Commvault[®] MediaAgent on Cisco UCS S3260 Storage Server



This document provides an introduction to the process of deploying Commvault[®] Data Platform on the Cisco UCS[®] S3260 Storage Server for a traditional Commvault MediaAgent architecture.

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Introduction

This document describes at a high level the installation and configuration steps for deploying the Commvault MediaAgent server on the Cisco UCS® S3260 Storage Server to build a data protection solution. This document does not provide a detailed step-by-step guide, and not every task is documented. The document focuses on the steps that are relevant to the specific use case under discussion. To complete the deployment, you should be familiar with the following:

- Cisco Unified Computing System™ (Cisco UCS) configuration
- Microsoft Windows installation and configuration
- Commvault[®] installation and configuration

Technology overview

This section introduces the technologies used in the solution described in this document.

Cisco Unified Computing System

Cisco UCS is a state-of-the-art data center platform that unites computing, network, storage access, and virtualization resources into a single cohesive system.

The main components of Cisco UCS are described here:

- Computing: The system is based on an entirely new class of computing system that incorporates rack-mount and blade servers using Intel® Xeon® processor CPUs. The Cisco UCS servers offer the patented Cisco® Extended Memory Technology to support applications with large data sets and allow more virtual machines per server.
- Network: The system is integrated onto a low-latency, lossless, 10- or 40-Gbps unified network fabric. This network foundation consolidates LANs, SANs, and high-performance computing (HPC) networks, which are separate networks today. The unified fabric lowers costs by reducing the number of network adapters, switches, and cables, and by decreasing the power and cooling requirements.
- Virtualization: The system unleashes the full potential of virtualization by enhancing the scalability, performance, and operational control of virtual environments. Cisco security, policy enforcement, and diagnostic features are now extended into virtualized environments to better support changing business and IT requirements.
- Storage access: The system provides consolidated access to both SAN storage and network-attached storage (NAS) over the unified fabric. By unifying the storage access layer, Cisco UCS can access storage over Ethernet (with Network File System [NFS] or Small Computer System Interface over IP [iSCSI]), Fibre Channel, and Fibre Channel over Ethernet (FCoE). This approach provides customers with choice for storage access and investment protection. In addition, server administrators can pre-assign storage-access policies for system connectivity to storage resources, simplifying storage connectivity and management for increased productivity.

Figure 1. Cisco UCS Manager



Cisco UCS consists of the following components:

- <u>Cisco UCS Manager</u> provides unified, embedded management of all Cisco UCS software and hardware components (Figure 1).
- <u>Cisco UCS 6000 Series Fabric Interconnects</u> are line-rate, low-latency, lossless, 10-Gbps Ethernet and FCoE interconnect switches providing the management and communication backbone for Cisco UCS.
- <u>Cisco UCS 5100 Series Blade Server Chassis</u> supports up to eight blade servers and up to two fabric extenders in a six-rack unit (6RU) enclosure.
- <u>Cisco UCS B-Series Blade Servers</u> increase performance, efficiency, versatility, and productivity with Intel-based blade servers.
- <u>Cisco UCS C-Series Rack Servers</u> deliver unified computing in an industry-standard form factor to reduce total cost of ownership (TCO) and increase agility.
- <u>Cisco UCS S-Series Storage Servers</u> deliver unified computing in an industry-standard form factor to address data-intensive workloads with reduced TCO and increased agility.
- <u>Cisco UCS adapters</u>, with wire-once architecture, offer a range of options to converge the fabric, optimize virtualization, and simplify management.

Cisco UCS is designed to deliver:

- Reduced TCO and increased business agility
- Increased IT staff productivity through just-in-time provisioning and mobility support
- A cohesive, integrated system that unifies the technology in the data center
- Industry standards supported by a partner ecosystem of industry leaders
- Unified, embedded management for easy-to-scale infrastructure

Cisco UCS S3260 Storage Server

The Cisco UCS S3260 Storage Server (Figure 2.) is a modular, high-density, high-availability dual-node rack server well suited for service providers, enterprises, and industry-specific environments. It addresses the need for dense, cost-effective storage for the ever-growing amounts of data. Designed for a new class of cloud-scale applications and data-intensive workloads, it is simple to deploy and excellent for big data, software-defined storage, and data protection environments such as Commvault, IBM Cloud Object Storage, and unstructured data repositories, media streaming, and content distribution.

Figure 2. Cisco UCS S3260 Storage Server



Extending the capabilities of the Cisco UCS C3000 platform, the S3260 helps you achieve the highest levels of data availability. With a dual-node capability that is based on the Intel Xeon processor E5-2600 v4 series, it offers up to 600 terabytes (TB) of local storage in a compact 4RU form factor. All hard-disk drives (HDDs) can be asymmetrically split between the dual nodes and are individually hot-swappable. The drives can be built in an enterprise-class Redundant Array of Independent Disks (RAID) redundant design or used in pass-through mode.

This high-density rack server easily fits in a standard 32-inch-depth rack, such as the Cisco R42610 Rack.

Cisco UCS S-Series Storage Servers can be deployed as standalone servers or as part of a Cisco UCS managed environment to take advantage of Cisco's standards-based unified computing innovations that help reduce customers' TCO and increase their business agility.

The S3260 uses a modular server architecture that, using Cisco's blade technology expertise, allows you to upgrade the computing or network nodes in the system without the need to migrate data from one system to another. It delivers:

- Dual server nodes
- Up to 36 computing cores per server node
- Up to 60 drives, mixing a large form factor (LFF) with up to 28 solid-state disk (SSD) drives plus 2 SSD SATA boot drives per server node
- Up to 512 GB of memory per server node (1 TB total)
- Support for 12-Gbps serial-attached SCSI (SAS) drives

 A system I/O controller (SIOC) with a Cisco UCS Virtual Interface Card (VIC) 1300 platform embedded chip supporting dualport 40-Gbps connectivity

High reliability, availability, and serviceability (RAS) features with tool-free server nodes, system I/O controller, easy-to-use latching lid, and hot-swappable and hot-pluggable components.

Commvault® Data Platform

The Commvault[®] Data Platform is a single platform for automated global protection, retention, and recovery. Commvault enterprise data protection and recovery software automates global data protection, accelerates recovery, reduces costs, and simplifies operations. Commvault integrates application awareness with hardware snapshots, indexing, global deduplication, replication, search, and reporting. The Commvault Data Platform converges all the needs of a modern data management solution in one place to seamlessly integrate protection, management, and access in one solution.

A comprehensive data protection and management strategy offers seamless and efficient backup, archiving, storage, and recovery of data in your enterprise from any operating system, database, and application. To protect and manage data in your environment, the Commvault software must be distributed to systems that you want to protect. CommServe®, MediaAgent, and protected systems constitute a CommCell® environment, and each protected system is referred to as a client (Figure 3).

Figure 3. Commvault Data Platform overview



The CommServe server is the command and control center of the CommCell architecture. It coordinates and runs all CommCell operations, maintaining Microsoft SQL Server databases that contain all configuration, security, and operational history for the CommCell environment. A CommCell environment can contain only one CommServe host. The CommServe software can be installed in physical, virtual, and clustered environments.

MediaAgent is the data transmission manager. It provides high-performance data movement and manages the data storage pools. When installed on a client system, it also manages the Commvault IntelliSnap snapshot integration with the underlying storage.

A client is any system within a CommCell environment to be protected. iDataAgents are software modules that are installed on computers to access and protect data. The backup and recovery system uses agents to interface with file systems, applications, and databases to facilitate the protection of data on production systems. By default, a file system iDataAgent module is installed when the Commvault software is added to a system. If the client hosts specific applications or databases, additional iDataAgents are required.

These three Commvault components combined offer the most comprehensive and flexible data protection solution on the market today.

Commvault® IntelliSnap® technology

IntelliSnap technology integrates with leading storage arrays, such as Pure Storage arrays, to provide consistent point-in-time recovery copies integrated into the data protection process. Unlike many other hardware-based copy management approaches, IntelliSnap extends beyond just creating or deleting snapshots. Snapshot contents are indexed to enable simple, specific object recovery, and snapshots can, for example, be mounted to allow the creation of a backup copy for a cloud library. Snapshots are integrated into virtual machine, database, and application protection schemes, enabling highly specific, partial, and point-in-time recovery operations from snapshot-based backup copies.

Figure 4 shows the snapshot creation process. Logically, it has six phases.



Figure 4. Six phases of the snapshot creation process

Solution design and reference architecture configurations

Commvault with Cisco UCS addresses the data protection needs of modern data centers. The increasing percentage of virtualized workloads, the dramatic increase in the size and amount of data, and the changes in the ways that companies do business and work with data have had an immense impact on data protection solutions. With the time requirement for backup operations reduced to minutes and the recovery point objective (RPO) and recovery time objective (RTO) requirements in the range of minutes to one hour, technologies such as compression, deduplication, replication, and backup to disk are essential in every design. The features and functions provided by Commvault, combined with the features and functions provided by Cisco UCS servers, create a powerful solution for fast backup and fast restore operations. For long retention periods and for less frequently accessed data, tape libraries or cloud storage can be used. With the combination of Cisco and Commvault technology, you can easily scale from tens of terabytes up to hundreds of petabytes (PB) of protected data.

Disks are now common backup media, and data backup on disk generally provides faster restore operations. Disk-based storage can be useful if you have many incremental backups and the percentage of data change is small. If the volume of data in incremental copies is insufficient to help ensure efficient writing to tape, consider disk storage. After writing the data to disk, you can use staging or storage lifecycle policies to copy batches of images to tape. This arrangement can produce faster backup operations and prevent wear and tear on your tape drives. Consider the following factors when backing up a data set to disk or tape:

- Disks are well suited for short retention periods; tape is better suited for longer retention periods.
- Disks are well suited for staging; tape is good for long-term storage.
- Disks are better suited for low-volume incremental backups.
- Synthetic full backups are faster when incremental backup copies are stored on disk.
- Restoration from disk is usually faster than from tape.
- If client backup operations are too slow to keep the tape in motion, send the backups to disk.
- If the backups are small, send the backups to disk.
- Staging or lifecycle policies can later move the backup images to tape.

There is no "best" position in the infrastructure to install a Commvault with Cisco UCS solution. Many options are available regardless of how big a data center is. One option is to position the solution in a central place in the physical network so that it can be accessed from everywhere with the required bandwidth. Another option is to place the solution as close as possible to the data source.

With most data transferred from the backup client to the server and not directly from storage, and with the unique design of Cisco UCS, the use of a Cisco UCS domain will limit the network bandwidth required for data replication between the Commvault MediaAgent nodes. This option also allows Cisco UCS Manager to manage all Commvault MediaAgent servers in a central place.

Reference architecture

This section introduces the reference architecture for the Commvault and Cisco solution.

Overview

Commvault and Cisco worked together to establish a simplified approach to sizing hardware to work within a Commvault environment. Building-block designs were aligned and tested with Commvault architecture deployments. This design is expandable from single-site to multisite, hybrid cloud, and public cloud environments, and any combination. Figure 5 shows the models and configuration needed for each size of Commvault MediaAgent. These models and configurations have been tested to provide the necessary requirements for each size. When ordering these approved and tested configurations, you can be assured of the proper performance.



Figure 5. Approved and tested configurations

Storage capacity explained

Customers sometimes ask why a freshly formatted hard disk or array is smaller than the advertised capacity. For example, a 1-TB drive has 931 GB after formatting.

The reason for this is that hardware and storage manufacturers count the capacity in different ways than the files system does. The prefixes kilo-, mega-, giga-, and tera- are used to state powers of ten. However, in computer software, the data being handled is typically organized based on powers of 2, so it became customary to call 2 x 10 a kilobyte, which is actually 1024 bytes, not exactly 1000 bytes.

There are prefixes to differentiate between base 10 and base 2; however, these are seldom used. In base 2 the proper terms are kibibyte, mebibyte, gibibyte, and tebibyte. The "bi" refers to binary, and the shortened terms are KiB, MiB, GiB, and TiB.

Here's the underlying math:

- Hard disk manufacturers assume kilo = 103 = 1000 (KB).
- File systems assume kilo = 224 = 1024 (KiB).

To convert KB, MB, and GB to KiB, MiB, and GiB, see the following list:

- KB to KiB: 1000/1024 = 0.9766
- MB to MiB: (1000 x 1000) / (1024 x 1024) = 0.9537
- GB to GiB: (1000 x 1000 x 1000) / (1024 x 1024 x 1024) = 0.9313
- TB to TiB: (1000 x 1000 x 1000 x 1000) / (1024 x 1024 x 1024 x 1024) = 0.9095

Typically, software will display GB or TB as the storage unit, but the amount actually is Gib or TiB, so this confusion will remain unless this approach is changed.

Keep these values in mind as you review the Tables 1, 2, and 3 in the next section. Capacities are stated using the sizes provided by the hardware manufacturer (base 10). Notes reference the software-based sizes (base 2).

Individual MediaAgent server configurations

Tables 1, 2, and 3 summarize the individual MediaAgent server configurations available. You can choose a configuration based on your data protection requirements. This guide specifically focuses on Cisco UCS S3260 as the MediaAgent server and uses an Extra Large server in the example configuration. The storage configuration details depend on the specific customer environment and the size and number of drives available in the S3260.

Medium MediaAgent server configuration with Cisco UCS									
Cisco solution ID	Commvault MediaAgent Medium S3260								
Cisco UCS server type	Cisco UCS S3260 M4								
Rack units	4RU (7 in. [177.8 mm])								
Chip set	Intel C610 series								
CPU type	2 x Intel Xeon processor E5-2650v4								
	52.8 GHz across 24 cores								
Memory	8 x 16 DDR4 2400-MHz RDIMM (128 GB total)								
Storage controller	Cisco UCS C3000 12-Gbps SAS RAID controller with 4-GB cache								
Storage: Boot	 2 x 480-GB SSD at 6 Gbps with RAID 1 (480 GB total*) Access policy: Read-Write; read policy: No Read Ahead Cache policy: Direct I/O; write policy: Write Through Disk cache policy: Unchanged; stripe size: 64 KB 								
Storage: Metadata	 1 x 3200-GB PCle and Non-Volatile Memory Express (NVMe) storage* Index cache: 800 GB; deduplication database (DDB): 600 GB; and cloud copy DDB: 600 GB 								
Storage: Storage pool	 18 x 6-TB N-SAS with RAID 60 (72 TB total with 2 hot spares*) 2 x 8 drives with RAID 6: Nested Access policy: Read-Write; read policy: Always Read Ahead Cache policy: Direct I/O; write policy: Write Back Good Backup Battery Unit (BBU) Disk cache policy: Unchanged; stripe size: 512 KB 								
Network options	2 x 40-Gbps connection								
Additional connectivity	Single dual-port 16-Gbps Fibre Channel host bus adapter (HBA)								
Power specifications	4 x 1050 watt (W) AC power supply**								

Table 1. Medium Commvault MediaAgent configuration

*When these drives are formatted, the OS will show capacities in base 2, so 480 GB will be approximately 447 GB, 3.2 TB will be approximately 2.9 TB, and 72 TB will be approximately 65.4 TB.

**For these configurations, power supplies and power cables must be ordered separately to accommodate different power requirements in different regions.

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Table 2. Large Commvault MediaAgent configuration

Large MediaAgent server configuration with Cisco UCS									
Cisco solution ID	Commvault MediaAgent Large S3260								
Cisco UCS server type	Cisco UCS S3260 M4								
Rack units	4RU (7 in. [177.8 mm])								
Chip set	Intel C610 series								
CPU type	2 x Intel Xeon processor E5-2650v4 • 52.8 GHz across 24 cores								
Memory	8 x 16 DDR4 2400-MHz RDIMM (128 GB total)								
Storage controller	Cisco UCS C3000 12-Gbps SAS RAID Controller with 4-GB cache								
Storage: Boot	 2 x 480-GB SSD at 6 Gbps with RAID 1 (480 GB total)* Access policy: Read-Write; read policy: No Read Ahead Cache policy: Direct I/O; write policy: Write Through Disk cache policy: Unchanged; stripe size: 64 KB 								
Storage: Metadata	 1 x 3200-GB PCle and NVMe storage* Index cache: 1 TB; DDB: 1.1 TB; and cloud copy DDB: 1.1 TB 								
Storage: Storage pool	 30 x 6-TB NL-SAS with RAID 60 (144 TB total with 2 hot spares)* 2 x 14 drives with RAID 6: Nested Access policy: Read-Write; read policy: Always Read Ahead Cache policy: Direct I/O; write policy: Write Back Good BBU Disk cache policy: Unchanged; stripe size: 512 KB 								
Network options	2 x 40-Gbps connection								
Additional connectivity	Single dual-port 16-Gbps Fibre Channel HBA								
Power specifications	4 x 1050W AC power supply**								

*When these drives are formatted, the OS will show capacities in base 2, so 480 GB will be approximately 447 GB, 3.2 TB will be approximately 2.9 TB, and 144 TB will be approximately 130 TB.

**For these configurations, power supplies and power cables must be ordered separately to accommodate different power requirements in different regions.

