/2	8G	320	✓	
fc1/3	--	320	✗	
fc1/4	--	320	✗	
fc1/5	32G	320	✓	
fc1/6	--	320	✗	
fc1/7	--	320	✗	
fc1/8	--	320	✗	
fc1/9	--	320	✗	
fc1/10	--	320	✗	

Show 10 ▾ Page 1 ▾ of 24 << >>

Cisco SID – Report – SAN fabrika

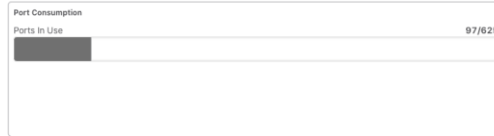
☰ Cisco SAN Insights Discovery



◀ Back to Reports Overview Alerts VSANs Utilization Topology Compare with other report

Collector Version: 2.0.1

Fabric Utilization
FABRIC_A
JANUARY 27TH 2021



Port Utilization Filter table

Switch Name	Port	Mode	Speed	Rx Util	Tx Util	PortChannel or FCIP
MD59706-C	fc8/22	TF	8G			port-channel1
MD59706-C	fc8/21	TF	8G			port-channel1
F6248-1-A	fc1/22	TNP	8G			san-port-channel1
F6248-1-A	fc1/21	TNP	8G			san-port-channel1
MD59718-A	port-channel2	TE	64G			
MD59719-A	fc1/16	TE	32G			port-channel2
MD59716-A	fc1/15	TE	32G			port-channel2
F6248-1-A	Ethernet1/4	fabric	10G			
F6248-1-A	Ethernet1/2	fabric	10G			
F6248-1-A	Ethernet1/1	fabric	10G			

40%

Show 10 Page 1 of 10

Switch CPU and Memory Utilization Filter table

Switch Name	Mem. Status	Mem. Usage	CPU Usage
F6248-1-A			
F6248-28-B			
MD59148T-A			
MD59706-C			
MD59716-A			

Show 10 Page 1 of 1

Cisco SID – Report – SAN fabrika

Cisco SAN Insights Discovery



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Collector Version: 2.0.1

Fabric Utilization FABRIC_A JANUARY 27TH 2021

Cisco SAN Insights Discovery



Back to Reports Overview Alerts Inventory VSANs Utilization Topology Compare with other report

Collector Version: 2.0.1

Port Consumption

Ports In Use

0

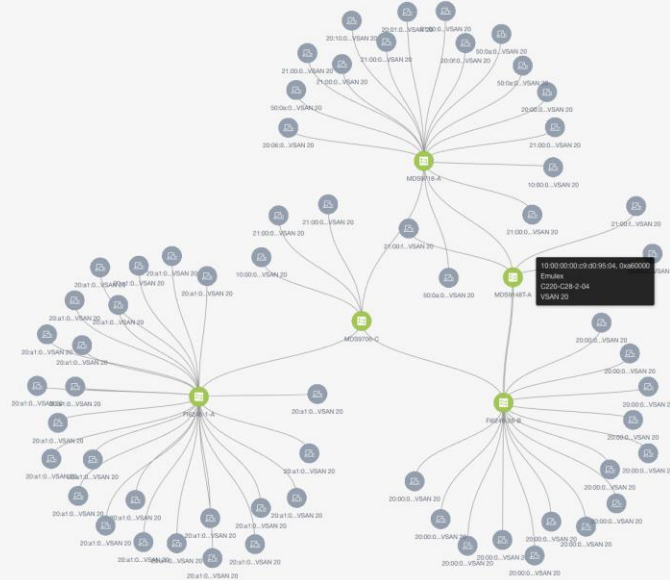
Port Utilization

Switch Name	Port
MD59706-C	fc8/22
MD59706-C	fc8/21
F6248-1-A	fc1/22
F6248-1-A	fc1/21
MD59718-A	port-channel2
MD59719-A	fc1/16
MD59716-A	fc1/15
F6248-1-A	Ethernet1/4
F6248-1-A	Ethernet1/2
F6248-1-A	Ethernet1/1

Show 10

Fabric Topology FABRIC_A JANUARY 27TH 2021

Show End Devices



Cisco SID – Automatizovaný návrh obnovy SAN sítě

Konvergovaná síť N5K



Nexus 5672UP-16G



Nexus 2348UPQ



Nexus 5458UP

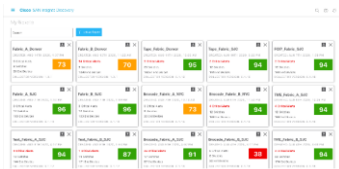


Nexus 5596UP



Nexus 5696Q

SAN Insights Discovery



Kontrola stavu pro Cisco i Brocade SAN

Bez nutnosti instalace

Konvergovaná síť N9K s nativním FC



Nexus 9336C-FX2-E*



Nexus 93360YC-FX2



Nexus 93180YC-FX

* Podpora FC plánována ke konci CY21

Konvergence FC/FCoE v NX-OS či
ACI režimu

Dedikovaná FC síť MDS



MDS 9132T



MDS 9148T



MDS 9396T

Dedikovaná SAN infrastruktura s
pokročilými funkcemi

Automatické doporučení optimální platformy pro obnovu staršího HW

Cisco SID – Návrh migrace z Brocade

Cisco SAN Insights Discovery

Back to Reports Overview Alerts Inventory Zones Utilization Topology Migration Compare with older report

Collector Version: 2.0.1

Switch Migration I-BRCD1 JANUARY 12TH 2021 View Type: Switches Zones Parameters

Download

Switches Filter table

Switch Name	Serial Number	Brocade Switch Model	Brocade Switch Speed	Brocade Licensed Ports	Brocade Total Ports	Suggested Cisco Switch	Cisco Config Options
BRCD-300-107	ALJ2510L...	Brocade 300	8G	24	24	MDS 9148S with 24 ports	DS-C9148S-12PK9, DS-C9148S-48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9
BRCD-6510-101	BRW4051M...	Brocade 6510	16G	48	48	MDS 9148S with 48 ports	DS-C9148S-12PK9, DS-C9148S-48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9
BRCD-6510-102	BRW1909MO2	Brocade 6510	16G	48	48	MDS 9148S with 48 ports	DS-C9148S-12PK9, DS-C9148S-48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9
BRCD-6510-103	BRW2533K0KZ	Brocade 6510	16G	48	48	MDS 9148S with 48 ports	DS-C9148S-12PK9, DS-C9148S-48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9
BRCD-6510-104	BRW2548K03D	Brocade 6510	16G	48	48	MDS 9148S with 48 ports	DS-C9148S-12PK9, DS-C9148S-48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9
BRCD-6510-105	BRW2533K...	Brocade 6510	16G	48	48	MDS 9148S with 48 ports	DS-C9148S-12PK9, DS-C9148S-48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9
BRCD-6510-106	BRW2548K...	Brocade 6510	16G	48	48	MDS 9148S with 48 ports	DS-C9148S-12PK9, DS-C9148S-48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9, DS-C9148S-D12PK9, DS-C9148S-D48PK9

Show 10 Page 1 of 1

Cisco SID – Migrace zónové konfigurace Brocade

Cisco SAN Insights Discovery

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Zoning Migration

I-BRCD1
JANUARY 12TH 2021

View Type: Switch Zones Parameters

This is a tool designed to help migrate zoning information from a Brocade SAN fabric into a Cisco MDS 9000 SAN fabric. This tool generates an output file which can be directly applied on Cisco MDS 9000 Command Line Interface (CLI). It is important to understand that this tool is designed to place zoning configuration on an MDS 9000 Switch that has NO current zoning configurations nor device aliases and will be applied to the desired VSAN. This tool currently supports Brocade switches running FOS 7.x and above and only for PWWN based zones. Any hard / interface-based zoning will error out and provide errors in the generated log files. To migrate the Brocade Zoning information please follow the steps below:

Step 1: Select Target VSAN number (1-4093) that you would like this new zoneset to reside.

Step 2: Select optional features: (both of these modes are suggested for new deployments)
Enhanced Zone Mode
Enhanced Device-Alias Mode
For more information on Enhanced Zoning and Enhanced Device-Alias please check MDS 9000 documentation on www.cisco.com

Step 3: Click on the "Convert" button to generate the output file that can then be applied to the MDS 9000 switch. The file will generate the new Cisco zoning information.

Step 4: Apply the migrated zoning output to the switch

For more information, please check out the SID help section.

Select Target VSAN:

Enhanced Zoning
 Enhanced Device Alias

Cisco Zone Migration Output

```
conf t
device-alias mode enhanced
exit
conf t
vsan database
vsan 100
exit

zone mode enhanced vsan 100

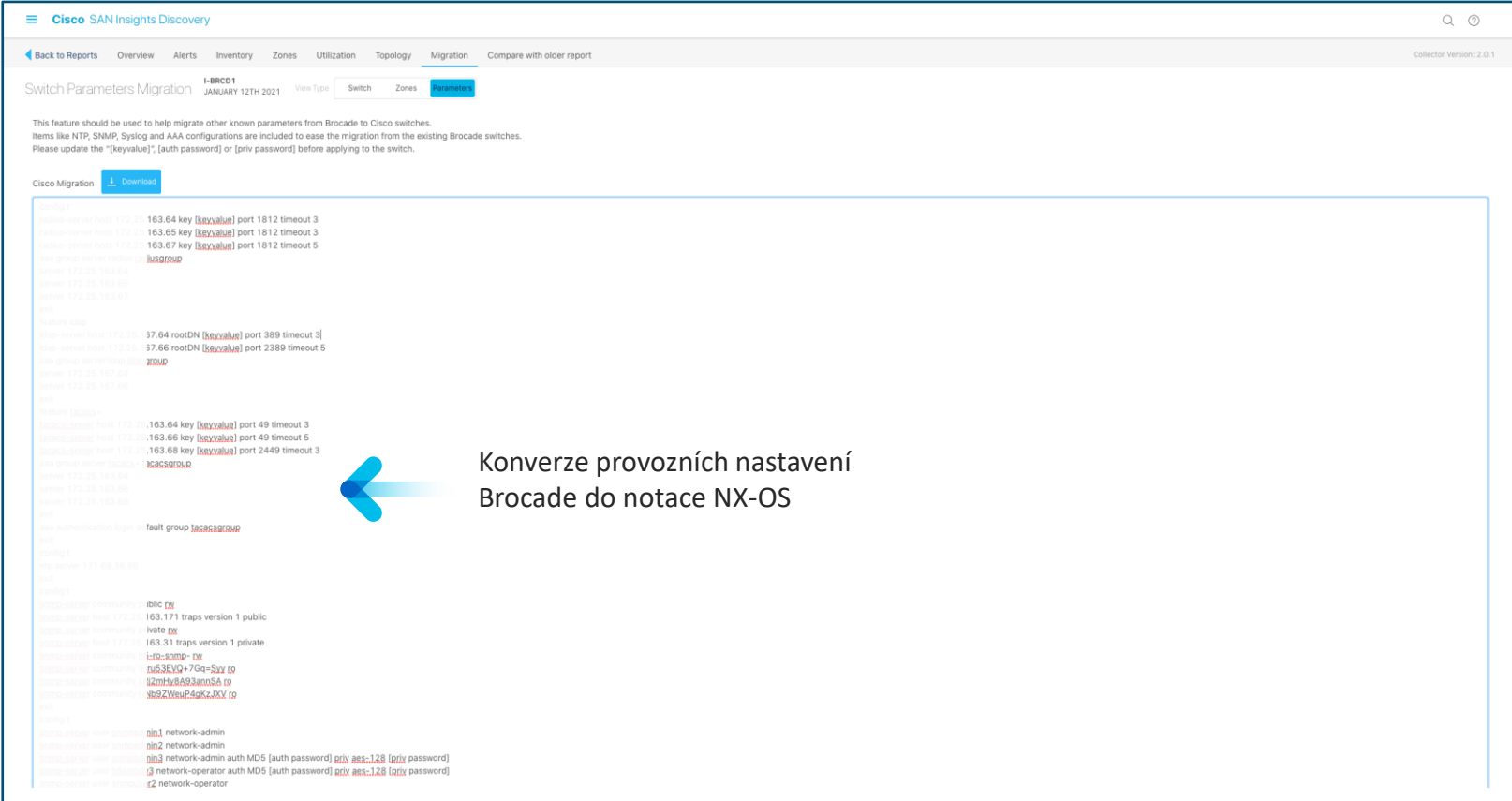
fabric name SANBare_Port8_Targ1 vsan 100
  member pwwn 20:08:00:11:00:3c:a8:00
fabric name SANBare_Port19_AHS vsan 100
  member pwwn 20:16:00:11:00:3c:08:00
fabric name SANBare_Port18_SHT vsan 100
  member pwwn 20:14:00:11:00:3c:00:01
fabric name SANBare_Port8_Targ2 vsan 100
  member pwwn 20:08:00:11:00:3c:a8:14
fabric name SANBare_Port18_SHT vsan 100
  member pwwn 20:14:00:11:00:3c:0c:02
fabric name SANBare_Port9_SHT vsan 100
  member pwwn 20:08:00:11:00:3c:a7:04
fabric name SANBare_Port19_SHT vsan 100
  member pwwn 20:16:00:11:00:3c:48:07
fabric name SANBare_Port8_Targ1 vsan 100
  member pwwn 20:08:00:11:00:3c:a8:18
fabric name SANBare_Port18_SHT vsan 100
  member pwwn 20:14:00:11:00:3c:0c:04
fabric name SANBare_Port8_Targ1 vsan 100
  member pwwn 20:08:00:11:00:3c:a8:12
fabric name SANBare_Port8_Targ2 vsan 100
  member pwwn 20:08:00:11:00:3c:a8:14
fabric name strom_kvmd_20 vsan 100
  member pwwn 21:00:00:24:00:00:00:10