Table 3. Extra Large Commvault MediaAgent configuration	on
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Extra Large MediaAgent serv	Extra Large MediaAgent server configuration with Cisco UCS									
Cisco solution ID	Commvault MediaAgent XL S3260									
Cisco UCS server type	Cisco UCS S3260 M4									
Rack units	4RU (7 in. [177.8 mm])									
Chip set	Intel C610 series									
CPU type	2 x Intel Xeon processor E5-2650v4 • 52.8 GHz across 24 cores									
Memory	8 x 16 DDR4 2400-MHz RDIMM (128 GB total)									
Storage controller	Cisco UCS C3000 12-Gbps SAS RAID controller with 4-GB cache									
Storage: Boot	 2 x 480-GB SSD at 6 Gbps with RAID 1 (480 GB total)* Access policy: Read-Write; read policy: No Read Ahead Cache policy: Direct I/O; write policy: Write Through Disk cache policy: Unchanged; stripe size: 64 KB 									

Extra Large MediaAgent server configuration with Cisco UCS									
Storage: Metadata	2 x 3200-GB PCle and NVMe storage* • Index cache: 2 TB; DDB: 2 TB; cloud copy DDB: 2 x 1 TB								
Storage: Storage pool 51 x 6-TB NL-SAS with RAID 60 (252 TB total with 3 hot spares)* • 3 x 16 drives with RAID 6: Nested • Access policy: Read-Write; read policy: Always Read Ahead • Cache policy: Direct I/O; write policy: Write Back Good BBU • Disk cache policy: Unchanged; stripe size: 512 KB									
Network options	2 x 40-Gbps connection								
Additional connectivity	Single dual-port 16-Gbps Fibre Channel HBA								
Power specifications	4 x 1050W AC power supply**								

*When these drives are formatted, the OS will show capacities in base 2, so 480 GB will be approximately 447 GB, 6.4 TB will be approximately 5.8 TB, and 234 TB will be approximately 212 TB.

**For these configurations, power supplies and power cables must be ordered separately to accommodate different power requirements in different regions.

Cisco UCS S3260 configuration

This document discusses the use of a standalone Cisco UCS S32600 Storage Server as well as the use of a Cisco UCS 3260 Storage Server managed by Cisco UCS to install Commvault MediaAgent server with a media management role.

Please use the Cisco UCS S3260 installation guide to complete the initial configuration (IP addresses, passwords, software versions, etc.). This document assumes that the S3260 is accessible through the Cisco Integrated Management Controller (IMC) or Cisco UCS Manager over the network.

Standalone configuration with Cisco Integrated Management Controller

Follow these steps to configure a standalone solution using IMC.

1. Log on to the IMC as the admin user.



2. Check the condition of the system and the components required for the deployment on the Chassis > Summary page.

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Chassis Status			Power Utilization	Server Utilization	
Overall Chassis Status:	Good	Power State		(8)	
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- 3. Choose Networking to see the Cisco VIC configuration.
- 4. Only one SIOC is required. The second SIOC is optional and is used to achieve better high availability or greater throughput.
- 5. The General tab provides an overview of the SIOC and Ethernet ports, including the uplink status and port speeds. The operating speed can be 10 Gbps, 4 x 10 Gbps, or 40 Gbps. You should use 40 Gbps whenever possible.

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▼ Adapter Card Properties				
PCI-Slot: SIOC2	Hardware Revision:	3	Description:	
Vendor: Cisco Systems Inc	Cisco IMC Management Enabl	no	Enable FIP Mode:	2
Product Name: UCSS-S3200-SIOC	Configuration Pending:	no	Enable LLDP:	
Product ID: UCSC-C3260-SIOC	ISCSI Boot Capable:	True	Enable VNTAG Mode:	
Serial Number: FCH19237FP2	CDN Capable:	True	Port-0:	40Gbps 🔻
Version ID: V01	usNIC Capable:	True	Port-1:	40Gbps 🔻
PCI Link: Server-2			Link Training-0:	
			Link Training-1:	
▼ Firmware	N			
Running Version: 4.1(1d)	Bootloader Version: 4.0(7b)			
Backup Version: 4.0(7b)	Status: Idle			
Startup Version: 4.1(1d)				
▼ External Ethernet Interfaces				
▼ Port-0	▼ Port-1			
MAC Address: 08:81:90:F0:80:53	MAC Address	c D8:81:90:F0:80:54		
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- The virtual network interface card (vNIC) tab summarizes the existing host Ethernet interfaces, including the maximum transmission unit (MTU) size, the uplink port used, and VLAN information. As a best practice, you should create at least one vNIC per uplink port or one vNIC per VLAN ID.
- 7. You should use MTU 9000 for the backup network if possible and on all participating devices in the network (clients, switches, and servers).



8. The virtual host bus adapter (vHBA) tab summarizes the existing host Fibre Channel Interfaces, including the worldwide port name (WWPN) and worldwide node name (WWNN) and information about whether the vHBA is used to boot the system. As a best practice, you should create at least one vHBA per uplink port or one vHBA per VSAN ID. Fibre Channel connectivity is used mainly for backup to Fibre Channel tape or for LAN-free backup directly from SAN storage.

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9. The CPU tab of the Inventory pane shows the CPUs.

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10. The Memory tab of the Inventory pane presents memory details.

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Eff	ective Memory	131072 MB		Number of I	ailed DIMMs 0					
Red	undant Memory	0 MB		Memory I	RAS Possible Indep	endent Mirroring L	ockstep			
	Failed Memory	0 MB		Memory Configuration Independent				E DIMM Location Diagram		
Memory	Details									
Name	Capiacity	Channel Speed (MHz	c) Channel Type	Memory Type D	etail Bank Loc	ator	Manufacturer	Serial Number	Asset Tag	Part Number
DIMM_A1	16384	2400	DDR4	Registered (Buff	ered) NODE 0 0	HANNEL O DIM	0×CE00	322EA727	DIMM_A1	M393A2K40BE
DIMM_A2	Not Inst	NA	NA.	NA	NA		NA	NA	NA	NA
DIMM_B1	16384	2400	DDR4	Registered (Buff	NODE 0 C	HANNEL 1 DIM	0×CE00	322EA763	DIMM_81	M393A2K40BE
DIMM_B2	Not Inst	NA	NA	NA	NA		NA	NA	NA	NA
DIMM_C1	16384	2400	DDR4	Registered (Buff	ered) NODE 0 0	HANNEL 2 DIM	0×CE00	322EA6D8	DIMM_C1	M393A21040BE
DIMM_C2	Not Inst	NA	NA	NA	NA		NA	NA	NA	NA
DIMM_D1	16384	2400	DDR4	Registered (Buff	ered) NODE 0 0	HANNEL 3 DIM	0×CE00	322EA721	DIMM_D1	M393A2K40BE
DIMAN DO	Mod Inch	N.A.	NA	N.A.	NA		NA	NA	NA	NA

11. The S3260 SIOC is connected as the PCIe device and shown on the PCI Adapters tab along with the NVMe drives on the server node and the I/O expansion module.

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1 1 :	Server 2 /	Inventory	r ste							Refr	esh Hest Power	Launch KVM Ping R	aboot . Locator LE	0 0
eneral	Inventory	Sensors	BIOS	Remote Me	nagement	Trouble	shooting	Power Po	licies	PID Catalog	Secure Key Mar	nagement		
CPU	Memory	PCI Adapters	vNICs	Storage	TPM	IO Expand	er P	letwork Adapt	ors					
1	Stot ID	▲ Pr	oduct Name				Option	ROM Status	Firmva	are Version	Vendor ID	Sub Vendor ID	Device ID	
	IOEMezz1	Ch		00 RAID Contr	oller for M4	Server	Loaded		29.00.1-	0011	0=1000	0x1137	0×000×e	c
0	IOENVMe1	Cit	ICO(R) UCS (S	N100) 2.6 380	O OB NVM	le based	Not Lo	aded	KMCCP	105	0×1 <i>e</i> 58	0×1137	0×0003	c
ø	IOENVMe2	Ch	ICOCR) UCS (S	N100) 2.5 380	O OB NVM	le bared	Not Los	aded	KMCCP	105	0x1o58	0×1137	0×0003	c
	SDMezz1	Ch	teo UCS CBOO	00 RAID Contr	oller for M4	Server	Loaded		29.00.1-	0110	0×1000	Ox1137	0x00 ce	c
ø	SBNVMe1	Ch	Ico(R) UCS (S	N100) 2.5 380	O GB NVM	le based	NotLos	aded	KMCCP	105	0×1058	0×1137	0x0003	c
	PLOCO.	110	SC-C3260-SI	00			Not Los	ded	4.1(14)		0x1137	0×1137	0.0042	6

12. The vNICs tab of the Server Inventory pane shows the vNICs.

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1 / Se	erver 2 / In	ventory 🚽	è.							Refresh	Host Power Li	aunch KVM P	ing Reboot	Locator LED	0
General	Inventory	Sensors	BIOS	Remote Manaj	gement	Troubles	hooting Po	wer Poli	cies Pl	D Catalog Se	cure Key Mana	igement			
CPU M	emory PCI	Adapters	vNICs	Storage	TPM	IO Expande	r Networ	Adapte	rs						
VNICs	VIC Slot	CDN	ма	C Address	MTU	110	Inlink Part	Cal	VLAN	VI AN Mode	ICCCI Boot	DVE Book	Chaopal	Total 2 🖧 🐙	Î
eth0	SIDC-2	VIC-2-eth0	DS:I	91:90:F0:80:5F	9000	0	0	0	NONE	TRUNK	disabled	disabled	N/A	N/A	1
ath 1	SIOC-2	VIC-2-eth1	D8:1	91:90:F0:B0:60	9000	0	1	0	NONE	TRUNK	disabled	disabled	N/A	N/A	

- 13. Click eth0 under vNICs in the left panel and set the following parameters to improve performance of Windows specific adapter with 40Gb NICs:
 - a. Transmit Queues: 8
 - b. Ring Size: 4096
 - c. Receive Queues: 8
 - d. Ring Size: 4096
 - e. Completion Queues: 16
 - f. Interrupts: 32
 - g. Receive Side Scaling (RSS): Enabled

al vNICs	vHBAs						
		Default VLAN:	None		Enable aRFS:		
llCs				0	Enable Uplink Failover:		
eth0			<u>с</u>	•	Failback Timeout:		(0 - 600)
eth1							
		• Ethernet Interrupt					
		Interrupt Count:	32	(1 - 514)	Coalescing Time:	125	(0-66535us)
		Interrupt Mode:	MSIX	T	Coalescing Type:	MIN	
		▼ Ethernet Receive Queue					
		Receive Queue Count:	8	(1 - 256)			
		Receive Queue Ring Size:	4096	(64 · 4096)			
		▼ Ethernet Transmit Queue					
		Transmit Queue Count:	8	(1 - 256)			
		Transmit Queue Ring Size:	4096	(64 · 4096)			
	U	 Completion Queue 					
		Completion Queue Count:	16	(1 - 512)			
		Completion Queue Ring Size:	1				
		 RoCE Properties 					
		► TCP Offload					
		▼ Receive Side Scaling					
		Enable TCP Receive Side Scaling:	\checkmark	Enable TCP-IPv6 RSS: 🗹			
		Enable IPv4 RSS:	 Enabl 	e IPv6 Extension RSS:			
		Enable TCP-IPv4 RSS:	Enable TC	P-IPv6 Extension RSS:			
		Enable IPv6 RSS:	\checkmark				

- 14. Click Save Changes.
- 15. The Storage tab of the Inventory pane shows the storage controller information.

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111	Server 2	/ 1	nventory	ŵ.						Refre	sh Hest Power	Launch KVM	Ping F	Reboot 🚽 Locator LED 🙆 🄇
General	Invento	rý	Sensors	BIOS	Remote Mar	nagement	Troub	leshooting	Power Policies	PID Catalog	Secure Key M	lanagement		
CPU	Memory	P	CI Adapters	vNICs	Storage	TPM	IO Expa	nder N	etwork Adapters					
Cont	troller		PCI Slot		Product Name			Serial Nu	mber Fi	mware Package B	uild Product	t ID Batt	ery Status	Cache Memory Size
IOE	Mezz1		IOEMezz1		Cisco UCS C30	000 RAID C	ontroll	FCH20037	×9F 29	00.1-0011	LSI Logi	ic Optin	mal	3513 MB
IOE	NVMe1		IOENVMe1		Cisco UCS (SN	100) 2.5" 3	800 G	CJH00100	ICFCF KM	CCP105	HGST	BBU	Not Sup	0 MB
IOE	NVMe2		IOENVMe2		Cisco UCS (SN	100) 2.5" 3	800 G	CJH00100	CFBE KM	CCP105	HGST	BBU	Not Sup	0 MB
SBN	fezz1		SBMezz1		Cisco UCS C30	000 RAID C	ontroll	FCH20193	7JGO 29	00.1-0110	LSI Logi	io Optin	mal	3087 MB
SBN	l∨Me1		SBNVMe1		Cisco UCS (SN	1100) 2.5" 3	800 G	CJH00100	ICFD8 Kh	CCP105	HGST	BBU	Not Sup	0 MB

16. If the S3260 is equipped with an I/O expander board for installing PCIe cards or additional NVMe devices, the details are shown on the IO Expander tab.

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n / /	Server 2	/ Inventory	20						Reto	esti Host Power Launch	KVM Ping Re	baot + Loca	tor LED	001
General	Inventor	y Sensors	BIOS	Remote Ma	nagement	Troubleshoo	oting	Power Policies	PID Catalog	Secure Key Manageme	nt			
CPU	Memory	PCI Adapters	VNICs	Storage	TPM	IO Expander	Netvy	ork Adapters						
IO E	xpander													
	Version	AD												
	Presence	equipped												
	Revision	1												
	Model	UCSC-C3K-M4	10											
	Serial	FCH20027FEL												

- 17. Choose Storage. The storage configuration is the most important part of the Cisco UCS S3260 configuration for Commvault MediaAgent server.
- 18. The Storage pane shows the NVMe details, RAID controller information, physical drive and virtual drive information, and RAID settings.



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😼 📲 Cisco Integrated Mana	igement Controller		🐥 🗹 1 admin@192.168.10.10 - C3260-FOX203362N1 🌣
▲ / / (Server 2) Cisco UCS C30 Blade with 4G RAID Cache (SBMe	00 RAID Controller for M4 Se azz1) / Controller Info 🔹	rver Refresh	Host Power Launch KVM Ping Reboot + Locator LED 🕖 🛈
Controller Info Physical Drive Info Virt	ual Drive Info Battery Backup Unit	Storage Log	
Create Virtual Drive from Unused Physical Drives	Create Virtual Drive from an Existing V	Sidual Drive Group Import Foreign Config Clear F	oreign Config
Clear Boot Drive 1 Get Storage Elemente Log 1	Enable Drive Security Dirable Drive Se	outine Class Caoba Class all Configuration Set	Eastern Defaultr 1
Switch to Demote Vey Management 1 Switch to	Local Vey Management	and a second second a second s	
Source to remote key management (Source to	Logal Ney Management		
 Health/Status 		▼ Settings	6
Composite Health:	Saod.	Predictive Fail Poll Interval:	300 sec
Controller Status:	Optimal	Rebuild Rate:	30 %
RAID Chip Temperature:	51	Patrol Read Rate:	30 %
Storage Firmware Log Status:	NotDownloaded	Consistency Check Rate:	30 %
		Reconstruction Rate:	30 %
		Cache Flush Interval:	4 sec
Product Name:	Cisco UCS C3000 RAID Controller for	Max Drives To Spin Up At Once:	60
Serial Number:	FCH20197JG0	Delay Among Spinup Groups:	8 sec
Firmware Package Build:	29.00.1-0110	Physical Drive Coercion Mode:	1 68
▼ PCI Info		Cluster Mode:	false
		Battery Warning:	true
PCI Slot:	SBMezz1	ECC Bucket Leak Rate:	1440 min
Vendor ID:	1000	Expose Enclosure Devices:	true
Device ID:	ce	Maintain PD Fall History:	false
Sub Vendor ID:	1137	Enable Copyback on SMART:	true
SubDevice ID:	197	Enable Copyback to SSD on SMART Error:	true
 Manufacturing Data 		Native Command Queuing:	enabled
Manufactured Date:	2016-05-12	JBOD:	false
		Easthin Crain Down of Upscholaurad Driver	- true -

Configure disk zoning

Disk zoning allocates disk slots between server nodes in the chassis. To allocate disks to the server node, perform the following steps:

- 1. Choose Chassis. The RAID controller will see only the physical drives that are zoned for it in the Chassis area.
- 2. In the Chassis area, choose Inventory > Dynamic Storage. On this screen, click the Zoning tab.
- 3. Select all the drives and click Assign to Server 2.
- 4. Click Save Changes.

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8555		Servers Power S	upplies	Disco VIC Adap	ters Dyn	amic Storage											
ammary		Drive Power Stat	e														
antory		Physical Drive Po	wer State:	ctive		*											
insors				Save Change	Reset	/alues											
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orage		6	PD 43	PD 44	PD 45	PD 45	PD 47	PD 48	PD 49	PD 50	PD 51	PD 52	PD 53	PD 54	PD 55	PD 55	1
min	8	2 0	SEAGATE	SEAGATE	SEAQATE	SEAGATE	SEAGATE	SEAQATE	SEAGATE	SEAGATE	SEAGATE	SEAGATE	SEAGATE	SEAGATE	SEAGATE	SEAGATE	• 💌
		S •	PD 29 SEAGATE C	PD 30 SEAQATE	PD 31 SEAGATE	PD 32 SEAGATE	PD 33 SEAGATE Server2	PD 34 SEADATE	PD 35 SEAQATE SE Server2	PD 36 SEAGATE I Server2	PD 37 SEAGATE	PD 38 SEAGATE	PD 39 SEAQATE	PD 40 SEAQATE	PD 41 BEAGATE IV server2	PD 42 SEAGATE	• 9
		9	PD 15 SEAGATE	PD 16 SEADATE C	PD 17 SEAGATE	PD 18 SEAGATE	PD 19 SEAGATE SEAVER1	PD 20 SEAGATE	PD 21 SEAGATE SEAGATE SERVer1	PD 22 SEAGATE SEAGATE Server2	PD 23 SEAGATE	PD 24 SEAGATE	PD 25 SEAQATE	PD 25 SEADATE	PO 27 SEAGATE	PD 28 SEA0ATE IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	• 2
			PD 1 SEAGATE	PD 2 SEAGATE	PD 3 SEAGATE	PD 4 SEAGATE	PD 5 SEAGATE	PD 6 SEAGATE	PO 7 SEAGATE	PD 8 SEAGATE	PD 9 SEAGATE	PD 10 SEAGATE	PD ti SEAGATE	PD 12 SEAGATE	PD 13 SEAGATE	FD 14 SEAGATE	• 9

- 5. Give the system some time to complete the zoning process. Power on the server node so that the physical disk devices are discovered by the RAID controller before you start creating virtual drive groups and virtual drives in the Storage area.
- 6. In the status column, the drives should be listed as Unconfigured Good. if they aren't, select the drive and then click Set State as Unconfigured Good at the upper right.