```

© 20

Konverze Brocade zóningu do notace NX-OS enhanced zoning včetně definice device-aliasů

Cisco SID – Migration konfiguračních parametrů switchů



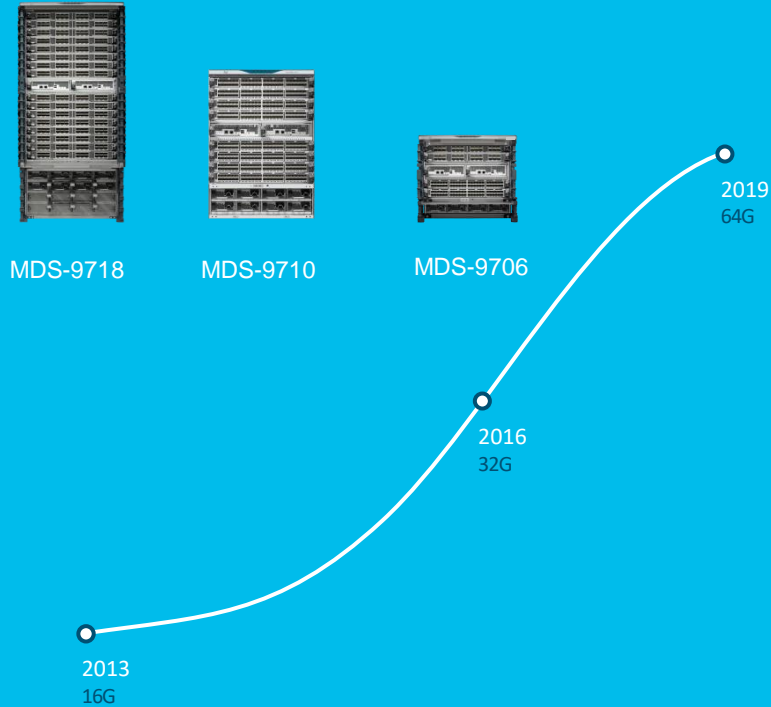
The screenshot displays the Cisco SAN Insights Discovery web interface. At the top, there is a navigation bar with a hamburger menu, the text "Cisco SAN Insights Discovery", a search icon, and a "Collector Version: 2.0.1" indicator. Below this is a secondary navigation bar with tabs for "Back to Reports", "Overview", "Alerts", "Inventory", "Zones", "Utilization", "Topology", "Migration", and "Compare with older report". The main content area is titled "Switch Parameters Migration" and includes a sub-header "I-BRCD1 JANUARY 12TH 2021" and a "View Type" selector with options for "Switch", "Zones", and "Parameters". A descriptive paragraph explains the feature's purpose: "This feature should be used to help migrate other known parameters from Brocade to Cisco switches. Items like NTP, SNMP, Syslog and AAA configurations are included to ease the migration from the existing Brocade switches. Please update the '[keyvalue]'; [auth password] or [priv password] before applying to the switch." Below this is a "Cisco Migration" section with a "Download" button. The main part of the page is a large text area containing a list of configuration commands for various switches, such as "n10101", "n10102", "n10103", "n10104", "n10105", "n10106", "n10107", "n10108", "n10109", "n10110", "n10111", "n10112", "n10113", "n10114", "n10115", "n10116", "n10117", "n10118", "n10119", "n10120", "n10121", "n10122", "n10123", "n10124", "n10125", "n10126", "n10127", "n10128", "n10129", "n10130", "n10131", "n10132", "n10133", "n10134", "n10135", "n10136", "n10137", "n10138", "n10139", "n10140", "n10141", "n10142", "n10143", "n10144", "n10145", "n10146", "n10147", "n10148", "n10149", "n10150". A blue arrow points from the text "Konverze provozních nastavení Brocade do notace NX-OS" to the configuration list.