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/ (Server 2) C	isco UCS	C3000 RAID Co	introller for M4 Server Bla	ade with 4G RAID Ca	he (SBMezz	1) / Physical D	rive Info 🔹		Rattwah	Hoot Power Launch KVM Per	ng Reboot 🚽 Locator LEE	00
stroller Info Physic	cal Drive list	virtual Drive info	Battery Backup Unit S	torage Log								
Physical Drives	Phys	ical Drives									Selected 0 / Total 30	٥.
PD-1	14	Au Giobel Due Spece	Note Tellcated (Int Spare	Burneties Errors (for Splace Prov)	CPHINETO	e Boompel 11 (Boot	Pequiti Ecclimont	1.000+2000		Double Second Dilles		
PD-1		Controller	Physical Drive Number	Status	Health	Boot Drive	Drive Firmware	Coerced Size	Model	Туре		
2 PD-4		SBMezz1	1	Unconfigured Good	Good	false	A21D	9536743 MB	NGST	HDD		1
PD-5		S8Mezz1	2	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HOD		
2 PD-6		SBMazz1	э	Unconfigured Good	Good	faise	A210	9536743 MB	HGST	HDD		
1 PD-7		SBMezz1	4	Unconfigured Good	Good	faite	A21D	9536743 MB	HGST	HOD		
PD-8		SBMezz1	5	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD		
2 PD-9		SBMezz1	6	Unconfigured Good	Good	faise	A210	9536743 MB	HGST	HOD		
PD-10		SBMezz1	7	Unconfigured Good	Good	faise	A21D	9536743 MB	HGST	HOD		
2 PD-11		SBMezz1	8	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD		
E PD-12	0	SBMezz1	9	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD		
2 PD-13	0	SBMezz1	30	Unconfigured Good	Good	faise	A210	9536743 MB	HGST	HOD		
2 PD-14		S8Mezz1	11	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HOD		
PD-15		SBMezz1	12	Unconfigured Good	Good	false	A210	9536743 MB	HGST	HOD		
2 PD-16		SBMezz1	13	Unconfigured Good	Good	false	A210	9536743 MB	HGST	HDD		
2 PD-17		S8Mezz1	34	Unconfigured Good	Good	faise	A210	9536743 MB	HQST	HDD		
2 PD-18		SBMezz1	15	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD		
C PD-19		S8Mezz1	16	Unconfigured Good	Good	faise	A210	9536743 MB	HGST	HDD		- 2
2 PD-20		SBMezz1	17	Unconfigured Good	Good	faise	A210	9536743 MB	HGST	HDD		
2 PD-21	0	SBMezz1	18	Unconfigured Good	Good	false	A25D	9536743 MB	HGST	HOD		
C PD-22		SBMezz1	19	Unconfigured Good	Good	faise	A21D	9536743 MB	HGST	HOD.		
C PD-23		SBMezz1	20	Unconfigured Good	Good	faise	A21D	9536743 MB	HGST	HDD		
E PD.24		S8Mezz1	21	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HOD		

0	S8Mezz1	22	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD
0	SBMezz1	23	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	нор
0	SBMezz1	24	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD
0	S8Mezz1	25	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD
0	S8Mezz1	26	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HOD
	S8Mezz1	27	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HOD
	SBMezz1	28	Unconfigured Good	Good	false	A21D	9536743 MB	HGST	HDD
	SBMezz1	201	Unconfigured Good	Good	false	0370	456809 MB	ATA	SSD
	S8Mezz1	202	Unconfigured Good	Good	false	0370	456609 MB	ATA	SŚD

7. Now configure the hot spare drives. This configuration has three (based on the Extra Large configuration). Select Drive 1. Then click Make Global Hot Spare at the top. Do the same thing for Drive 2 and Drive 3.

▲ / / (Server 1) RAID control Servers (SLOT-MEZZ) / Phys	ler for ical Dr	UCS C3X60) Storage		Refresh Hos	t Power Launch KV	M Ping Reboot 🔻 Lo	cator LED 🚱
Controller Info Physical Drive Info	Virtual	Drive Info	Battery Backup Unit	Storage Log	R			
Physical Drives	Phys	ical Drives					Selected	1 / Total 60 🛛 🛱 🚽
V PD-1	M	ake Global Hot S	Spare Make Dec	licated Hot Spare	Remove from Hot Spa	re Pools Prepa	re for Removal	\gg
V PD-2								
✓ PD-3		Controller	Ph	ysical Drive Number	Status	Health	Boot Drive	Drive Firmware
V PD-4	\checkmark	SLOT-MEZZ	1		Unconfigured Goo	d Good	false	0205
V PD-5		SLOT-MEZZ	2		Unconfigured Goo	d Good	false	0205
V PD-6		SLOT-MEZZ	3		Unconfigured Goo	d Good	false	0205

Note: Drive slots 1,2 and 3 or 46,47 and 48 can be used to create hot spares, the drives in other remaining slots should be used to create the Raid 60 Disk Group.

8. In the Virtual Drive Info pane, no virtual drives should be listed. Remove any virtual drives that appear in this initial configuration.

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🗧 diale Cisco	Integrated Management Control	er						🐥 🕑 0 admin@10.55.56.40 - S3260-FOX21020	22NL 🗘
Controller Info	Cisco UCS C3000 RAID Controll sical Drive lots Virtual Drive Info	er for M4 Server Bla attery Backup Unit	ade with 4G RAID	Cache (SBMezz	1) / Virtual	Drive Info *		Refresh Host Pawer: Launch KVM Ping Reboet + Locator LED	00
Vitual Drives	Virtual Drives							Selected 0 / Total 0	٥.
	Virtual Drive Number	Name	Status	Health	Size	RAID Leve	Boot Drive		

Create virtual disk groups

Zoning allocated drives to the server nodes, but you need to create virtual disk groups to use the drives for booting and for the disk library.

Create virtual disk groups 0 and 1.

1. On the Controller Info page, click Create Virtual Drive from Unused Physical Drives.

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🛬 📲 Cisco Integrated Managemer	nt Controller	🌲 🕑 🚺 🛛 admin@192.168.10.10 - C3260-FOX203362N1 🔅
↑ / / (Server 2) Cisco UCS C3000 RAI (SBMezz1) / Controller Info ★	Controller for M4 Server Blade with 4G RAID Cache	Refresh Host Power Launch KVM Ping Reboot 🕇 Locator LED 🥹 🔞
Create Virtual Drive Typesco Controlmite Create Virtual Drive Typesco University of Create Create Drive (Obsobrage Firmware Log) Enable Dr Switch to Remote Key Management Switch to Local Key	Vidual Drive from an Existing Vidual Drive Group Import Foreign Config Clear Foreign Config Net Security Disable Drive Security Clear Cache Clear all Configuration Set Factory Defaults y Management	
✓ Health/Status	▼ Settings	
Composite Health: 🧧 Good	Predictive Fail Poll Interval: 300 sec	

- 2. For the operating system, you must create a RAID 1 configuration on the two SSDs on the back of the chassis.
 - a. Select 1 as the RAID level.
 - b. Select physical drives 201 and 202 and add them to the drive group (click >>).
 - c. For the name, enter Raid1_Boot. (Any other name you want can be used to identify the drive.)
 - d. Change Cache Policy from DirectIO to Cached IO.
 - e. Keep Cache Policy set to Direct IO.
 - f. Keep Write Policy set to Write Through.
 - g. Enter 456809 as the size and select MB as the unit.

	ev	1			•						
Crea	ite Driv	ve Group)S								
Phys	ical D	rives			Selected 0	/ Total 4	ζ‡ γ	Drive	Groups s	elected 1 / Total	1 🔅
_	ID EA	Size(IVI	D)	Wodel	internace	Type			Name		
	53	152492	5 MB	TOSHIBA	SSD	SAS			DG [201.202]		
	54	152492	5 MB	TOSHIBA	SSD	SAS	>>				
	55	152492	5 MB	TOSHIBA	SSD	SAS	<<				
	56	152492	5 MB	TOSHIBA	SSD	SAS					
/irtu	ial Driv	ve Prope Name:	rties RAID1_E	3004			Disk Cache Policy:	Unchange	ed	×	
	Acces	s Policy:	Read Wr	ite		•	Write Policy:	Write Thre	ough	•	
	Rea	d Policy:	No Read	Ahead		•	Strip Size (MB):	64k		•	
		D.F	Direct IO			•	Sizo	456809		1	MP

- 3. Click Create Virtual Drive.
- 4. Go to the Virtual Drive Info tab and select the Boot virtual drive.
- 5. Click Set as Boot Drive.

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I / (Server Server Blade Info *	2) Cisco UCS (with 4G RAID C	C3000 RAID Cor ache (SBMezz1	ntroller for M4) / Virtual Drive		Refresh Host P	lower Launch KVM Ping	Reboot * Loca	tor LED 🥝 🕤
Controller Info	Physical Drive Info	Virtual Drive Info	Battery Backup Un	nit Storage Log				
✓ Virtual Drives	Virtual Drives						Selected 1	/Total 1 🖧 +
VD-0	Initialize	Cancel Initialization	Set as Boot Drive	Delete Virtual Drive	Edit Virtual Drive	Set Transport Ready		>>
	Virtual D	rive Number	Name	Status	Health	Size	Raid Level	Boot Drive
	v 0		Boot	Optimal	Good	456809 MB	RAID 1	false

6. Confirm that you want to make the Boot virtual drive the boot drive.

 ★ aloge C ↑ / (Server Server Blade Info ★ 	isco Integrated Ma 2) Cisco UCS C3 with 4G RAID Cad	anagement (3000 RAID C che (SBMezz	Are you sure yo device - 0 ?	ou want to make the vi	Intual drive as boot	admin@192.168 wer Launch KVM Ping	159.95 - C3260-FO) Reboot 🔻 Local	02037G9MC 💠
Controller Info	Physical Drive Info	Virtual Drive Info	Battery Backup U	nit Storage Log				
✓ Virtual Drives	Virtual Drives						Selected 1	/ Total 1 🖧 🔹
2 VD-0	Initialize		Set as Boot Drive	Delete Virtual Drive	Edit Virtual Drive	Set Transport Ready		
	Virtual Driv	ve Number	Name	Status	Health	Size	Raid Level	Boot Drive
	0	1	loot	Optimal	Good	456809 MB	RAID 1	false

- 7. Return to the Controller Info tab to create the additional virtual drive groups and virtual drives. The following configuration for the disk library is for MediaAgent Extra Large configuration, which uses 48 SAS drives.
- 8. Click Create Virtual Drive from Unused Physical Drives.
- 9. Select 60 as the RAID level.
- 10. Select physical drives 4 through 19 and add them to the drive group (click >>).
- 11. Repeat the addition of physical drives by selecting 20 through 35 and then adding the drives to the drive group (click >>).
- 12. Repeat the addition of physical drives by selecting 36 through 51 and then adding the drives to the drive group (click >>).

d Lev	el: (60			•							
reate	e Dri	ive Group	s									
hysic	al D	Drives			Selected 0 / To	otal 12	⇔ +		Driv	e Groups	Selected 0 / Tota	з ф.,
	ID	Size(M	IB)	Model	Interface	Туре				Name		
	54	572203	1 MB	SEAGA	HDD	SAS	-			DG [4.5.6.7	.8.9.10.11.12.13.1	
	55	5722031	1 MB	SEAGA	HDD	SAS		>>		DG [20.21.2	22.23.24.25.26.27	
	56	5722031	1 MB	SEAGA	HDD	SAS		<<		DG [36.37.3	39.40.38.41.42.43	
	57	5722031	1 MB	SEAGA	HDD	SAS						
	58	5722031	1 MB	SEAGA	HDD	SAS						
	59	5722031	1 MB	SEAGA	HDD	SAS						
irtual	l Dri	ve Prope	rties									
		Name:	DiskLibR	aid60			Disk	Cache Policy:	Disabled	1	•	
1	Acce	ss Policy:	Read Wr	te		r		Write Policy:	Write Ba	ack Good BBU	•	
	Re	ad Policy:	Always R	lead Ahead		r	St	trip Size (MB):	512k		•	
	Cac	he Policy:	Cached I	0		r		Size	1598167	2		MB 🔻
									[380516	: 15981672]		

- 13. Provide the following values and complete the virtual drive creation.
 - a. Enter DiskLibRaid60 as the name. (You can use any other name you want to identify the drive.)
 - b. Change Read Policy to Always Read Ahead.
 - c. Change Cache Policy to Cached IO.
 - d. Change Write Policy to Write Back Good BBU.
 - e. Change Strip Size to 512 KB.
 - f. Use the size populated automatically or change the size to the maximum available space.

14. Click Create Virtual Drive.

Virtual Drives	Virtual Drives					Selected	0 / Total 2 🛛 🖏 👻
VD-0	Initialize Cancel Initia	lization Set as Boot Drive	Delete Virtual Drive	Edit Virtual Drive	Set Transport Ready		>>>
	Virtual Drive Number	Name	Status	Health	Size	Raid Level	Boot Drive
) 0	Boot	Optimal	Good	456809 MB	RAID 1	true
] 1	DiskLibRaid60	Optimal	Good	223159092 MB	RAID 60	false
í í	Ĭ						

- 15. Be aware that the disk group initialization process is ongoing in the background for several hours, and full performance is available only after the initialization process finishes.
- 16. Now you need to initialize the drives. Select a drive and click Initialize in the menu at the top of the screen. Then select Fast Initialize in the next window. Do this for all drives.

Virtua	al Drives		Delete Virtual Drive	Edit Virtual Drive			Selected 1 / Total 2 🧔 🔹
	Virtual Drive Number	Name	Status	Health	Size	Raid Level	Boot Drive
	0	Boot	Optimal	Good	456809 MB	RAID 1	true
	1	DiskLibRaid60	Initialize Virtual Drive		⊘ × ³	RAID 60	false
			Are you sure you want to in Initialize Type:	itialize the virtual drive - Boo	ot 🗸		
				Initialize VE	Cancel		

- 17. To see the initialization progress, click the virtual drive in the left column (for example, VD-0).
- 18. The server is now ready to load the OS.

Note: The number and sizes of drives dictates the virtual drive configuration. The values are based on the suggested MediaAgent configuration detailed earlier in this document.

Cisco UCS managed configuration with Cisco UCS Manager

The following section covers the configuration of Cisco UCS managed Cisco S3260 chassis.

1. Log on to Cisco UCS Manager as the admin user or as another user with administrative rights.



2. On the Equipment tab, identify the Cisco UCS S3260 chassis and verify the condition of the system and the components required for the deployment.

All - Equipa - Cohe -	rment ansein Dhassis 1 ⊗ Dhassis 2 PAne PSUs	Equipment / Chassis / Chassi Caeneral Servers Servers Fault Summary 0 0 0	is 2 Invice Profiles Fans	PSUs Hyb Physical Displ	nid Display Slots av	Installed Firmware	SEL Logs Po	wer Control Monitor	Connectivity ()
verm Constant	nnent Dissis Dissis 1 📀 Dissis 2 Fans PSUs	General Servers Servers <t< th=""><th>rvice Profiles Fans</th><th>PSUs Hyb</th><th>rid Display Slots ay</th><th>Installed Firmware</th><th>SEL Logs Po</th><th>wer Control Monitor</th><th>Connectivity F)</th></t<>	rvice Profiles Fans	PSUs Hyb	rid Display Slots ay	Installed Firmware	SEL Logs Po	wer Control Monitor	Connectivity F)
Nern C	Dhassie 2 Fans PSUs	8 0 4	0	-					
금 	Fans PSUs	0 0 0		10 I	12		-	-	
	SIOCs	Statua	0						
) .	· Servers	Overall Status: + Operable							
N	Server 2	 Status Details 		-					-
• Rac	Storage Enclosures	Actions			4.4 014				-
) , s	EX Servers	Associate Chassis Profile		Properties					
ie v Fab	pric Interconnects	Decommission Chassis		ID	2				
	abric Interconnect A (primary) 😚	Remove Chassis		Product Name Vendor	Cisco UCSC C3X0	PID	UCSC-C3X60		
sin P F	abric interconnect is (aubordinate) 👈	View POST Results		Revision	: 0	Seri	al : FOX2102Q2N	L	
		Start Fault Suppression		Chassis Profile					
				Locator LED	. @				
		Suppression Task Properties		User Label					
		Create Zoning Policy from Inven	tory	④ Part Det	ails				



- 3. Verify the SIOC Information. Only one SIOC is required. The second SIOC is optional and is used for better high availability or greater throughput.
- 4. The General tab provides an overview of the SIOC and Ethernet ports, including the uplink status and port speeds. The operating speed can be 10 Gbps, 4 x 10 Gbps, or 40 Gbps. You should use 40 Gbps whenever possible.



disalis cisco	UCS Manager			8 V 🗘 2 15 2	0			0 = 9	1 (i) 🌣 G
	All + + Equipment - Chassis	Equipment / Chas General Fabri Ty Advanced Filter	sis / Chassis z / S c Ports Faults + Export - Print	SIOCa / System IO Co Events Statistics	ntrol_ / Shared Ada	pter			٥
U	 Chassis 1 🛞 	Name	Oper State	Port Channel	Peer Slot ID	Peer Port ID	Fabric ID	Acknowledged	Peer
Servers	 Chassis 2 	Fabric Port 2/1	Up		1	32	A	OK	sys/switch-A/slot
品 LAN	 Fans PSUs SIOCs 	Fabric Port 2/5	Up		1	32	В	OK	sys/switch-B/slot-
	 System IO Controller 1 								
SAN	 System IO Controller 2 								
0	Shared Adapter Secure								

5. The Servers area shows the details of the server node, including information about the CPU, memory, PCIe cards, and local storage.





cisco.	UCS Manager	8 👽 🙆 🕄 2 15 2 11		○ ≡ ♀ ? () ¢ ⊖
guipment B Servers	All	Equipment / Chassis / Chassis Z / Servers / Server 2 General Inventory Virtual Machines Installed Firmware CIMC Se Motherboard CIMC CPUE Memory Adapters HBAs NICs Processor 1 Product Name : Intel(R) Xeon(R) E5-2605 v4	ssions SELLogs VIF Paths Paults ISCSI VNICs Storage GPUs Se Vendor Intel(2) Corpore	Events FSM Health Statistics)) curity ttion
	PSUs SIOCs Servers Servers Storage Enclosures Rack-Mounts FEX Servers Fabric Interconnects Fabric Interconnect A (primary) 📀	PID : UCS-CPU-Es2095E	Revision : 0 Speed (BHz) : 2.1 Number of Threads : 30 Number of Cores Enabled : 18 Power : N/A Presence : Enulated	
Lassis Los	Fabric Interconnect B (subordinate)	Processor 2 Product Name : Inte(IR) Xeon(R) E5-2095 v4 PID : UCS-CPU-E52095E (*) Part Details	Vendor : Inte(R) Corpora Revision : 0	

disalis cisco	UCS Manager		8 V (1) 2 15 2 11		() ≡ Q ? (0 & G
Equipment	All + • Equipment • Chassis • Chassis 1 8	Equipment / Chassis / Cha General Inventory Motherboard CIMC	asla 2 / Servers / Server 2 Virtual Machines Installed Firmware CPUs Memory Adapters HBAs	CIMC Sessions SEL Logs VIF Path NICs iSCSI vNICs Storage	is Faults Events FSM Health 3PUs Security	Statistics)
Servers LAN	Chassis 2 Fons PSUs SIOOs SIOOs	% Advanced Filter # Export Name Memory 1 Memory 2 Memory 2	t Print Location DMM_A1 DMM_A2	Capacity(38) 16.00 16.00	Clock(MH2) 2400 2400	0
SAN	Storage Enclosures Rack-Mounts FEX	Memory 3 Memory 4 Memory 5 Memory 6	DRMM_B1 DRMM_C1 DRMM_C2	16.00 16.00 16.00 Add Dalate into	3400 2400 3400 2400	
Storage Chasess	 Servers Fabric Interconnects Fabric Interconnect A (primary) 0 Fabric Interconnect B (subordinate) 0 					
Admin					System Time	2017-08-14702:11

All Caujoment • Equipment Gen • Chassis Mathem • Chassis Mathem • Chassis 2 France • Fans France • Storage Enclosures Adapt • Storage Enclosures Fabric Interconnect B • Fabric Interconnect B (subordinate) ©	/ Chassis / Chassis I Inventory Vi and CIMC CPU d Piler + Daort @ Vendor 2 Cisco 5	s 2 / Servers / intual Machines Us Memory Print Cystems Inc	Server 2 Installed Firmware Advertines HBAs PID UCSC-Cozeo-SIOC	CIMC Sessions SE NICs ISOSLVNIC Senial FCH210679WQ	EL Logs VIF Paths Cs Storage GPUs Overell Stetus N/A	Faults Events F Security Operability N/A	Thermol	tatistics > 3
Chassis 1 Chassis 1 Chassis 1 Chassis 2 Ch	and CIMC CPU d Filter + Export - Vendor 2 Cisco 5	La Memory Print r Systems Inc	Adoctine HBAs PID UCSC-C3260-SIOC	NICs ISCSLVNR Serial FCH210676WQ	Co Storage GPUs Overall Status N/A	Security Operability N/A	Thermel N/A	o
Chassis 2 Chassis 2 Chassis 2 Chassis 2 Fone Fone Source 2 Storage Enclosures Rack-Mounts FEX Servers Fabric Interconnect A (primery) Fabric Interconnect B (subordinate)	d Filter 🔶 Export 💩 Vendor 2 Cisco 5	+ Print r Systems Inc	PID UCSC-Cazeo-SIOC	Serial FCH210679WQ	Overall Status N/A	Operability N/A	Thermel N/A	ò
Clarates A Fone Fone Fone Source Sources Sources Sources Sources Sources Sources Sources Fabric Interconnect A (primery) Fabric Interconnect B (subordinate)	Vendor 2 Cisco 5	r Systems Inc	PID UCSC-C3260-SIOC	Senal FCH210676WQ	Overall Status N/A	Operability N/A	Thermel N/A	
Adapt Adapt Adapt SrCs Servers Storage Enclosures Rack-Mounts FEX Servers Fabric Interconnect A (primery) Fabric Interconnect B (subordinate)	z CixoS	Systems Inc	UC\$C-C3280-SIOC	FCH210676WQ	N/A	N/A	N/A	
Storage Enclosures Rack-Mounts FEX Servers Fabric Interconnects Fabric Interconnect A (primary) Fabric Interconnect B (subordinate)								
 Storage Enclosures Rack-Mounts FEX Servers Fabric Interconnects Fabric Interconnect & (primary) Fabric Interconnect B (subordinate) 								
FEX • Servers • Fabric Interconnects • Fabric Interconnect A (primary) • Fabric Interconnect B (subordinate) • Fabric Interconnect B (subordinate)								
Fabric Interconnect A (primary) Fabric Interconnect B (subordinate) G								
				- Add III Delete				

6. In a standalone configuration, the SIOC includes predefined vNICs and vHBAs. In a configuration managed by Cisco UCS, however, nothing is defined. This definition is part of the service profile configuration. If PCIe cards for networking or Fibre Channel are installed, the information is listed on the NICs and HBAs tabs.

UCS Manager			2) 👽 🙆 🚺 15 2 11				୍ 🗉 ବ	? i	¢ G
	Equipment /	Chassis / Chassi	2 / Servers /	Server 2	antes a					
ent • Chassis	General	Inventory V	rtual Machines	Installed Firmware	CIMC Sessions	SEL Logs VIF Pa	the Faults	Events FSM	Health	Statistice > _ >
+ Chassis 1 🛞	Motherboard	GIMG CP1	25 Memory	Adopters HBAS	NIGS ISUS	I VINIUS Storage	GPUS Securit	v		12
rs - Chassis 2	+ - 7/A	vAlic	port @ Print	DID	Model	Onershills	MAC	Original MAG	10	¢
Fans		Villo	venuur	1940	No data a	valable	0040	Crigina nos		
PSUs SIGCs										
- Servers										
Server 2										
 Storage Enclosures 										
FEX										
Fabric Interconnects										
 Fabric Interconnect A (primary) 😳 										
 Fabric Interconnect B (subordinate) 👩 										
P										
)										
n										

 To complete the storage configuration discussed earlier in this document, you need to identify the physical disks available for the operating system installation. The Cisco UCS S3260 chassis comes with four disk slots on the rear side, with disk numbers 201 through 204. Identify and note the disks that are available. In the example here, the available disks are 201 and 202.

	All +	Equipment / Chassis / Cha	ssis 2 / Servers /	Server 2					
2.	Equipment	General Inventory	Virtual Machines	Installed Firmware	CIMC Sessions	SEL Loge V	IF Paths Faults	Events FSM	Health Statistics
	+ Chassis	Motherboard CIMC	CPUs Memory	Adapters HBAs	NICs iSC	SI vNICs Storage	GPUs Secu	irity	
9	Chassis 1 (8)	Controller LUNe Die	ike						
ers	+ Chassis 2								
5	 Fons PSUs 	+ - C Advanced Filter	+ Export Print Size (MP)	Casial	Occasilia	Distance	Technolom	Paine States	Rostable
4.C	 SIOCs 	Storene Conduiter DCH 1	arsa (MD)	- aenai	Operativity	Presence	recriminingy	Drive State	BUCIADIE
	 Servers 	- Storage Controller SAS 1							
	Server 2	Pisk 1	9536743	7PHVDXNC	Onemble	Fauipped	HOD	Online	False
N	 Storage Enclosures 	Disk 2	9536743	2PHVK4PC	Operable	Equipped	HDD	Online	False
	 Rack-Mounts 	Disk 9	9536743	7PJORGLC	Operable	Equipped	HDD	Online	False
	FEX	Disk 4	9536743	7PHTP5RC	Operable	Equipped	HDD	Online	False
	SIOCs Servers Servers Server > Storage Enclosures Rack-Mounts EEX	Unix 20 Unix 27 Divix 28 Divix 20 Divix 202 Storage Controller SAS 2	9536743 9536743 9536743 456809 456809	7PHJUHC 7PHZ17DC BTWL515302C6. BTWL515401964	Operable Operable Operable Operable	Equipped Equipped Equipped Equipped	HDD HDD SSD SSD	Unconfigured Go Unconfigured Go Online Online	False False False False
)	 Servers 				2				
Un .	Fabric Interconnects	Detalls							
	 Fabric Interconnect A (primary) 😳 	Actions	P	roperties					
iin	 Fabric Interconnect B (subordinate) C 		hod i	0	3	ा इ	90	84	
		Prépara (or Romonal		/endor		١	ΛD		
			4	Seriel		f	levision		
			are	Product Name					
				Product variant					

8. On the server node, Storage Enclosure 3 represents the disk slots on the back of the chassis, used for the operating system disks. Storage Enclosure 4 represents the NVMe slot on the server node, and Storage Enclosure 5 represents the two NVMe slots on the I/O expander board (if one is connected). Those storage enclosures are dedicated to the specific server.

UCS Manager			2 15	2 17) ≣ Q	? (i 🌣	
All	Equipment / Chassis /	/ Chassis 2 / Se	ervers / Server 2	/ Storage Encl., /	Storage Encl					
+ Equipment	General Disks	Slots Faults	Events FS	M Statistics						
 Chassis 1 (2) 	+ - 🍢 Advanced F	Filter + Export	e Print							
Chassis 2	Name Su	ize (MB)	Raw Size (MB)	PID	Senal	Operability	Drive State	Presence	Technology	e
▶ Fans	Disk 201 45	56809	457862	INTEL SSDSC2	BTWL515302C	Operable	Online	Equipped	SSD	
PSUs	Disk 202 45	56809	457862	INTEL SSDSC2	BTWL51540196	Operable	Online	Equipped	SSD	
- SIOCs										
System IO Controller 1										
 System IO Controller 2 										
 Shared Adapter 										
 ▶ Shared Adapter ▼ Servers 	Details									
 Shared Adapter Servers ★ Server 2 	Details				.000.					
 > Shared Adapter - Servers - Server 2 - Adapters 	Details		Properties		.000					
 Shared Adapter Servers Server 2 Adapter 2 	Details Actions Gar Unconfigured Ba		Properties	; 20	2	PID		: UCS-C3X60	G1SD480	
 Shared Adapter Servers Server 2 Adapters Adapter 2 Storage Enclosures 	Details Actions Out Deconfigured Ba Priceses for Removal		Properties ID Vendor	: 20 : Int	2	PID. VID		: UCS-C3X60 . V01	-G1SD480	
Shared Adapter Servers Server 2 Adapters Adapter 2 Adapter 2 Storage Enclosures Storage Enclosure 3	Details Actions Gas Unconfigures Da Presars for Removal Lands Presars for Removal		Properties ID Vendor Serial	: 20 int 81	2 Iel WL51540190480Q4	PID VID SN Revision		: UCS-C3Xeo : V01 : 0	-G18D480	
Shared Adapter Servers Servers Adapters Adapters Adapter 2 Storage Enclosures Storage Enclosure 3 Storage Enclosure 4	Details Actions Gar Unconfigured Da Presara for Removal Litude Preseze for Da Bart BROD Made		Properties ID Vendor Serial Product Nat	: 20 : Int : 81 : 100	2 iel WL51540190480Q4 sco UCS C3X00480	PID VID SN Revision GB SATA Boot SSI)	: UCS-C3X60 : V01 : 0	-G1SD480	
Shared Adapter Servers Servers Adapters Adapters Adapter 2 Storage Enclosures Storage Enclosure 3 Storage Enclosure 4 Storage Enclosure 5	Details Actions Get Deconfigured Da Presars for Removal Little Presson for Da Dark JBCD Mode Mark as Cardinated In December France		Properties ID Vendor Serial Product Na Product Va	: 20 Int BT me Ci iant Ci	2 lel WL51540190460Q4 sec UCS C3X00 480 000_BOOT	PID VID 3N Revision KGB SATA Boot SSI	2	: UCS-C3X60 : V01 : 0	-G15D480	
Shared Adapter Servers Servers Adapters Adapters Adapter 2 Storage Enclosures Storage Enclosure 3 Storage Enclosure 4 Storage Enclosure 5 Storage Enclosure 1	Details Actions Ger Unconfigured Ba Presars for Removal Lauts Presses for Bo Bart LBOD Mode Mark as Centurated In Remove Hot Span Kors (BCD) to Jacob		Properties ID Vendor Serial Product Na Product Ver () Port D	: 20 Int ne Ci iont Ca letails	2 lel WL51540190480Q4 BGD UCS C3X00 480 000_BOOT	PID VID SN Revision (GB SATA Boot SSI	2	: UCS-C3X00 : V01 : 0	-G15D480	
Shared Adapter Servers Servers Servers Adapters Adapters Adapter 2 Storage Enclosures Storage Enclosure 3 Storage Enclosure 4 Storage Enclosure 5 Storage Enclosure 5 Storage Enclosure 1 Storage Enclosure 1 Rack/Mounts	Details Actions Ger Deconformel Ba Presers for Removal Lauts Presers for De Bart JBOD Mode Mark as Centicated In Remove Hot Span Remove Hot Span Tum on Locator LED	ad to Good L Introdukt Tot Spare Agained Aland D	Properties ID Vendor Serial Product Na Product Vor () ⊕ Port D Drive State	: 20 Int BT Ciant Ci Int Ci Int Int Ciants	2 lel WL51540190480Q4 BGD UCS C3X00 480 000_BOOT	PID VID SN Revision GB SATA Boot SSI Size (MB))	: UCS-C3X00 : V01 : 0	-G15D480	
Shared Adapter Servers Servers Servers Adapters Adapters Adapter 2 Storage Enclosures Storage Enclosure 3 Storage Enclosure 4 Storage Enclosure 5 Storage Enclosure 1 Rack-Mounts FEX	Details Actions Ger Deconfigured Ba Pressus for Removal Latels Pressus for Re- bert JBOD Mode Mark at Cedicated In Remove flot Span Rem JBOD to Moood Turm on Locator LED	ad to Good L Introdukt Fair Spare Agrined (Rood D	Properties ID Vendor Serial Product Na Product Var (⊕ Port D Drive State	: 20 Ini BT Sint G International International International	2 lel WL51540190480QQ seo UCS C3X00480 000_BOOT	PID VID SN Revision KGB SATA Boot SSI Size (MB))	: UCS-C3X00 : V01 : 0 450809	-G15D480	

9. The Storage Enclosures area under Chassis, not under Servers, represents the top-loaded disk slots of the Cisco UCS S3260 chassis.



10. The Disks tab of Storage Enclosure 1 shows all the details about the top-loaded drives.

UCS Manager			8 V 2 15	2 11				OBQ	? i ¢	Ř.
All +	Equipment / Ch General Di	assis / Chassis 2 . sks Slots Fa	Storage Enclosure	ns / Storage Enclos	sure 1					
	Y. M	warrend Ditor & Ever	un 🕮 Onive							
Chassis 1 🚫	Name	Size (MR)	Daw Sine (MR)	pin:	Sava	Devability	Dinie State	Presence	Technology	
+ Chassis 2	Dek 1	0506746	apo7505	HUNTOTOTI E	TOLICOVIC	Operation	Orders	Freedored	upp	-
➤ Eans	Disk a	9030743	9337330	HURZ TOTOLS.	PHYRAING	Operable	Online	Edotphed	HDD -	
 PSUs 	Disk 2	9536743	9537536	HUH721010AL5	7PHV84PC	Operable	Online	Equipped	HUU	
	Disk 3	9536743	9537536	HUH721010AL5	7PUOR8LG	Operable	Online	Equipped	HDD	
 System IO Controller 1 	Disk 4	9536743	9537536	HUH721010AL5	7PHTP5RC	Operable	Online	Equipped	HDD	
 System IO Controller 2 	Disk 5	9536743	9537536	HUH721010AL5	7P.00SAC	Operable	Online	Equipped	HDD	
 Shared Adapter 	Disk 6	9536743	9537536	HUH721010AL5	7GJ727SK	Operable	Online	Equipped	HDD	
• Servers	Disk 7	9536743	9537536	HUH721010AL5.	7GHM2EOK	Operable	Online	Equipped	HDD	
 Server 2 	Disk 8	9536743	9537536	HUH721010AL5	7GJ65DTK	Operable	Online	Equipped	HDD	
* Storage Enclosures	Disk 9	9596743	9532536	HUH721010AL5.	7GJ72EPK	Operable	Online	Equipped	HDD	
Storage Enclosure 1						51 3157	A. 11	· · · · · · · · · ·	1. 1. 1.	
* Rack-Mounts										
FEX	Details									
 Servers Fabric Interconnects 	Actions		Propertie	14						
Fabric Interconnect A (primary) 😨	See Upport	white Bard to Greed		1974 1977	0	BID		1105-09V-1	OTEM	
 Fabric Interconnect B (subordinate) C 	Virgania fair Removal Undo Prépara for Removal		No. 1		о Ист Ш1	PID INF		UCS-CSK-10TEM		
			Vendor		con , a western i company	ngian ViO		201		
				17		Carlet.				

Create a profile

The next task is to specify a chassis profile for the Cisco UCS S3260 to define the disk zoning for the top-loaded drives (Storage Enclosure 1) within the chassis. Without a chassis profile, servers have no access to the top-loaded drives.

The Cisco UCS Manager configuration for the MediaAgent server is specific to the use case, so you can optionally define a new suborganization for Commvault to keep all configurations dedicated to this use case.