Konverze provozních nastavení
Brocade do notace NX-OS

Integrace storage s výpočetní platformou

Platformy

MDS něco vydrží



SPEED

Investment protection for NVMe/FC and all flash arrays

- 64G ready director
- No forklift upgrade
- Built for the most demanding storage environments



VISIBILITY

Gain actionable insights

- Industries first NVMe/FC analytics
- FC-SCSI and NVMe/FC support
- Built for customer choice and flexibility



AUTOMATION

Reduce operational complexity

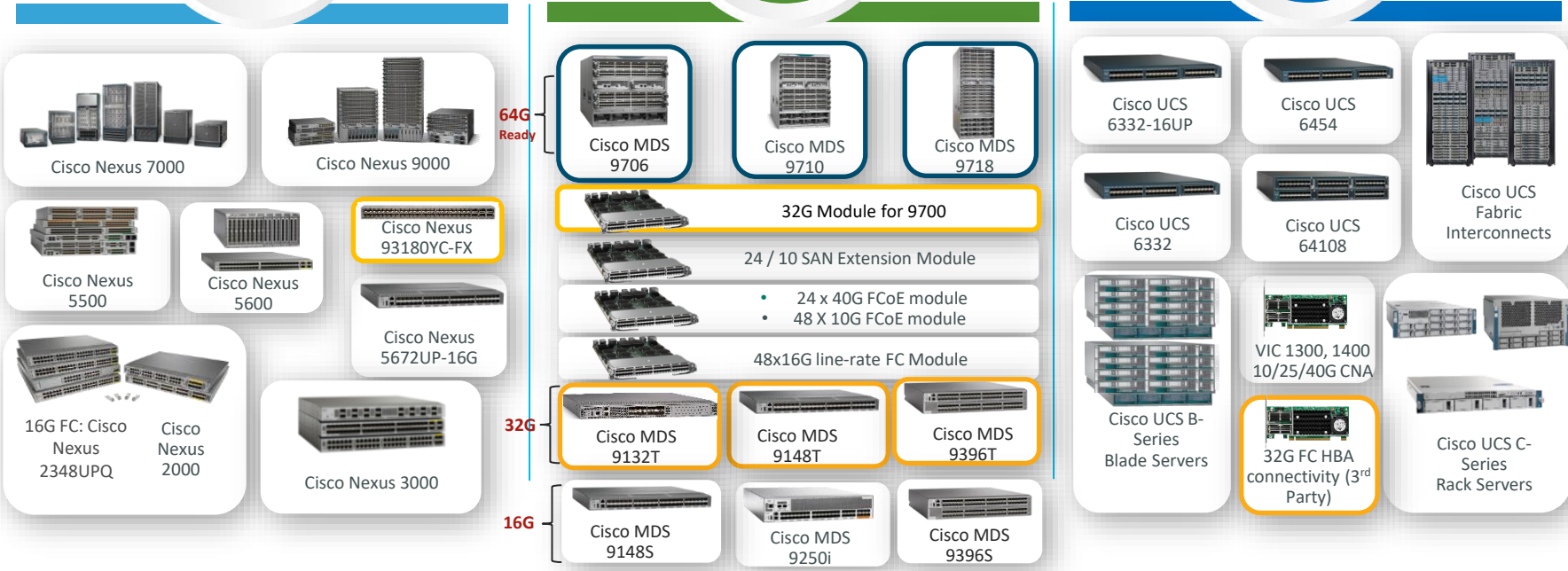
- Extending DevOps support for IT automation: ANSIBLE
- Reduce OPEX; simple integration
- Built for advanced SAN automation