Note: If a suborganization is created, all the tasks described below which are usually performed under root organization have to be performed under the suborganization created.

1. In the Chassis area, choose one of the root options, and choose Sub-Organizations. Right-click and choose Create Organization.



UCS Manager	8 😨 🙆 🚱 2 15 2 11	٥	۹	?	(i)	\$	G
All -	Chassis / Chassis Profiles / root / Sub-Organizations Sub-Organizations						
Chassis Profiles	+ - + Bxport 🔮 Prim						10
+ roct ()	Nome						
 Uhassis Profile Templates rioot Sub-Organizations Policies Chassis Firmware Packages Chassis Maintenance Policies Disk Zoning Policies Sub-Organization HANA () 	100						
in .	(a) Add Delete In Info						
red in as admin@192.168.76.9			Syst	em Tin	ne: 201	7-08-	1410

2. Enter an obvious name, such as Commvault, enter a description, and click OK.

Create (Drganization	? ×
Name :	Commvault	
Description :	Commvault Data Protection	

3. Create the chassis profile with in the suborganization you created.

The next steps depend on the available disk drives in Disk Enclosure 1 and the number of drives assigned to the MediaAgent server.

ОК

Cancel

For a configuration with 48 disk drives for the disk library, use the following set of steps.

Create a chassis profile template

The chassis profile can be deployed independently, but to increase the consistency within Cisco UCS, you can generate chassis profiles from chassis profile templates. To create a chassis profile template, three policies are used:
- Disk zoning policy
- Chassis maintenance policy
- Chassis firmware policy

The disk zoning policy allocates disk slots between server nodes in the chassis. To create a disk zoning policy, perform the following steps:

- 1. In Cisco UCS Manager, click Chassis in the navigation pane and choose Policies from the Chassis pull-down options.
- 2. Right-click Disk Zoning Policies and choose Create Disk Zoning Policy.
- 3. Provide an appropriate name for the disk zoning policy and leave Preserve Config unselected.

Create Di	sk Zoning Poli	су			? ×
Name	: CVLT-MA-Zoning				
Description	:				
Preserve Config Disk Zoning In	r: D formation				
+ - T/ A	dvanced Filter 🔺 Export	🖶 Print			¢
Name	Slot Number	Ownership	Assigned to Ser	Assigned to Con	Controller Type
		🕂 Add 📋	Delete 🌘 Modify		
					K Cancel

4. Click Add in the Disk Zoning Information section to set the disk slot associations for the chassis.

Create D)isk Zoning F	Policy			? ×
Name	: CVLT-MA-Zon	ing			
Description	2				
Preserve Conf	ig : 🔲				
Disk Zoning	Information				
+ - 7	Add Slots to	o Policy		?	× ¢
Name	Ownership : (Unassigned) Dedicated	Shared O Chassis G	lobal Hot Spare	er Type
tempora	Server : [1	•			
	Controller :	×			
	Controller Type : S	AS			
	Slot Range :	1-56			
	112				
			ОК	Cancel	y -
				OK	Cancel

- 5. For this deployment, the S3260 is using one node, so in the Add Slots to Policy dialog box, do the following:
 - a. Click the Dedicated option for Ownership.
 - b. Select 1 for the server
 - c. Select 1 for the controller.
 - d. Enter **1-56** as the slot range.
- 6. Click OK to confirm the Add Slots to Policy options.
- 7. Click OK to create the disk zoning policy.

Create the chassis maintenance policy

The default chassis maintenance policy is set to User Ack for Reboot. You can use this policy.

Create the chassis firmware policy

The chassis firmware policy applies an appropriate firmware package to the chassis as it is associated. To create a chassis firmware policy, perform the following steps:

- 1. In Cisco UCS Manager, click Chassis in the navigation pane and choose Policies from the Chassis pull-down options.
- 2. Right-click Chassis Firmware Packages and choose Create Chassis Firmware Package.
- 3. Give the chassis firmware package an appropriate name (such as UCS-3260), select the 3.2(1d)C chassis package, and leave Local Disk as the only option selected under Excluded Components.

Name :	UCS-S3260	
Description :		
Chassis Package :	<not set=""></not>]
Service Pack :	<not set=""></not>	
he images from Se	3.1(2b)C	dence over the images from Chassis Package
Excluded Compor	3.1(2f)C	server are images from emissis r ackage
	3.1(3a)C	
Chassis Adapt Chassis Board	3.2(1a)C	1
Chassis Mana	3.2(1d)C	
Local Disk		6
SAS EXpander		

4. Click OK to create the chassis firmware package policy.

Note: Select the latest supported firmware package downloaded on the UCS manager.

Create the chassis profile template

With the policies used by the resulting chassis profile in place, create the chassis profile template with the following steps:

- 1. In Cisco UCS Manager, click Chassis in the navigation pane and choose Chassis Profile Templates from the Chassis pull-down options.
- 2. Right-click and choose Create Chassis Profile Template.
- 3. Provide a name for the chassis profile template and set it to the Updating Template type.

		Create Chassis Profile Template	? ×
0	Identify Chassis Profile Template	You must enter a name for the chassis profile template and specify the template type. You can also enter a description of the template.	
0	Chassis Maintenance Policy	Name : \$3260-1node	
6	Policies	The template will be created in the following organization. Its name must be unique within this organization. Where : org-root	
0	Disk Zoning Policy	Type : [Intell Template •• Updating Template] Optionally enter a description for the template. The description can contain information about when and where the chassis profit template should be used.	e
		Next > Finish Can	cel

4. Select the default chassis maintenance policy.

		Create Chassis Profile Template	? ×
0	Identify Chassis Profile Template	Specify how disruptive changes (such as reboot, network interruptions, firmware upgrades) should be applied to the system.	
		Chassis Maintenance Policy	
2	Chassis Maintenance Policy	Select a maintenance policy to include with this chassis profile template or create a new maintenance policy that will be acces chassis profile templates.	sible to all
3	Policies	Chassis Maintenance Policy: Select (no policy used by default) 🔻 Create Chassis Maintenance Policy	
0	Disk Zoning Policy	Select (no policy used by default)	
		No maintenance policy is c default ded.	
		< Prev Next > Finish Ca	ncel

5. Set the chassis firmware package to the UCS-3260 package created previously.

		Create Chassis F	Profile Template	9	? ×
0	Identify Chassis Profile Template	Optionally configure chassis	firmware package for this c	hassis profile template.	
0	Chassis Maintenance Policy	Chassis Firmware P	ackage e policy for this chassis pro	file template, the template will update the firmware on th	ne chassis that it is
3	Policies	associated with. Otherwise the system uses the	firmware already installed	on the associated chassis.	
0	Disk Zoning Policy	Chassis Firmware Package :	<not set=""></not>	Create Chassis Finitivale Package	
			Domain Policies		
			default		
				1	
				< Prev Next > Hinist	Cancel

6. Select the CVLT-MA-Zoning disk zoning policy that was previously created.

hassis Maintenance Policy olicies tek Zening Policy	Disk Zoning Policy: C Name : C Description : Preserve Config : P Diaks Zoned + - Ty Advar Name • disk-stot-1	VLT-MA-Zoning Create Disk Z CVLT-MA-Zoning No No Siot Number 1	Print Ownership Dedicated	Assigned to Ser	Assigned to Con	Controller Type	\$
olicles lak Zoning Policy	Name : 0 Description : Disks Zoned + - 7y Advar Name > disk-slot-1	Create Disk 2 CVLT-MA-Zoning No No Stot Number 1	Phint Ownership Dedicated	Assigned to Ser	Assigned to Con	Controller Type	\$
sk Zoning Policy	Name : O Description : Preserve Config : N Disks Zoned + - Ty Advar Name > disk-slot-1	No No Stot Number 1	Print Ownership Dedicated	Assigned to Ser	Assigned to Con	Controller Type	0
	+ - T _F Advar Name disk-slot-1	Slot Number	 Print Ownership Dedicated 	Assigned to Ser	Assigned to Con	Controller Type	\$
	Name Misk-slot-1	Slot Number	Ownership Dedicated	Assigned to Ser	Assigned to Con	Controller Type	
	▶ disk-slot-1	1	Dedicated				
							1
	disk-slot-10	10	Dedicated				
	▶ disk-slot-11	11	Dedicated				
	▶ disk-slot-12	12	Dedicated				
	▶ disk-slot-13	13	Dedicated				
	► disk-sint-14	14	Dedicated				
		▶ disk-stor-13 ▲ risk-stor-14	▶ disk-slot-13 13 ► rink-slot-14 14	▶ disk-slot-13 13 Dedicated ► risk-slot-14 14 Dericated	disk-stor-13 13 Dedicated disk-stor-14 14 Derticated	disk-slot-13 13 Dedicated idisk-slot-14 14 Dedicated	disk-slot-13 13 Dedicated risk-slot-14 14 Dericated (Prev Field Cal

7. Click Finish to create the chassis profile template.

Create chassis profiles from the template

The chassis profile template has been created with policies appropriate for both Cisco UCS S3260 Storage Servers used in the environment, so you can create one or more chassis profiles using the template.

- 1. In Cisco UCS Manager, click Chassis in the navigation pane and choose Chassis Profile Templates from the Chassis pull-down options.
- 2. Right-click the newly created chassis profile template and choose the Create Chassis Profiles from Template option.
- 3. Specify a naming prefix, the name suffix starting number, and the number of instances of chassis profiles to be created from the template. Match the Number of Instances field value to the number of MediaAgent servers that need to be deployed.

	Create	Chassis	Profiles	From	Template	?	>	<
--	--------	---------	----------	------	----------	---	---	---

Naming Prefix :	CVLT-S3260-0
Name Suffix Starting Number :	1
Number of Instances :	1
	OK Cancel

1. Click OK to create the chassis profile.

Associate chassis profiles

Each chassis profile created can be associated with one of the connected S3260 servers.

- 1. In Cisco UCS Manager, click Chassis in the navigation pane and choose Chassis Profiles from the Chassis pull-down options.
- 2. Right-click one of the newly created chassis profiles and choose Change Chassis Profile Association.
- 3. Choose "Select existing Chassis" from the Chassis Assignment pull-down menu and select the appropriate chassis ID to use.

ts chassis ID. If no chassis currently exi	sts at that location, the system waits un	til one is discovered.
ou can select an existing chassis you we hassis Assignment: Select existing Che	ant to associate with this chassis profile.	
Available Chassis () All Chassis		
Select	ID	
۲	2	
	3	
Restrict Migration	: 🗆	
		_

- 4. Click OK to associate the chassis.
- 5. Repeat these steps for the second S3260, if a second MediaAgent server needs to be deployed.

Set up the Cisco UCS S3260 server node

The server nodes will be configured using service profiles just like other Cisco UCS Manager managed server resources, but they require a storage profile to use disks made available to them by disk slots designated for the server in the disk zoning policy of the chassis profile associated with the chassis.

Create the Cisco UCS S3260 storage profile

The storage profile consists of storage polices used for creating local LUNs from allocated disks (disk group policies).

For S3260 M3 server nodes, a controller definition of the embedded RAID controller or platform controller hub (PCH) used by the rear panel SSD of the S3260 is created in the storage profile, instead of a local LUN disk group policy for those SSDs.

Create disk group policies

You need to create two disk group policies for the MediaAgent deployment on the S3260 based on the Extra Large MediaAgent configuration options:

- Boot_SSD_rear1: Boot LUN of the rear SSD slots in a RAID 1 configuration
- S3260-Disk_Lib: Disk library of the MediaAgent using 48 HDDs in RAID 60 with three hot spares

Note: Large and Extra Large MediaAgent configurations use an NVMe drive for hosting the DDB and index cache.

Each of these disk group polices will create local LUNs for the S3260 server nodes, using available disks of specific types or through manual slot specification.

Create Boot_SSD_rear1 disk group policy

To create the Boot_SSD_rear1 disk group policy, perform the following steps:



- 1. In Cisco UCS Manager, click Storage in the navigation pane and choose Storage Policies from the Storage pull-down options.
- 2. Right-click and choose Create Disk Group Policy.
- 3. Do the following:
 - a. Enter an appropriate name (Boot_SSD_rear1).
 - b. Select RAID 1 Mirrored.
 - c. Select Disk Group Configuration (Manual).
 - d. Click Add and enter 201 as the slot number.

Create L	ocal Disk Configuration Reference	e ?×
Slot Number :	201 [1-205]	1
Sees ID	Normal Decidated Not Spare Global Not Spare	
opanio .		
		OK Cancel

- 4. Click OK.
- 5. Click Add again and enter 202 as the slot number.

Create L	ocal Disk Configuration Referenc	:e ?×
Slot Number :	202 [1-205]	_
Span ID :	Normal Dedicated Hot Spare Global Hot Spare Unspecified [0-8]	
		OK Cancel

- 6. Do the following:
 - e. Set Stripe Size to 64 KB.
 - f. Set Access Policy to Read Write.
 - g. Set Write Cache Policy to Write Through.
 - h. Set IO Policy to Direct.
 - i. Set Drive Cache to No Change.

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lame : RAID_1_Mirrored			
Description :			
RAID Level : RAID 1 Mirrored	*		
) Disk Group Configuration (Automatic) 💿 [Disk Group Configuration (Manual)		
Disk Group Configuration (Manual)			
Ty Advanced Filter ↑ Export ⊕ Print			\$
Slot Number	Role	Span ID	
201	Normal	Unspecified	
202	Normal	Unspecified	
			I
	🕀 Add 📋 Deleti	0 Info	
Virtual Drive Configuration	🕀 Add 📋 Deleti	0 Info	
Virtual Drive Configuration Strip Size (KB) : 64KB	Add Delete	0 info	
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write	Add Delet	0 info	
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write	Add Delet	• O Info	OK Cancel
Virtual Drive Configuration Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write	Add Delete T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T	0 Info	OK Cancel
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write	Add Delet	o ∎ Info	OK Cancel
Virtual Drive Configuration Strip Size (KB) 64KB Access Policy Read Write Intual Drive Configuration	Add Delete	: ● Info	OK Cancel
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write	Add Delet	r ● Info	OK Cancel
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write	Add ☐ Delete	■ The second se	OK Cancel
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write rtual Drive Configuration trip Size (KB) : 64KB Access Policy : Read Write tead Policy : Platform Default	Add Delete	r ● Info	OK Cancel
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write rtual Drive Configuration trip Size (KB) : 64KB access Policy : Read Write tead Policy : @Platform Default Vrite Cache Policy : @Platform Default	Add Delete Add Delete T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T	nays Write Back	OK Cancel
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write irtual Drive Configuration Strip Size (KB) : 64KB irtual Drive Configuration Strip Size (KB) : 64KB ead Policy : Read Write Read Policy : Platform Default Vrite Cache Policy : Platform Default D Policy : Platform Default	Add Delete Add Delete T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T T	rays Write Back	OK Cancel
Virtual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write Intual Drive Configuration Strip Size (KB) : 64KB Access Policy : Read Write Read Policy : Platform Default Write Cache Policy : Platform Default D Policy : Platform Default Drive Cache : Platform Default	Add Delete Add Delete	vays Write Back	OK Cancel

7. Click OK to create the disk group policy.

Manual slot number specifications for the rear SSD can be found in Cisco UCS Manager under > Equipment > Chassis > Chassis [chassis #] > Servers > Server [server #] > Storage Enclosures > Storage Enclosure 3. The slots should be 201–202 for Server Node 1 and 203–204 for Server Node 2.

Create S3260-Disk-Lib disk group policy

To create the S3260-Disk-Lib disk group policy, perform the steps shown here.

You will create a RAID 60 group as part of this procedure with three RAID 6 spans of 16 drives each and three hot spares.

Note: The below procedure manually selects the drives to be part of the disk group,optionally the drives can be automatically selected by checking the Disk Group Configuration (Automatic) option with the following parameters: Number of drives as 48 and Number of Global Hot Spares as 3. All the other parameters are identical with either options.

- 1. In Cisco UCS Manager, click Storage in the navigation pane and choose Storage Policies from the Storage pull-down options.
- 2. Right-click and choose Create Disk Group Policy.
- 3. Provide an appropriate name (S3260-Disk-Lib).



- 4. Select RAID 60 Striped Dual Parity.
- 5. Select Disk Group Configuration (Manual).

Create Disk Group Pol	icy		? >
Name : S3260-Disk-Lib			
Description :			
RAID Level : RAID 60 Striped Dual Pa	rity / 🔻		
Disk Group Configuration (Automatic)	Oisk Group Configuration (Manual)		
Disk Group Configuration (Manual)			
🏹 Advanced Filter 🔶 Export 🎂 Pr	int		\$
Slot Number	Role	Span ID	
ris	No data a	vailable	
	🕀 Add 👘 D	elete 🕕 Info	
Virtual Drive Configuration			
Strip Size (KB) : Platform Defau	lt 🔻		
Access Policy : Platform Defau	lt 🔻		

6. Click Add and leave the slot number set to 1. Set Role to Global Hot Spare.

Create Local Disk	Configuration Reference	? ×
Slot Number : 1	[1-205]	
Role : Normal	Dedicated Hot Spare 🔘 Global Hot Spare	
Span ID : 1	[0-8]	

7. Repeat the preceding procedure to add two more global hot spares, providing the slot numbers as 2 and 3 respectively.

8. Click Add again and enter the slot number as 4. Set Role to Normal and Span ID to 1.

OK

Cancel

Create Lo	ocal Disk Configuration Referenc	e ? ×
Slot Number :	4 [1-205]	
Role :	Normal Dedicated Hot Spare Global Hot Spare	
Span ID :	1 [0-8]	
		OK Cancel

9. Repeat the preceding procedure to add 15 more drives to the first RAID 6 set or Span 1.

ne : S3260-Disk-Lib			
scription :			
D Level : RAID 60 Striped Dual Parity			
Disk Group Configuration (Automatic) () Disk Group Configuration (Manual)		
sk droup Gonnguration (Manual)			
Advanced Filter 🔶 Export 🚔 Print			¢
Slot Number	Role	Span ID	
4	Normai	1	
5	Normal	1	
6	Normal	Ť	
7	Normal	t	
8	Normal	1	
9	Normal	1	
	🕀 Add 🗎 Dele	te 🕕 Info	
rtual Drive Configuration			
Strip Size (KB)			
Platform Default			
ccess Policy : Platform Default	v		

10. Repeat the preceding procedure to add drives to two more spans that will be part of the RAID 60 set. Enter the span number as 2 for the next 16 drives and the span number as 3 for another 16 drives.