Cisco portfolio – konvergence LAN, SAN a výpočetní platformy

LAN/SAN

32/64G SAN

COMPUTE

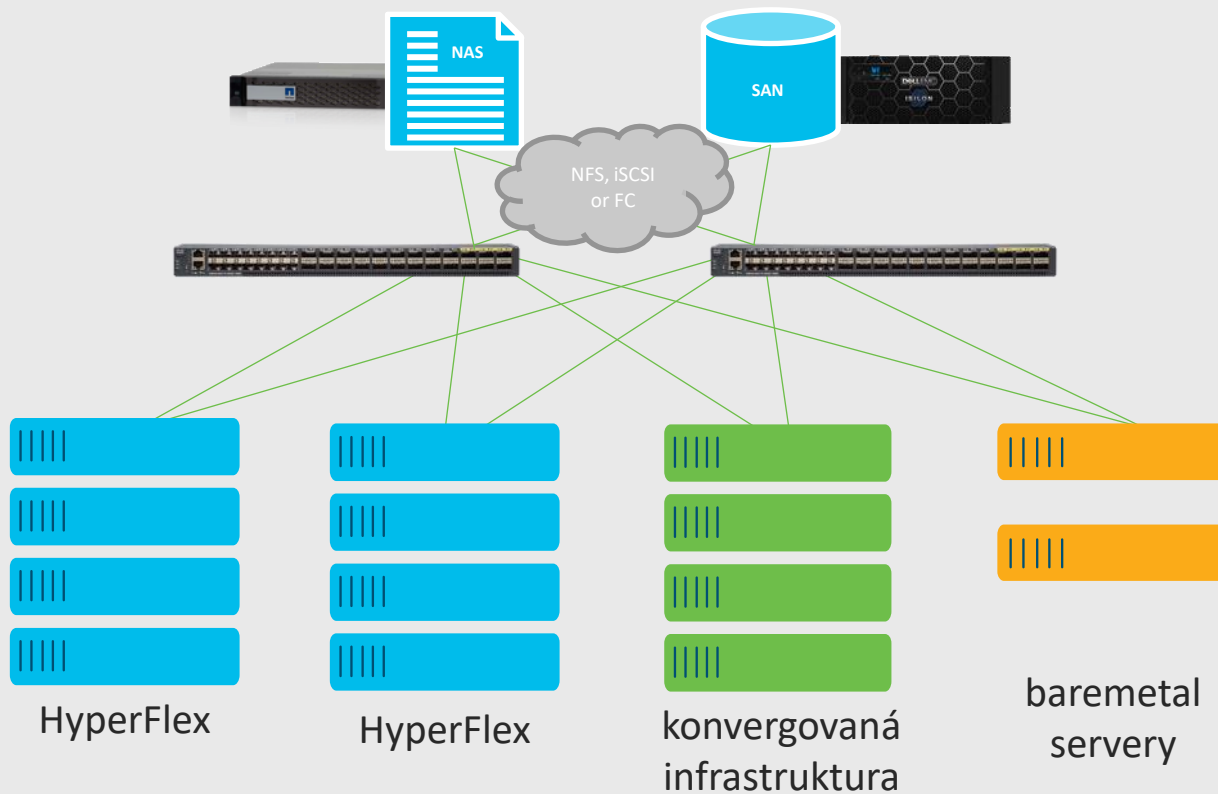


Konzistentní funkce, správa, programovatelnost



Flexibilita infrastruktury

Kombinace provozu HCI, CI i baremetal a připojení diskových úložišť NFS, iSCSI nebo FC



Novinky v HW portfoliu UCS

Intel Ice Lake

Modernize your hybrid cloud infrastructure & operations



UCS B200 M6



UCS C220 M6



UCS C240 M6



Strategic Partnership

Cisco and Intel build upon our 10+ year strategic partnership by introducing the 6th generation of the UCS portfolio with new 3rd generation Intel Xeon Scalable processors to accelerate IT modernization



Compute Modernization

The new Cisco UCS B200 M6, C220 M6, and C240 M6 servers deliver up to 40% more performance, enhanced security, and improved efficiency to easily transition and modernize a wide range of workloads



Cloud-First Architecture

Cisco InterSight is the world's only hybrid cloud operations platform that can simply unlock all the Cisco and Intel technology innovations at scale across hybrid cloud environments

Cisco UCS B200 M6 Blade Server

#1 blade server for virtualization, converged infrastructure, and applications

Up to 80 Cores

2 x 3rd Gen Intel® Xeon® Scalable Processors

Up to 12TB Memory

32x 3200MHz DDR4 Up to 512GB Per DIMM
Intel Optane PMem support



2x 7MM NVMe/SATA SSD

Or

4x M.2 SATA w/RAID

Up to 80 Gigabit Ethernet I/O

Cisco UCS C220 M6 Rack Server

Dense 1RU form factor for a wide range of workloads, including virtualization, web, collaboration, cloud, and bare-metal applications

2x Intel® Xeon® 3rd Gen Scalable Processors

2 x Ice-Lake Processors

32 DIMM slots

32x 3200MHz DDR4



Up to 10 drives

All NVMe

or

Hybrid SAS/SATA HDD/SSD with up to 4 NVMe

**mLOM, 10-Gbps LOM
and M.2 support**

**Choice of PCIe Options
Up to 3 HHHL PCIe Cards or Up to 2 FHFL PCIe Cards**

Cisco UCS C220 M6

Cisco UCS® C220 M6 x 10-HDD/SSD backplane

Maximum density and performance

Up to 10 x 2.5-inch HDDs or SSDs
(up to 4 NVMe PCIe SSDs)

Cisco UCS C220 M6 NVMe-optimized backplane

Maximum NVMe capability

Up to 10 x 2.5-inch NVMe PCIe SSDs

UCSC-C220 M6S

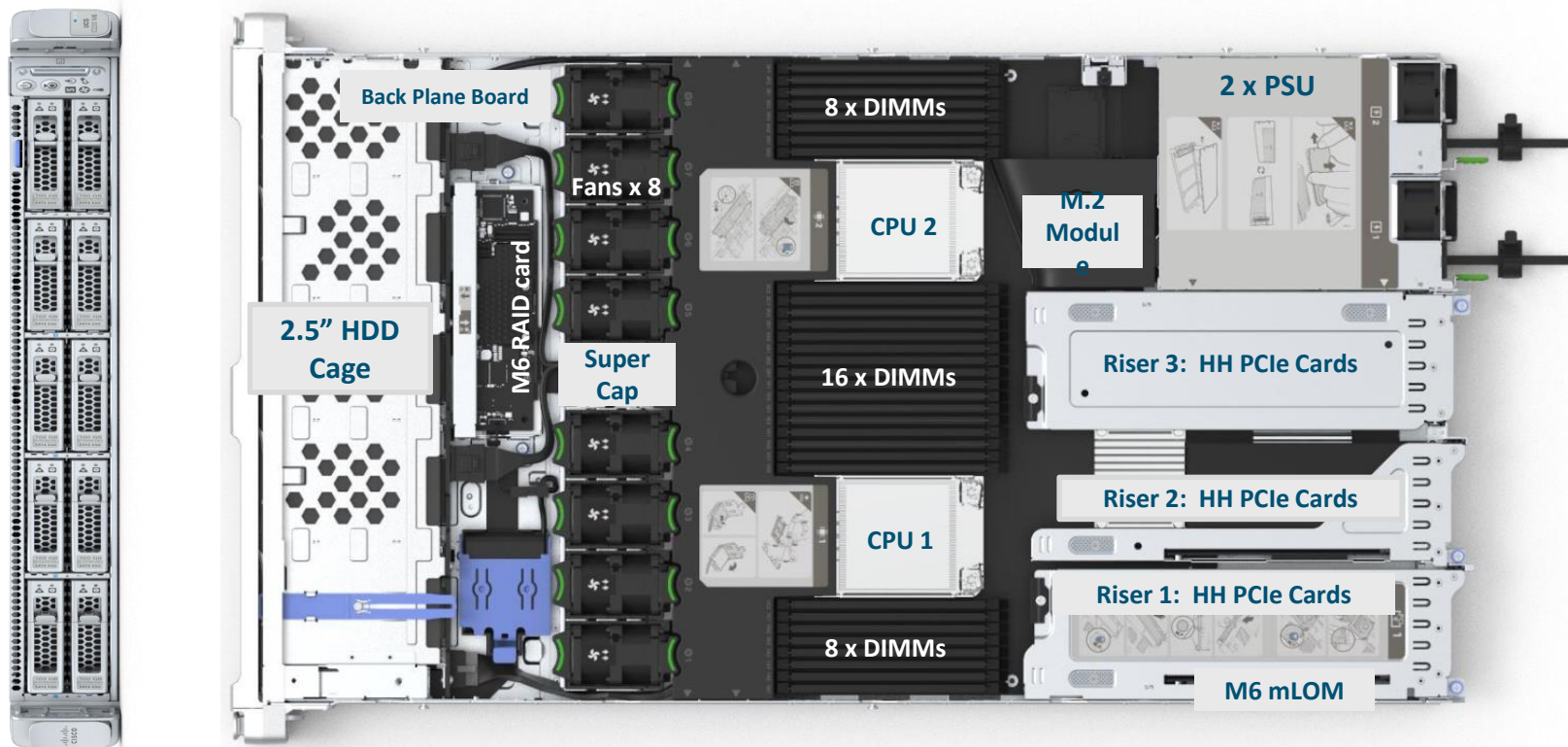


UCSC-C220 M6N



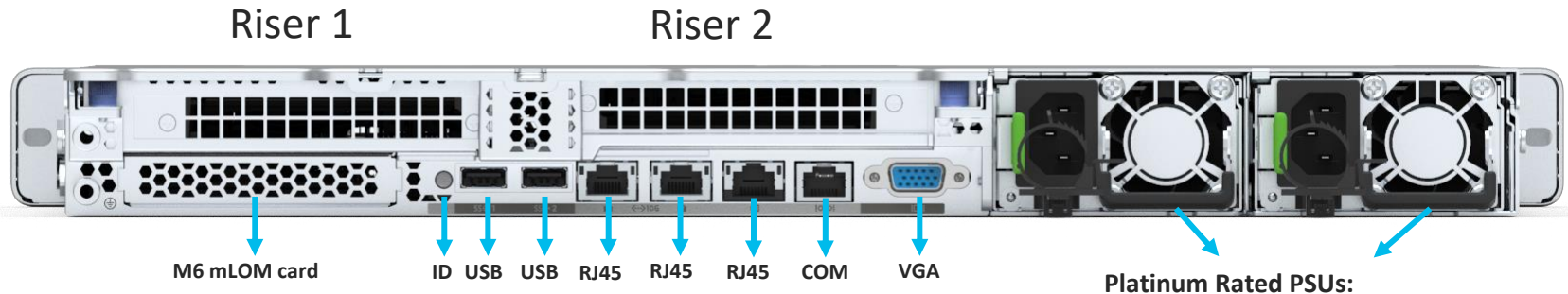
UCS C220 M6 - System Placement | Top View

Top View with 3 HHFL / HHHL PCIe

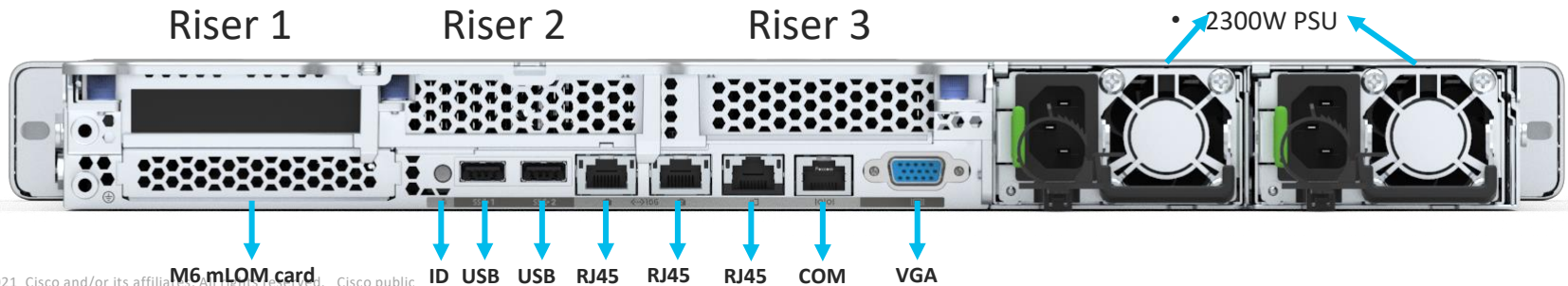


UCS C220 M6 - System Placement | Rear View

UCS C220 M6 with 2 x FH PCIe cards:



UCS C220 M6 with 3 x HH PCIe cards:



Cisco UCS C240 M6 Rack Server

Exceptional performance for enterprise workloads, including big data analytics, collaboration, databases, virtualization, and high-performance applications

2x Intel® Xeon® 3rd Gen Scalable Processors

2 x Ice-Lake Processors

32 DIMM slots

32x 3200MHz DDR4



Up to 28 SFF drives

All NVMe or
Hybrid SAS/SATA HDD/SSD with up
to 4 NVMe

OR

Up to 16 LFF drives

mLOM, 10-Gbps LOM and M.2 support

Choice of PCIe Options

Up to 6 FHFL + Up to 2 FL 3/4L PCIe
Cards

Or

Up to 2 FHFL + 2 FL 3/4L + 4 2.5 SFF
Drives

Cisco UCS C240 M6 backplane options

Cisco UCS® C240 M6 x 28 HDD/SDD backplane

Up to 24 x 2.5-inch 12-Gbps Front load HDDs or SSDs and 4 rear hot-swappable 2.5-inch drives (up to 8 NVMe SSDs)