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🍢 Advanced Filter 🕴 Export 🖷 Print			\$
Slot Number	~ Role	Span ID	
28	Normai	2	
29	Normal	2	
30	Normal	2	
31	Normal	2	
32	Normal	2	
33	Normal	2	
	🕀 Add 📑 Delet	te 🕕 Info	
🌾 Advanced Filter 🕴 Export 🛛 🚔 Print			\$
Slot Number	~ Role	Span ID	
43	Normai	3	
44	Normal	3	
45	Normal	3	
46	Normal	3	
47	Normal	3	
48	Normal	3	8
	(+) Add 🝈 Delet	e 🕕 Info	

- 11. Set Stripe Size to 512 KB.
- 12. Set Read Policy to Read Ahead.
- 13. Set Write Cache Policy to Write Back Good Bbu.

/irtual Drive Confi	igu	iration	
Strip Size (KB)	:	512KB	
Access Policy	13	Read Write	
Read Policy		OPlatform Default Read Ahead Normal	
Write Cache Polic	у:	OPlatform Default O Write Through O Write Back Good Bbu O Always Write Back	
IO Policy	:	OPlatform Default Direct OCached	
Drive Cache	;;	OPlatform Default No Change Disable Disable	
Security	13		

14. Click OK to create the disk group policy.

Create the MediaAgent storage profile

To create the MediaAgent storage profile, perform the following actions:

- 1. In Cisco UCS Manager, click Storage in the navigation pane and choose Storage Profiles from the Storage pull-down options.
- 2. Right-click and choose Create Storage Profile.
- 3. Provide a name for the storage profile (S3260-MediaAgent).

me : SS	3260-MediaAgent		
scription :		ad 	
Local LUNs	Controller Definitions		
Advanced Filt	er 🕂 Export 🍵 Print		¢
Name	Size (GB)	Order	Exectional Size (MB)
	Ν	lo data available	Fractional Size (MD)
	Ν	lo data available	Fractional Size (MB)
	N ⊕ Ad	d Delete () Info	Fractional Size (MD)

- 4. Select Add on the Local LUNs tab to add a LUN that will be created from the Boot_SSD_rear1 disk group policy.
- 5. Provide the following in the Create Local LUN dialog box:
 - a. For Name, enter Boot_SSD.
 - b. Leave Size set to 1.
 - c. Leave Auto Deploy selected as Auto Deploy.
 - d. Select Expand To Available.
 - e. Choose the Boot_SSD_rear1 disk group policy from the Select Disk Group Configuration pull-down menu

Create Local L	UN		? ×
	Create Local LUN () Pr	repare Claim Local LUN	
Name	: Boot_SSD		
Size (GB)	: 1	[0-102400]	
Fractional Size (MB)	: 0		
Auto Deploy	: O Auto Deploy ()	No Auto Deploy	
Expand To Available	: 🗷		
Select Disk Group Configu	uration : <not set=""> 🔻</not>	Create Disk Group Policy	
	<not set=""></not>		
	Domain Policies		
	Boot_SSD		
	Boot_SSD_rear	1/	
	C240-Boot_SSI	D	OK Cancel
	C240-RAID6-LI	JN	
	S3260-Disk-Lib		
	S3260-SSD-Ca	iche	

- 6. Click OK to add the local LUN.
- 7. Select Add on the Local LUNs tab to add a LUN that will be created from the Disk-Lib disk group policy.
- 8. Provide the following in the Create Local LUN dialog box:
 - f. For Name, enter Disk-Lib.
 - g. Leave Size set to 1.
 - h. Leave Auto Deploy selected as Auto Deploy.
 - i. Select Expand To Available.
 - j. Choose the S3260-Disk-Lib disk group policy from the Select Disk Group Configuration pull-down menu.

Create Local LUN

? ×



9. Click OK to add the local LUN.

10. Click OK to create the storage profile.

Create the Cisco UCS S3260 service profile

In addition to the storage profile, you need to create several new policies and pools before you can create a service profile for the S3260 server node.

Create the Cisco UCS S3260 server pool

The S3260 server pool will contain S3260 server nodes to be used for the MediaAgent. To create the server pool to use, follow these steps:

- 1. In Cisco UCS Manager, click Server in the Servers pane and choose Pools from the Server pull-down options.
- 2. Right-click Server Pools and choose Create Server Pool.
- 3. Enter an appropriate name for the server pool (S3260-MediaAgent) and click Next.

		Create Server Pool	? ×
0	Set Name and Description	Name : <u>\$3260</u> -MediaAgent	
0	Add Servers	Description :	
		Next> Time	Cancel

4. The S3260 servers are acknowledged in this environment as Chassis 2 and Chassis 3, so select these numbers, or select the appropriate chassis numbers in your environment if they differ. Then click the >> button between the Servers list and the Pooled Servers list.

		Creat	e S	erve	er Po	ool						? >
0	Set Name and Description				Serve	ers					Pooled Servers	
-									¢			\$
2	Add Servers	Chas	si	•	5 97	P		973			SI R U PID A	S C
				2		110 (æ	F			No data available	
				1			52	F		>>		
		3	1				222	F	24	<<		
		2	1				277	F	24			
		1	1			22.1	72	F	28			
		1	2					F	28			
		1	3					F	16			
		1	4				92	F	16			
		1	5					F	16			
		1	6			225	m	F	20			
		1	7				(9	F	12			
		1	8				52	F	20			
		Model: Serial N Vendor:	lumbei :		U F	ICSC CH2(isco	-C3K D33JE Syste	-M4Si FF ems Inc	RB		Model: Serial Number: Vendor:	
											< Prev Heat Finish	Cancel

5. Click Finish to create the server pool.

Create boot policy

You need a boot policy to boot from the Boot_SSD_rear1 local LUN created during the disk group policy part of the storage profile process. To create the boot policy, follow these steps:

- 1. In Cisco UCS Manager, click Server in the navigation pane and choose Policies from the Server pull-down options.
- 2. Right-click Boot Policies under root and choose Create Boot Policy.
- 3. Provide a name for the policy (**Boot_SSD**) and add a remote CD/DVD (used for KVM virtual media [vMedia] booting) under Local Devices.

Steale Bool Policy												:
Name :	S3260-Boot	SSD										
Description :												
Reboot on Boot Order Change :	0											
Enforce vNIC/vHBA/ISCSI Name :												
Boot Mode :	Legacy	Ueft										
e effective order of boot devices Enforce vNIC/vHBA/ISCSI Name It is not selected, the vNICs/vHBA	within the sar Is selected a As are selected	me device cl ind the vNIC, d if they exis	lass (LAN/Stora /vHBA/ISCSI doe it, otherwise the	je/ISCSI) is as not exist, vNIC/vHBA	determiner a config e with the lo	d by PCIe rror will be west PCIe	bus scan o a reported. a bus scan o	rder. order is use	ed.			
Local Devices												
 Local Devices 	B	Boot Order	Advanced Eiter	& Evport	di Drint							A
 Local Devices tocal Disk 	В	Hoot Order	Advanced Filter	+ Export	🖶 Print	-						¢
Local Devices dd Local Disk Add Local LUN		+ - To Name	Advanced Filter	♦ Export Or ▲	Print vNIC/	Туре	WWN	LUN	Slot N	Boot	Boot	¢ Descri
Local Devices dd Local Disk Add Local LUN Add Local JBOD		Hoot Order + - Ty Name Remote	Advanced Filter		Print vNIC/	Туре	WWN	LUN	Slot N	Boot	Boot	¢ Descri
Local Devices dd Local Disk Add Local LUN Add Local JBOD Add SD Card	-	Name Remote	Advanced Filter	+ Export Or • 1	Print vNIC/	Туре	WWN	LUN	Slot N	Boot	Boot	¢ Descri
Local Devices dd Local Disk Add Local LUN Add Local JBOD Add SD Card Add Internal US8	-	And	Advanced Filter		Print vNIC/	Туре	WWN	LUN	Slot N	Boot	Boot	Ç Descri
Local Devices dd Local Disk Add Local UN Add Local J80D Add SD Card Add Internal US8 Add External US8	-	Hoot Order + - 7/ Name Remote	Advanced Filter	Export Or • 1	Print vNIC/	Туре	WWN	LUN	Slot N	Boot	Boot	Cescri
Local Devices dd Local Disk Add Local JUN Add Local J8DD Add SD Card Add Internal US8 Add Exernal		Boot Order + - T/ Name Remote	Advanced Filter		Print vNIC/	Туре	WWN	LUN	Slot N	Boot	Boot	Cescri
Local Devices du Local Disk Add Local LUN Add Local JBOD Add SD Card Add Internal USB Add Enteedide Local LUN Add Embedded Local LUN Add Embedded Local Disk	-	Boot Order + - T/ Name Remote	CD/DVD	+ Export Or • 1	Print vNIC/	Туре	WWN	LUN	Slot N	Boot	Boot	Cescri
Local Devices du Local Disk Add Local LUN Add Local JBOD Add SD Card Add Internal US8 Add External US8 Add Exteeded Local LUN Add Embedded Local Disk edd Ch/040	-	Boot Order + - T/ Name Remote	Advanced Filter	♠ Export Or ▲	Print vNIC/ 1 Move	Type Up 4 N	WWN fove Down	LUN	Slot N	Boot	Boot	Cescri
Local Devices Add Local Disk Add Local JBOD Add SD Card Add Internal US8 Add Enternal US8 Add Entended Local Disk Add Entended Local Disk Add Encol Dosh Add Local CD/DVD		Soot Order + - T/ Name Remote	Advanced Filter	♣ Export Or▲	Print vNIC/ t Move	Type Up 4 N	WWN fove Down	LUN	Slot N	Boot	Boot	Cescri

4. Click Add Local LUN to reference the Boot_SSD LUN created by the Boot_SSD_rear1 disk group policy.

Name : Boot_SSD Description : Bect_SSD Description : Bect_SSD Enforce vNIC/vHBA/JSCSI Name : Bect_SSD Boot Mode : Description : Bect of the vMCa/vHBA/SCSI Name : Bect of and a device with the same day of the vMCa/vHBA/SCSI Name is selected and the fafforce vNIC/vHBA/SCSI Name i	Create Boot Policy		(?) >
Description Exception	Name :	oot_SSD	
Rebot on Boot Order Change : Enforce vNIC/vHBA/SCSI Name : Boot Mode : Boot Mode : Enforce vIC/vHBA/SCSI Name : Boot Soot devices which the same de the sin ot selected, the vNICs/vHBA/SCSI mane is selected and the th is is not selected, the vNICs/vHBA/SCSI Name is selected and the Add Local Devices Boot devices with the same de Add Local Devices Boot Of the vNICs/vHBA/SCSI Name is boot carder areasence. Type : Primary Secondary Any UN Name : Boot_SSD Add Local LUN Add Local UN Add Local UN Add Local UN Add Local UN Add Local UN Add Local UN Add External USB Add External USB Add External USB Add External USB Add Local CD/DVD Add Boot OD VIC Add Local CD/DVD Add Local CD/DVD Add Local CD/DVD Add Boot NO	Description :		
Enforce VNIC/VHBA/SCSI Name : Boot Mode : Degacy Uef WARNINGS: The specification order of boot devices within the same de the force VIC/VHBA/SCSI Name is selected and the th is is not selected, the VNICs/VHBA/SEC and the Add Local Devices Boot Add Local Devices Boot Add Local LUN Amme : Boot_SSD : Name : Boot_SSD : Name : Boot_SSD : Stot Nu_ Boot Na_ Boot Path Descript. Stot Nu_ Boot Na_ Boot	Reboot on Boot Order Change :		
Boot Mode : Degree U begree V U be WARNINGS: The type (primary/secondary) does not indicate a boot sorder presence. The effective order of boot devices within the same difference VIIC/VHBA/SCSI Name is selected and the fi sin ord selected. the VIICs/VHBA/SCSI Name is selected at the I is not selected. The VIICs/VHBA/SCSI Name is selected at the Docal Devices Boot Add Local LUN Image Path ? X Type : Primary Secondary Any UN Name : Boot_SSD Add Local LUN Add Local LUN Add Local JBOD Add Local JBOD Add Local LUN Add Enbedded Local Disk Add Embedded Local Disk Add Embedded Local Disk Add Embedded Local Disk Add Embedded Local Disk Add Local CD/DVD Add Local CD/DVD Add Local CD/DVD Add Local CD/DVD Add Local CD/DVD Add Local CD/DVD Add Local CD/DVD	Enforce vNIC/vHBA/iSCSI Name :		
WARNINGS: The type (primary/secondary) does not indicate a boot ender presence. The effective order of boot devices within the same definition of selected and the file in a selected, the vNICs/VHBA's are selected and the selected. I Local Devices Add Local LUN Add Enced Local LON Add Local CD/DVD Add Local CD/DVD Add Local CD/DVO	Boot Mode :	Legacy O Uef	
O Local Devices Boot O Add Local Devi + Add Local LUN + Add Local LUN Nar Add Local JBOD Re Add SD Card + Add Local LUN Re Add Local LUN Nar Add Local LUN Re Add Local LUN Re Add Local LUN CK Cancel CK Cancel Cancel	WARNINGS: The type (primary/secondary) does The effective order of boot devices If Enforce vNIC/vHBA/ISCSI Name If it is not selected, the vNICs/vHBA	Indicate a boot arder aresence. Init the same de Pateterd and the Add Local LUN Image Path ? X r is used.	
Add Local Diek Add Local LUN Add Local UN Add Local UN Add SD Card Add SD Card Add Enhedded Local CUN Add Enhedded Local CD/DVD Add Enhedded Local CD/DVD Add L	Local Devices	Boot Q Type : Primary Secondary Any	
Add Local LUN Add Local JBOD Add SD Card Add SD Card Add SD Card Add Enbedded Local CUN Add Enbedded Local CD/DVD Add Enbedded Local CD/DVD Add Encert		+ - LUN Name : Boot_SSD	0
Add Local JBOD Add SD Card Add SD Card Add SD Card Add SD Card Add EneedUSB Add EneedUSB Add EneedUsCal LUN Add EneedUsCal LUN Add EneedUsCal CD/DVD Add Renote CD/DVD Add Renote CD/DVD Add EneedUsCal CD/DVD Add EneeUsCal CD/DVD Add E	Add Local LUN	Nam Slot Nu	ot Path Descript_
Add SD Card Add Internal USB Add External USB CK Cancel CK CK CANCEL CK	Add Local JBOD	Re	
Add Internal USB Add External USB Add External USB Add Embedded Local LUN Add Embedded Local Disk Add CO/DVD Add Local CD/DVD	Add SD Card	» La	
Add External USB Add Embedded Local LUN Add Embedded Local Osk Add CorNOD Add Local CD/DVD Add Local CD/DVD Add Remote CD/DVD Add External Corn Und Remote CD/DVD Add External Corn Und Remote CD/DVD	Add Internal US8		
Add Embedded Local LUN Add Embedded Local Disk Add CO/DVD Add Local CD/DVD Add Exempter CD/DVD	Add External USB		
Add Co/DVD Add Local CD/DVD Add Remote CD/DVD Add Remote CD/DVD Add Remote CD/DVD Add Remote CD/DVD	Add Embedded Local LUN	OK Cancel	
Add Co/DVD Add Local CD/DVD Add Remote DD/DVD Add Remote DD/DVD Add Remote DD/DVD	Add Embedded Local Disk		
Add Local CD/DVD Add Remote CD/DVD Add Remote CD/DVD			
Add Remote CD/DNO	Add Local CD/DVD		
Add Element			
Add noppy	Add Floppy		
Add Local Floppy	Add Local Floppy		
Add Remote Flappy	Add Remote Floppy		
OK Cancel			K Cancel

5. Click OK and then click OK again to create the boot policy.

Create Microsoft Windows 40-Gbps adapter policy

You need to make some ring size adjustments and enable receive-side scaling for a Microsoft Windows-specific adapter for increased performance using 40-Gbps NICs. To create the adapter, follow these steps:

1. In Cisco UCS Manager, click Server in the navigation pane and choose Policies from the Server pull-down options.

- 2. Right-click Adapter Policies and choose Create Ethernet Adapter Policy.
- 3. Provide a name (S3260-Windows) for the adapter policy and specify the following options:
 - h. Transmit Queues: 8
 - i. Ring Size: 4096
 - j. Receive Queues: 8
 - k. Ring Size: 4096
 - I. Completion Queues: 16
 - m. Interrupts: 32
 - n. Receive Side Scaling (RSS): Enabled

Name : \$3260-Win	dows			
Description :				
Resources				
Fransmit Queues : 8		[1-1000]		
Ring Size : 40	296	[64-4096]		
Receive Queues : 8		[1-1000]		
Ring Size : 40	296	[64-4096]		
Completion Queues : 16	3	[1-2000]		
nterrupts : 3	2	[1-1024]		
Options				
Fransmit Checksum Offlo	ad	: Olisabled Enabled		
Receive Checksum Office	ad	: Olisabled Enabled		
ICP Segmentation Offloa	d	: Obisabled Enabled		
TCP Large Receive Offload		: Disabled Enabled		
Receive Side Scaling (RS	S)	: Disabled Enabled		

4. Click OK to create the adapter policy.

Create a vNIC template

MediaAgent and CommServe can use the LAN connectivity policy and vNIC templates that the other existing hosts use in the Cisco UCS domain, but only the in-band management network is needed. Other vNICs would not be used by the Windows OS. You can also set up A-B fabric failover in a new vNIC template that will save you the steps of configuring NIC teaming in the Windows OS.