UCS C240 M6SX



Cisco UCS® C240 M6 x 26 All NVME backplane

Up to 24 x 2.5-inch Front load All NVMe and 2 rear hot-swappable NVMe

UCS C240 M6SN



Cisco UCS® C240 M6 x 12 HDD/SDD backplane

Up to 12 x 2.5-inch 12-Gbps HDDs or SSDs and 2 rear hot-swappable 2.5-inch drives (up to 6 NVMe PCIe SSDs) and optional media drive

UCS C240 M6S



Cisco UCS® C240 M6 x 12 All NVME backplane

Up to 12 x 2.5-inch NVMe and 2 rear hot-swappable 2.5-inch NVMe and optional media drive

UCS C240 M6N



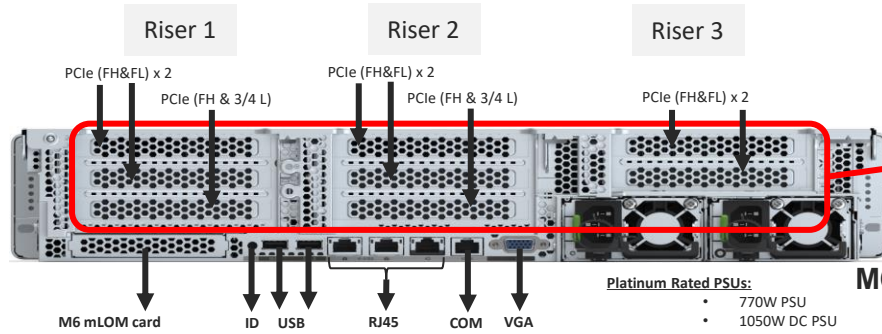
Cisco UCS® C240 M6 x 16 LFF backplane

Up to 16 x 3.5-inch HDDs and optional 4 rear hot-swappable 2.5-inch drives

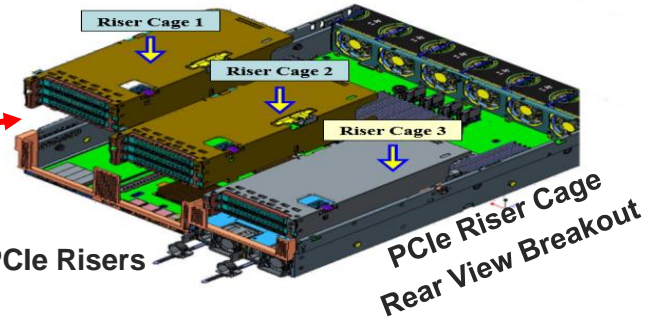
UCS C240 M6L



C240 M6 System Placement | Top View



M6 Rear View - PCIe Risers



PCIe Storage Riser Option - Rear View



PCIe Storage Riser Close-up - Rear View



Currently Shipping UCS C240 M5 Rear View
2 boot drives option

UCS C890 M5



- 8 Socket Cascade Lake CPU
- 96 DIMMs with Intel® Optane™ DCPMM support
- 8x 25G SFP Ethernet Ports
- 4x 32G FC Ports
- Internal RAID1 boot drives
- 5x 1600W (N+2) Redundant Power Supplies, Titanium Level (96%)
- Option: 16 Hot-swap 2.5" SAS3 drive bays (w/ RAID cards)

Novinky v HW portfoliu UCS

AMD EPYC (Milan)

New Cisco UCS Rack Servers with AMD EPYC™

Dense 1RU and 2RU form factors for a wide range of workloads

Cisco UCS 225 M6

Single socket optimized dual socket capable
All IO is through CPU1; optional CPU2 available for additional cores and memory



Up to 10 SFF HDD/SSD/NVMe



Cisco UCS 245 M6

Dual socket optimized
Balanced configuration with equal IO delivered from both CPUs



Up to 28 SFF HDD/SSD drives

PCIe 4.0
Open Compute Project 3.0
1400 Series Virtual Interface Card

Support for all 3rd Gen
EPYC CPU SKU's

DDR4 3200 MHz DIMMs
32 DIMM slots
Up to 8TB of Memory

Maximize performance and efficiency

Everything you need with a single CPU to reduce software licensing

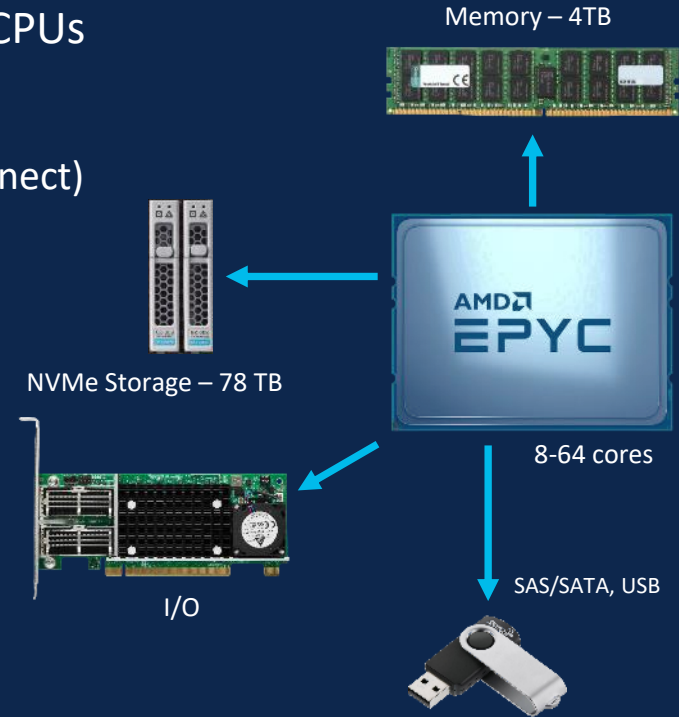
128 High Speed Lanes with 3rd Generation AMD EPYC CPUs