To create a vNIC template for use by MediaAgent, perform the following steps:

- 1. In Cisco UCS Manager, click LAN in the navigation pane and choose Policies from the Network pull-down options.
- 2. Right-click vNIC Templates under the root organization and choose Create vNIC Template.
- 3. Provide a name for the vNIC template and set the following options:
 - a. Fabric ID: Enable Failover
 - b. Template Type: Updating Template

c. VLANs: IB-Mgmt with Native VLAN selected

Create vNIC T	emplate		?
Name :	vNIC_IB-M_CVT_AB		
Description :			
Fabric ID : Redundancy	 Fabric A 	G Fabric B	Enable Failover
Redundancy Type	: No Redundancy O	Primary Template 🔘 Secondary Templ	ate
irget			
Adapter			
Warning			
If VM is selected, a port If a port profile of the sa Template Type : VLANS VLAN Gro	profile by the same name will be me name exists, and updating te Initial Template Updatin ups	e created. emplate is selected, it will be overwritter g Template	n
Advanced Filter 🔶 E	xport 🚔 Print		\$
Select	Name	Native VLA	AN
	default	0	
~	IB Mamt	۲	
	ib_mgnit		

- 4. Scroll down to the second half of the window and select these additional options:
 - d. MAC Pool: MAC_Pool_A
 - e. Network Control Policy: Enable_CDP

Note: An existing predefined MAC pool and Network Control Policy has been used in this set up. Create a MAC pool and Network Controk Policy with CDP Enabled if you have a new installation of the Cisco UCS domain.

	Native-VLAN	\sim	
	VM-App-201		
Create VLAN			
CDN Source :	vNIC Name OUser Defined		
MTU : 1	500		
MAC Pool :	MAC_Pool_A(25/64) 🔻		
QoS Policy :	not set> 🔻		
Network Control Policy :	inable_CDP V		
Pin Group : <	not set>		
Stats Threshold Policy :	default 🔻		
Connection Policies			
		•	K Cancel

5. Click OK to create the vNIC template.

Create a service profile template

With the storage profile ready and the vNIC template prepared, you can now create the service profile template.

- 1. In Cisco UCS Manager, click Servers in the navigation pane and choose Service Profile Templates from the Server pull-down options.
- 2. Right-click root and choose Create Service Profile Template to open the Create Service Profile Template wizard.
- 3. Enter an appropriate name (S3260-MediaAgent) for the service profile template.
- 4. Select the Updating Template option.
- 5. Under UUID, select UUID_Pool as the UUID pool.

Note: An existing predefined UUID pool has been used in this set up. Create a UUID pool if you have a new installation of the Cisco UCS domain.

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		Create Service Profile Template	? ×
0	Identify Service Profile Template	You must enter a name for the service profile template and specify the template type. You can also specify how a UUID will be assigned to template and enter a description.	his
0	Storage Provisioning	Name : S3260-MediaAgent	
3	Networking	The template will be created in the following organization. Its name must be unique within this organization. Where : org-root The template will be created in the following organization. Its name must be unique within this organization.	
0	SAN Connectivity	Type : O Initial Template • Updating Template Specify how the UUID will be assigned to the server associated with the service generated by this template.	
6	Zoning		
0	vNIC/vHBA Placement	UUID Assignment: UUID_Pool(19/32)	
0	vMedia Policy	The UUID will be assigned from the selected pool. The available/total UUIDs are displayed after the pool name.	
0	Server Boot Order	Optionally enter a description for the profile. The description can contain information about when and where the service profile should be used	d.
9	Maintenance Policy		
0	Server Assignment		
0	Operational Policies		
		Next> Finish Can	cei

- 6. Click Next.
- 7. You move to the Storage Provisioning section. Click the Storage Profile Policy tab in the Storage Provisioning section and select the storage profile you previously created (S3260-MediaAgent).

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		Create Service	Profile Template	е		? ×
0	Identify Service Profile	Optionally specify or create	e a Storage Profile, and sele	ct a local disk configuration policy.		
	Template	Specific Storage Profile	Storage Profile Policy	Local Disk Configuration Policy		
2	Storage Provisioning	Storage Profile: 53260-M		Create Stor	age Profile	1
0	Networking	Name : \$3260-N	lediaAgent			
0	SAN Connectivity	Description : LUNs				
6	Zoning	Local LUNs Co	ontroller Definitions Sec	urity Policy		
6	vNIC/vHBA Placement	T _e Advanced Filter	Export Print	1000	Emotional Size (MD)	\$
0	vMedia Policy	Boot_SSD	1	Not Applicable	0	-
0	Server Boot Order	Disk-Lib	1	Not Applicable	0	
0	Maintenance Policy					
10	Server Assignment					
0	Operational Policies					
				< Prev) Next > Finish (Cancel

- 8. Click Next.
- 9. You move to the Networking section, where you configure the network. Keep the default setting for Dynamic vNIC Connection Policy.
- 10. Select the Expert option to configure the LAN connectivity.
- 11. Click Add to add the vNIC.
- 12. Click Use vNIC Template in the Create vNIC window that appears.

ame :			
AC Add			
The Value is null, v	which is invalid for this field.		
AC Address Assignment: S	elect (pool default used by default)		
Create MAC Pool			
Select MAC address assignr	ment option.		
If nothing is selected, the M	AC address will be assigned from the default por	ol.	
NARNING: The selected poo	I does not contain any available entities.		
You can select it, but it is reco	ommended that you add entities to it.		
se vNIC Template :			
abric ID :	O Fabric B	Enable Failover	
abric ID : Fabric A AN in LAN cloud will take the	Fabric B precedence over the Appliance Cloud when the	Enable Failover	
abric ID : Fabric A AN in LAN cloud will take the VLANs VLAN Groups	 Fabric B precedence over the Appliance Cloud when the 	Enable Failover	
abric ID : Fabric A AN in LAN cloud will take the VLANS VLAN Groups Advanced Filter Faport	Fabric B precedence over the Appliance Cloud when the Print	Enable Failover	¢
abric ID : Fabric A AN in LAN cloud will take the VLANs VLAN Groups Advanced Filter Faport Select	Fabric B precedence over the Appliance Cloud when the Print Name	Enable Failover re is a name clash. Native VLAN	¢
abric ID : • Fabric A AN in LAN cloud will take the VLANs VLAN Groups Advanced Filter + Export Select	Fabric B precedence over the Appliance Cloud when the Print Name default	Enable Failover re is a name clash. Native VLAN	¢
abric ID : • Fabric A AN in LAN cloud will take the VLANS VLAN Groups Advanced Filter + Export Select	Fabric B precedence over the Appliance Cloud when the Print Name default IB_Mgmt	Enable Failover re is a name clash. Native VLAN O O O O O O O O O O O O O O O O O O	Q
abric ID : Fabric A AN in LAN cloud will take the VLANs VLAN Groups Advanced Filter Export Select	Fabric B precedence over the Appliance Cloud when the Name default IB_Mgmt ISCSI-A-VLAN	Enable Failover re is a name clash. Native VLAN	o
abric ID : Fabric A AN in LAN cloud will take the VLANs VLAN Groups Advanced Filter Export Select	Fabric B precedence over the Appliance Cloud when the Print Name default IB_Mgmt ISCSI-A-VLAN ISCSI-B-VLAN	Enable Failover re is a name clash. Native VLAN O O O O O O O O O O O O O O O O O O	0
abric ID : Fabric A AN in LAN cloud will take the VLANs VLAN Groups Advanced Filter Export Select	○ Fabric B precedence over the Appliance Cloud when the Print Name default IB_Mgmt ISCSI-A-VLAN ISCSI-B-VLAN	Enable Failover re is a name clash. Native VLAN	0
abric ID : Fabric A AN in LAN cloud will take the VLANs VLAN Groups Advanced Filter Export Select	Fabric B precedence over the Appliance Cloud when the Print Name default IB_Mgmt ISCSI-A-VLAN ISCSI-B-VLAN	Enable Failover re is a name clash. Native VLAN	0

13. Add an appropriate name for the vNIC to create (vNIC-IB-Mgmt), select vNIC_IB-Mgmt_AB for the vNIC template and choose the Windows-40G policy from the Adapter Policy pull-down menu.

Create vNIC			(?) ×
Name : vNIC-IB-Mgmt			
Jse vNIC Template : 🗹			
Redundancy Pair : 🗌		Peer Name :	
NIC Template : vNIC_IE	3-M_CVT_AB V	Create vNIC Template	1
Adapter Performance Pr	rofile		
Adapter Policy :	<not set=""> V</not>	Create Ethernet Adapter Policy	
	<not set=""></not>		
	Domain Policies		
	Linux		
	S3260-Windows		
	SMBClient		
	SMBServer		
	SRIOV		
	Solaris		
	VMWare		
	VMWarePassThru		
	VMware-alt		
	VMware-alt-32		
	Windows		
	default		OK Cancel

14. Click OK to add the vNIC.

- 15. Click Next.
- 16. You move to the Storage Options section. Select the Use Connectivity Policy option for the "How would you like to configure SAN connectivity?" field.
- 17. Choose the Infra-SAN-Policy option from the SAN Connectivity Policy pull-down menu.

		Create Service	Profile Template		? ×
0	Identify Service Profile	Optionally specify disk pol	licies and SAN configuration infor	mation.	
	Template	How would you like to confi	gure SAN connectivity?		
0	Storage Provisioning	SAN Connectuity Palicy	VHBA	cy Create SAN Connectivity Policy	
0	Networking	SAN Connectivity Policy :	<not set=""></not>		
0	SAN Connectivity		Domin Policies		
0	Zoning				
0	vNIC/vHBA Placement				
0	vMedia Policy				
0	Server Boot Order				
0	Maintenance Policy				
•	Server Assignment				
0	Operational Policies				
				< Prev Next >	Finish Cancel

Note: Existing SAN policy has been used in this setup, create a new SAN connectivity policy or select no vHBAs if SAN connectivity is not required

- 18. Click Next.
- 19. You move to the Zoning section. Don't set any zoning options. Click Next.
- 20. You move to the vNIC/HBA Placement section. In the Select Placement list, leave the placement policy set to Let System Perform Placement.
- 21. Click Next.
- 22. You move to the vMedia Policy section. Leave vMedia Policy unselected.
- 23. Click Next.
- 24. You move to the Server Boot Order section. Select Boot_SSD for Boot Policy.

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		Create	Service Profile Tem	olate		? >
	Identify Service Profile	Optionally s	specify the boot policy for this service	profile templ	ate.	
	Template	Select a boot	t policy.			
3	Storage Provisioning	Boot Policy:	Select Boot Policy to use 🔻		Create Boot Policy	
	Networking	The defau	Select Boot Policy to use	profile.		
•	SAN Connectivity		Boot Policies Boot-FC-A			
•	Zoning		Boot-FC-X-A			
>	vNIC/vHBA Placement		Boot-ISCSI-A Boot-ISCSI-X-A			
	utiladia Dallari		S3260-Boot_SSD			
2	vMedia Policy		default			
	Server Boot Order		diag			
>	Maintenance Policy		Utinty			
•	Server Assignment					
)	Operational Policies					
					< Prev Next	> Finish Cancel

- 25. Click Next.
- 26. You move to the Maintenance Policy section. Change the maintenance policy to default.

		Create Serv	vice Profile Template		? ×
0	Identify Service Profile Template	Specify how disrupt service profile.	tive changes such as reboots, network int	erruptions, and firmware upgrades should be applied to the server associate	ed with this
0	Storage Provisioning	 Maintenance Select a maintenance 	Policy	or create a new maintenance policy that will be accessible to all service pro	ofiles.
0	Networking	Maintenance Policy:	Select (no policy used by default)	Create Maintenance Policy	
0	SAN Connectivity		Select (no policy used by default) Domain Policies		
G	Zoning	No maintenance po	default		
0	vNIC/vHBA Placement	The service profile	will immediately reboot when disruptive of	ranges are applied.	
0	vMedia Policy				
0	Server Boot Order				
0	Maintenance Policy				
0	Server Assignment				
0	Operational Policies				
				< Prev Next > Hnish C	Cancel

27. Click Next.

- ? × Create Service Profile Template Optionally specify a server pool for this service profile template. **Identify Service Profile** Template You can select a server pool you want to associate with this service profile template. Pool Assignment: S3260-MediaAgent V Storage Provisioning Create Server Pool Assign Later elect the power state to be applied when this profile is associated Networking with the server • Up O Down 3260 SAN Connectivity Branch_C240_ESXI CommServe Zoning with one of the servers in the selected pool. pool policy qualification that the selected server must meet. To do so, select the qualification from The service pro If desired, you o the list. Infra_Pool vNIC/vHBA Placement S3260-MedlaAgent Server Pool O Test_Harness_Pool Restrict Migrat vMedia Policy default (+) Firmware Management (BIOS, Disk Controller, Adapter) Server Boot Order Maintenance Policy 10 **Operational Policies** < Prev Next > Cancel Finist
- 28. You move to the Server Assignment section. In the Pool Assignment list, select S3260-MediaAgent.

29. Leave Firmware Management at the bottom of the page as is because you will use the defaults from the Host Firmware list.

30. Click Next.

31. You move to the Operational Policies section. In the BIOS Policy list, select VM-Host-Infra.

32. Expand Power Control Policy Configuration and select No-Power-Cap in the Power Control Policy list.

Note: Existing BIOS and Power Control policies hav been used in this setup. Create new BIOS and Power Controk policies and select them if you are configuring a new Cisco UCS domain installation.

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		Create Servic	e Profile Template		(?) ×		
0	Identify Service Profile Template	Optionally specify infor	mation that affects how the syste	m operates.			
0	Storage Provisioning	 BIOS Configura If you want to override the 	tion e default BIOS settings, select a	BIOS policy that will be associated with this service profile			
0	Networking	BIOS Policy : VM-Ho	st-Infra 🔻				
0	SAN Connectivity	Evternal IPMI M	anagement Configuration				
0	Zoning	() Management IP	Addrass				
0	vNIC/vHBA Placement	Management iP	Management IP Address				
0	vMedia Policy	Monitoring Con	Dellas Castanadas				
0	Server Boot Order	Power control policy det	ermines power allocation for a se	rver in a given power group.			
0	Maintenance Policy	Power Control Policy :	default	Create Power Control Policy			
0	Server Assignment	Scrub Policy	Domain Policies				
0	Operational Policies	⊕ KVM Managem	No-Power-Cap default				
				< Prev	Cancel		

- 33. Click Finish to create the service profile template.
- 34. Click OK in the confirmation message.

Create service profiles

To create a service profile from the service profile template, complete the following steps:

- 1. Connect to the Cisco UCS 6332-16UP Fabric Interconnect in Cisco UCS Manager and click the Servers tab in the navigation pane.
- 2. Choose Service Profile Templates > root > Service Template S3260-MediaAgent.
- 3. Right-click S3260-MediaAgent and choose Create Service Profiles from Template.
- 4. Enter **S3260-MediaAgent-0** as the service profile prefix.
- 5. Leave 1 set as the name suffix starting number.
- 6. Set 1 as the number of instances.
- 7. Click OK to create the service profiles.

Create Service Pr	ofiles F	rom Templa	te 🤋 🗙
Naming Prefix : S3260-M	ediaAgent-0)	
Name Suffix Starting Number :	1		
Number of Instances :	1		
		ОК	Cancel

8. Click OK in the confirmation message to provision the MediaAgent service profile.

OS Installation for Commvault MediaAgent Server

The installation steps for the Cisco UCS S3260 server for MediaAgent include installing Microsoft Windows Server 2012 R2. The steps here use a Cisco UCS Manager KVM installation process from locally stored installation media on PC accessing UCS manager.

To begin the installation, open a Cisco UCS Manager KVM console from the General tab of the associated service profile of the first server to be installed. Then perform the following steps:

Note: For a standalone installation of the S3260, launch the KVM console from the IMC GUI.

1. Click Virtual Media and choose Activate Virtual Devices from the pull-down menu.

Fle Verw Macros Tools Verve V	
Create Image NM Console Properties Cisco Systems, Inc. Configuring and testing nemory Configuring platform hardware	
KWM Console Properties Activate Virbul Devices Cisco Systems, Inc. Configuring and testing memory Configuring platform hardware	
Cisco Systems, Inc. Configuring and testing memory Configuring platform hardware	
Cisco Systems, Inc. Configuring and testing memory Configuring platform hardware	
Cisco Systems, Inc. Configuring and testing memory Configuring platform hardware	
Configuring and testing menory Configuring platform hardware	
Configuring platform hardware	
11754	
11754	
LI-SM	
UPSM	
UPSM	
LIPSM	
LICOM	
LICOM	
LICOM	
LI-CM	
MODIL	
10.00	
UCSH	
192.168.164.119 admin 0.4 fps 0.001 KB/s	٥
A Connected to IP: 192.168.164.119 System Time: 2017-01-0	16:47

2. Click Virtual Media again and choose Map CD/DVD from the pull-down menu.

🚔 ucs-6332-16up / root / Co	mm	Vault-32	60-01 (Chassis - 3 Server - 1) - KVM Console(Launched By: admin)) X
File View Macros Tools	Virtu	al Media	Help	
-Boot Server - Shutdown		Create I	nage	
KVM Console Properties	~	Activate	Virtual Devices	
		Map CD	DVD	
		Map Rer	ovable Disk	
		Map Flop	py	
			192.168.164.119 admin	0.2 fps 0.001 KB/s
Connected to IP: 192.168.164	. 119			System Time: 2017-01-07T16:47

3. Click Browse in the Virtual Media pop-up window and locate and select the OS installation ISO image in the pop-up window that appears. Click Open.



4. Click Reset if the system has progressed past the boot selection menu before the Windows ISO image is mapped through KVM vMedia.