Delivers:

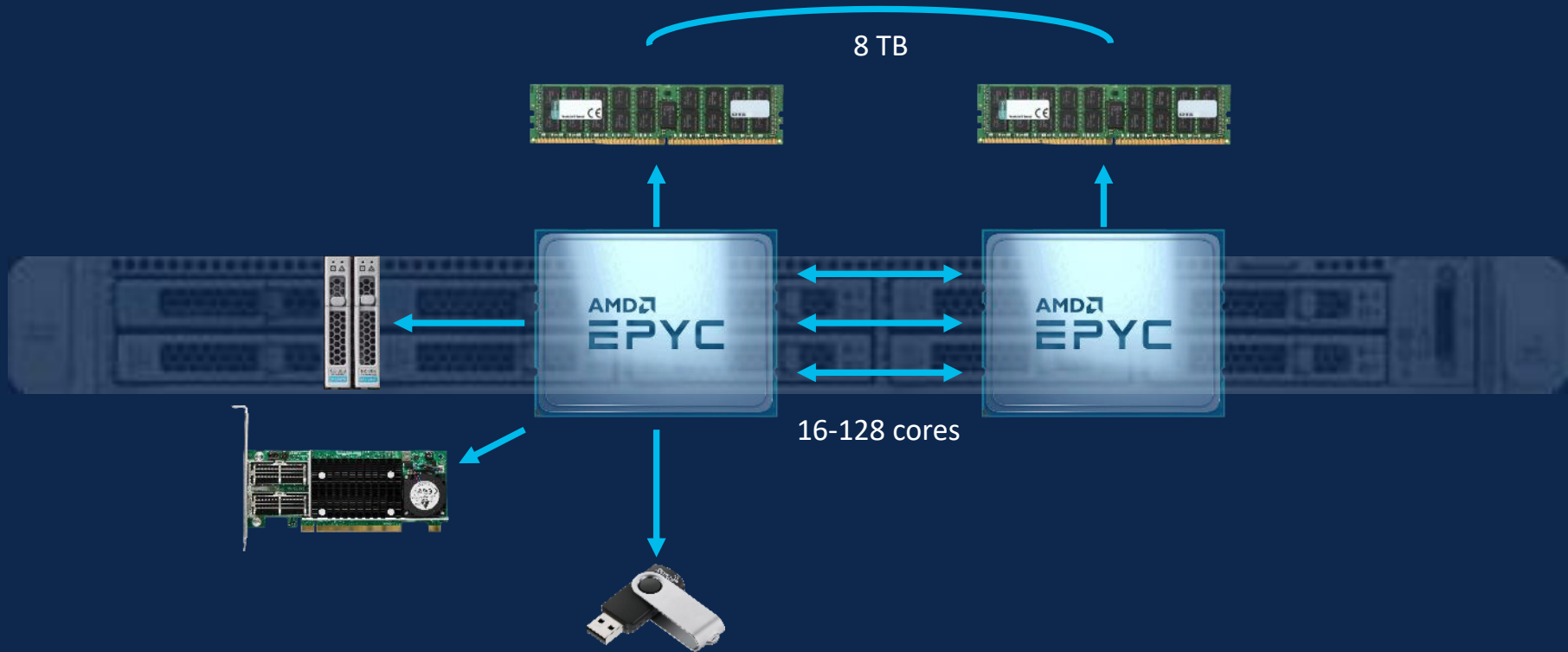
- 10 NVMe drives – Gen 4 x2 lanes to each (CPU Direct Connect)
- 3 PCIe slots - 2 x16 & 1 x8
- mLOM or Open Compute Project – 1 x16
- USB & SAS/SATA support



UCS C225 M6



Add 2nd CPU for more cores & memory



Next-Gen High Frequency Trading

AMD & Cisco innovation combine to deliver an end-to-end ultra-low latency solution



UCS 225 M6

Density and efficiency optimized for colo environments: 128 High Speed Lanes in a single-CPU-optimized 2S design

Nexus X25 SmartNIC

- Software trigger-to-response latencies as low as 32ns
- FPGA-based (Xilinx Ultrascale+) w/ FDK for custom application tuning

Nexus 3550-T

Sub-100ns latency for mission critical network applications

Cisco Intersight

Security policy enforcement; full-stack observability

Cisco UCS C4200 series rack server chassis

Four independent servers in 2U form factor

- Enable compute-intensive, scale-out workloads with the simplicity and built-in automation Cisco UCS®
- Maximize data center space and efficiency with a shared infrastructure solution designed to integrate easily into existing environments
- Avoid technology silos and streamline operations with Cisco UCS Management for dense, multi-site computing where automation is a priority



Cisco UCS C125 M5 rack server node

Unlock the power of data with
high performance computing at
any scale



100% more servers

per rack than our most dense rack servers

20% more storage

per rack than our most dense rack servers

Easy integration

with existing UCS or standalone servers

Programmable infrastructure

consistently configure hundreds of servers as easily as you manage a single one

Secure multitenancy

- Dedicated security subsystem
- Encrypt all memory and VMs
- No changes to applications

Sumář

Co pomůže v každodenní operativě

- Zjednodušení správy infrastruktury napříč typy zařízení
 - Vytváření a správa, orchestrace a automatizace
 - Odstranění technologických sil
- Široké možnosti využití výpočetní platformy
 - Provoz jakékoliv aplikace na jednotné infrastruktuře dle požadavků
 - Flexibilita nasazení – CI/HCI, scale-up/scale-out
- Správná volba platformy SAN
 - Viditelnost každého toku v rámci sítě
 - Výstupy analytické platformy pro rychlejší troubleshooting