5. The boot order will initiate the OS installation automatically. Click Next at the OS installation start screen.

🍌 ucs-6332-16up / root / 53260-MediaAger	nt-01 (Chassis - 2 Server - 1) - KVM Console(Launched By: admin)	
File View Macros Tools Virtual Media H	elp	
Boot Server Shutdown Server SRese	t	
KVM Console Properties		(
4	Windows Setup	
	Windows Server 2012 R2	
	Language to install: English (United States)	
	Time and currency formatic English (United States)	
	Keyboard or input method: US	
	Enter your language and other preferences and click "Next" to continue.	
	2013 Microsoft Corporation. All rights retenied.	
	192, 168, 164, 116 admin 0, 6 frs 0, 001 KB/s	NUM 🔒 子
A Connected to IP: 192, 168, 164, 116	Svstem Time	: 2017-01-24T09:26

- 6. Proceed with the installation, entering a valid Windows license key and selecting the mode (GUI mode is used in this example.)
- 7. Accept the license and select "Custom: Install Windows only (advanced)."



- When the installation destination screen appears, no suitable drives for the S3260 will be displayed. Download the Windows driver ISO image from software.cisco.com at https://software.cisco.com/portal/pub/download/portal/select.html?&mdfid=286281356&flowid=71443&softwareid=283853158.
- 9. Unmap the Windows OS installation ISO image as vMedia.

🚔 ucs-6332-16up / root / 5326	0-MediaAgent-01 (Chassis - 2 Server - 1) - KVM Console(Launched By: admin)	
File View Macros Tools Vir	tual Media Help	
	Create Image	
KVM Console Properties	Activate Virtual Devices	
	en_windows_server_2012_r2_x64_dvd_2707946.iso Mapped to CD/DVD	
	Map Removable Disk	
	Map Floppy	
	😋 🚣 Windows Selap	
	where do you want to install willidows:	
	Name Totalsice Freespace Type	
	falidade Xould Other	
	@Last dien Digned	
	🗼 Win couldn't field any drives. To get a storage driver, click Load driver.	
	Ziert	
. Collecting inform	uton o Intalina Wodows	
1	2	
	192.168.164.116 admin 0.6 fps 0.001 KB/s	NUM 35
Connected to IP: 192.168.164.11	6 System Time	: 2017-01-24710:28

- 10. Click Yes to confirm the unmap drive request.
- 11. Reopen the Virtual Media pull-down menu, choose Map CD/DVD, and find the downloaded Cisco UCS driver ISO image using the Browse option.



- 12. Click Open. Then choose Map Device.
- 13. Click Load Driver and select Browse from the pop-up window that appears.

rae wew macros roos vacualmenta met	
Boot Server Shutdown Server Reset	
KVM Console Properties	
1 Clickcog elements 2 Intelling Vinces	
192.158.164.119 admin 0.8 fps 0.002 KB/s NUM	35
Conserved by TD, 102, 159, 154, 110	-01-07T17:01

14. Select the storage directory in the mapped CD-ROM drive.

File View Macros Tools Virtua Soot Server Shutdown Server	Media Help	ssis - 3 Server - 1) - KVM (onsole(Launched B	iy: admin)		
KIM Console Properties	🖉 🚮 Windows Setup					
1 Collecting information 2	Select the drives	The install Browse for Fold Uncert be deve, and the doo Q Uncertain be deve, and the doo Q Uncertain be down, and the doo Q Uncertain be down, and the doo Q Uncertain be down, and the down of the do		Net		
8 Connected in The 102 168 164 110	1		192.168.164.119	admin 0.8 fps	0.002 KB/s NUM	<u> </u>
Connected to 1P? 192. 168. 164. 119					system time: 2017-	01-07/17:03

15. Drill further down within the storage directory to LSI > Cisco_Storage_12G_SAS_RAID_controller > W2K12R2 > x64 and click OK.

File View Macros Tools Vibual Meda Help Statutions Server Reset KMC Console Properties	🚔 ucs-6332-16up / root / CommVault-3260-01	(Chassis - 3 Server - 1) - KVM Console(Launched	By: admin)
Shutdown Server Reset Rever to install Select the driver the driver to install Select the driver the driver to install Select the driver the driver the driver to install Select the driver the dr	File View Macros Tools Virtual Media Help		
With Conside Properties Image: Conside of Constant Image: Constant of Constant Image: Constant of Constant Image: Constant Image: Constant Imag	-Boot Server 🔄 Shutdown Server 🧕 Reset		
Veterarement Veterarement Veterarement Veterarement	KVM Console Properties		
Select the driver to install Image: Select the driver to install Image: Select to install to install Image: Select to install to install Image: Select to install	💽 🚄 Windows	intup.	
Browse for Folder Prove to P drive, and Pan dot OK. P totaling windows P totaling windows Octecting information Distance	Select the	driver to install	
Collecting information	If the area	Browse for Folder	
192.158.164.119 admin 0.8 fps 0.002 KB/s NUM	T Collecting intermetion 2 Installing Winds	945 192.168.164.119	
Connected to IP: 192.168.164.119 System Time: 2017-01-07T17:07	Connected to IP: 192.168.164.119		System Time: 2017-01-07T17:07

16. Select the driver that is found and click Next.

🚔 ucs-6332-16up / root / Com	mVault-3260-01 (Chassis - 3 Server - 1) - KVH Console(Launched By: admin)
File View Macros Tools Vir	tual Media Help
Boot Server Shutdown Ser	ver 🥴 Reset
KVM Console Properties	
73	
	C 🔬 Windows Setup
	Colorado deixe to install
	Select the driver to install
	2
	¢ >
	Figure drivers that aren't compatible with this computer's hardware.
	Bigwie Bescan Med
Calmana and an	
1 Collecting information	2 ^{mittaling wedgere}
	192.168.164.119 admin 0.6 fps 0.001 KB/s NUM 🔒 🚽
Connected to IP: 192.168.164.11	9 System Time: 2017-01-07T 17:07

17. Select the drive on which you want to install the Windows OS and reopen the Virtual Media pull-down menu to unmap the Cisco Windows drivers ISO image.

📥 ucs-6332-16up / root / Co	mmVault-3260	-01 (Chassis - 3 Server	r - 1) - KVH Console	Launched E	By: admi	n)			
File View Macros Tools	Virtual Media H	lelp							
Boot Server 🜙 Shutdown	Create Ima	ge							
KVM Console Properties	 Activate Vir 	tual Devices				-			
	✓ ucs-cxxx-d	ivers-windows.3.0.1a.iso	Mapped to CD/DVD						
	Map Remov	able Disk							
	Map Floppy								
	😋 🛃 Wind	ows Setup							
	Where	do you want to install W	Vindows?						
		Name	Total size	Free space	Туре				
	4	Drive 2 Unallocated Space	446.1 GB	446.1 GB					
	4	Drive 3 Unallocated Space	74505.6 GB	74505.6 GB					
	4	Drive 4 Unallocated Space	3720.6 GB	3720.6 GB					
	dia Parte	when White	Alemat	A Mare					
	() Load	driver Statend	alle Country	. idu					
	A Window	s can't be installed on this drive.	(Show details)						
						Next			
					_				
					_				
1 Collecting information	2 Installing V	Vindows							
			192.1	68.164.119	admin	0.6 fps 0.	001 KB/s	NUM	35
Connected to IP: 192.168.164.	119						System Ti	me: 2017-01-07T	17:10

18. Click Yes to confirm the unmapping of the ISO image and reopen the Virtual Media pull-down menu to remap the Windows OS installation ISO image.



19. Click Next to begin the installation while the appropriate boot drive is being selected.

ucs-6332-16up / root / Com	nmVault-3260-01 (Chassis - 3 Serve	er - 1) - KVH Console(Launched By: admin)	_ 0
e View Macros Tools Vi	irtual Media Help			
Boot Server Shutdown Se	erver 🥴 Reset			
/M Console Properties				
	🚱 🔬 Windows Setup			
	Where do you want to install	Windows?		
	Name	Total size	Free space Type	
	Drive 3 Unallocated Space	74505.6 GB	74905.6 68	
	Drive 4 Unallocated Space	3720.6 68	3720.6 GB	
	4			
	fe Refrech XDelete	Format	+ New	
	Losd dever 2 Estend			
			Chier	
	N.			
Collecting information	2 Installing Windows			
		192.1	58.164.119 admin 0.8	fps 0.002 KB/s NUM
Connected to TD: 192 168 164 1	10			System Time: 2017-01-07T17:
NANCOUNT OF 1 172, 100, 104, 1				system the: 2017-01-07117.

20. Wait for the Windows Setup to complete.

🗼 ucs-6332-16up / root / CommVa	ult-3260-01 (Chassis - 3 Server - 1) - KVH Console(Launched By: admin)	_ D X
Boot Server Shutdown Server		
KVM Console Properties		
	💒 Windows Setup	
	Installing Windowa	
	Your computer will restart several times. This might take a while.	
	Copying Windows Bres Ortificing Gress ready for installation Installing Sectories Installing spaten Frienberg up	
1 ^{Callecting information} 2	Installing Windows	7.814 KD/6 NUM 9 1
Connected to IP: 192.168.164.119		System Time: 2017-01-07T17:12

21. Unmap the Windows OS installation ISO image after the installation is complete.



- 22. Provide an administrator password and click Finish.
- 23. Use the static macro for Ctrl-Alt-Del to log in to the system.



24. Reopen the Virtual Media pull-down menu and go through the steps to remap the Cisco UCS drivers for Windows ISO image.


25. Open Device Manager and find the unidentified Ethernet controller device under Other Devices. Right-click and choose Update Driver Software.

Server Manager Perior Manager Ter Anion View Holp Ter Anion View Holp Ter Anion View Holp Back System Device Back System Device <	- 0 X		
Device Manager Fat Action View Help Fat Action View Help Fat Action Fat Action Fat Action Fat Action Fat Action Fat Action Fat Actio	View Help		
Par. Attor View Help It corr It corr It corr It corr It corr It corr It corr It corr <th>View Held</th> <th></th> <th></th>	View Held		
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Image: Section Decision Image: Section Decision <td></td> <td>×</td> <td>File Action View Help</td>		×	File Action View Help
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Pedramance Counters P			Fibre Channel I Disable
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Launches the update balver somware witava for the selected device.			aunches the update bliver software wizako for the selected device.
WIN-23392855002C 8200 Ener Microsoft-Workows-Security-SPD Application 1/7/2017 3:514	2 PM	Application 1/7/2017 3:51:421	WIN-2338555002C 8200 Error
UNU 33155555732 8165 East Minutes Could 500 Assistant (7/3/17.555)	3.04	Application 1/7/2017 1/51/431	W/W, 121919100000 0100 Euror
win-assessed a the area microsoft minum-security-are approach trigant as a	1 PM	Application in restriction and the	WIN-LAPAGE UND DIG

- 26. Select "Browse my computer for driver software" in the pop-up window that appears.
- 27. Click Browse in the Update Driver Software Ethernet Controller window and drill down from the mapped CD drive to > Network > Cisco > VIC > W2K12R2 > x64 and click OK.



28. Click Next to update the driver.



- 29. Update the Fibre Channel drivers if SAN connectivity is needed for the MediaAgent server.
- 30. Click Close. With Device Manager still open, scroll down within Other Devices and find an entry for the first Fibre Channel controller. Right-click and choose Update Driver Software.



- 31. Repeating this process for the Ethernet controller. select "Browse my computer for driver software."
- 32. Select Browse and drill down from the mapped CD drive to > Storage > Cisco > VIC > W2K12R2 > x64 and click OK.



- 33. Click Next to update the driver.
- 34. Click Close.



35. Repeat these steps for the second Fibre Channel controller.

📥 ucs-6332-16up / root / 53260-MediaA	ent-01 (Chassis - 2 Server - 1) - KVM Console(Launched By: admi	n)	- O ×
ucs-6332-16up / root / 53260-HediaAd File View Macros Tools Virtual Media Boot Server Shutdown Server R R KVM Console Properties File Asian View Hep File Asian View Hep	ent-01 (Chassis - 2 Server - 1) - KVH Console(Launched By: admi Hep set Computer Management fo) 2: As AS Set Server Management fo) 2: As AS Set Server News Set Server News Set Set Server News	Artions Desice Manager	
 > ■ Performance ⇒ Performance ⇒ Transport ⇒ Transport ⇒ Windows Server Encode ⇒ Server and Applications 	Upptate Dower Software - Coco WC-FCoE Storgont Minypot Windows has successfully updated your driver software Windows has successfully updated your driver software Windows has successfully updated your driver software Coco WC-FCoE Storgont Minipot		
	Ower Ower	- D- 10 - 100 /MI	
	192.168.164.116 admin	0.8 fps 0.002 KB/s	NUM 🔒 🕤
Connected to IP: 192.168.154.116	1	System Time	: 2017-01-24T12:50

- 36. Click Close.
- 37. Open Windows File Explorer and drill down from the mapped CD drive to Chipset > Intel > [C3260] > W2K12R2 and open the SetupChipset application.



38. Click Next at the Welcome window, click accept to get past the End-User License Agreement (EULA), and click Install.

📥 ucs-6332-16up / root / 53260-MediaAgent-0	1 (Chassis - 2 Server - 1) - K	VM Console(Launched By: ad	dmin)	
File View Macros Tools Virtual Media Help Boot Server	Sanar Ma Computer Ma	nsoner nagement	_ 0	×.
	Application Tools	W2K12R2	x	E
A 11 System Teo B 20 Taik Sci c 20 Taik Sci c 20 Taik Sci c 20 Taik Sci c 20	re view Manage ChipSet + Intel + C3260 + W2K1282	v C Search W2K	1292 P	•
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1 mm 1 mm vietne	202100			
< III >	G- Cisco VIC-FCoE Storport Miniport			
	i i i i i i i i i i i i i i i i i i i	192, 168, 164, 116 admin	0.6 fps 0.001 KB/s	
Connected to IP: 192.168.164.116			Syster	n Time: 2017-01-24T12:55

- 39. When you are finished, click Restart Later.
- 40. Configure the network interface with an IP address and enable Remote Desktop.
- 41. Complete the OS updates and join the OS to an appropriate domain.
- 42. Disconnect the vMedia as the system reboots.



Commvault MediaAgent installation and configuration

To deploy the MediaAgent software on the Cisco servers, use the following steps for remote deployment of the software:

1. From the CommCell Console ribbon, on the Tools tab, click Add/Remove Software. Then choose Install Software from the drop-down menu.



2. The Install Wizard will appear. Click Next.

© Installer	×
Install Wizard	
This wizard guides you through the steps required to install software on computers.	
Click Next to continue.	
< Back Next > Advanced > Save As Script Finish C	ancel Help

3. On the "Select the computer's operating system" page, select the OS and click Next.

Installer					>
Select the computer's	operating system				
 Windows 					
O Unix and Linux					
			B a a a a a a a a a a	Cold.	Usla
	< Back Next >	Advanced	Save As Script	Finish Cancel	Help

4. On the "Select how to discover the computers for installing the software" page, click Next.

Installer	×
Select how to discover the computers for installing the software	
Manually select computers Software will be installed only on the selected list of computers.	
 Automatically discover computers Software will be installed on all discovered computers. 	
< Back Next > Advanced	Help

5. On the "Enter the host names of the computers" page, enter the host names or IP addresses of any Cisco servers that will host the MediaAgent role. Then click Next.

Please enter the host names	of the computers, or	ne per line		
<please here="" type=""></please>				Import from File
				Import From Active Directory
				Select from existing clients

6. On the Enter Account Information page, enter credentials for a user with local administrator or root privileges on the server and click Next.

© Installer		\times
Enter Account Information		
The specified account should have	administrative access to the computer. If you are installing multiple clients, the user should have access to all clients.	
Reuse Active Director	y credentials	
User Name:	domain\administrator	
	Example: domain\username	
Password:		
Confirm Password:		
Skip this page if the	computers you selected for installation are existing clients in the CommCell.	
	< Back Next > Advanced Save As Script Finish Cancel Hel	p

7. On the Select Package(s) to Install page, select the MediaAgent package and click Next.

linstaller	×
Select Package(s) to Install	
Server Server Search Engine Index Store Index Store Commcell Console Web Console Content Compliance Search Compliance Search Content Analyzer Microsoft Windows File System Continuous Data Replicator Continuous Data Replicator Continuous Data Replicator File System Continuous Data Replicator Diver for File Archiver Client Vitualization Vitualization Dista Server Database DB2 Cortacle SAP for Oracle SAP for MaxDB	
→ Sydac → MySQL	~
< Back Next > Advanced > Save As Script Finish Car	cel Help

8. On the "Enter Recommended Settings for the selected Software" page, select the appropriate client group and storage policy if applicable. Then click Next.

Recommended Settings	
Client Groups	
Available:	Selected:
172 16 14 65	Add >
172.24.21.171	
172.24.24.153	< Remove
	<< Remove All
Storage Policy To Use	
Storage Policy To Use	

9. On the Enter Additional Install Options page, click Next.

	_
Additional Install Options	
nstaller Flags	
Disable Windows Firewall	
Reboot (if required)	
Kill Browser Processes (if required)	
Restart Oracle/DB2 services (if applicable. Oracle/DB2 Instance needs to be restarted to load Commvault Media Library for Data protection.)	
Install Agents For Restore Only	
Ignore Client/Host Name Conflict	
Install new Instance (if required)	
Install 32-bit instead of default 64-bit packages(Windows X64 only)- This will protect 32bit applications only	
	>
e Barde Manaka Advanced Character Strick Council Mal	
	Additional Install Options staller Flags Disable Windows Firewall Reboot (if required) Kill Browser Processes (if required) Restart Orade/DB2 services (if applicable. Orade/DB2 Instance needs to be restarted to load Commvault Media Library for Data protection.) Install Agents For Restore Only Ignore Client/Host Name Conflict Install new Instance (if required) Install S2-bit instead of default 64-bit packages(Windows X64 only)- This will protect 32bit applications only Kaller State Script Finish Cancel Hell

10. On the Optional Settings page, select the "Index cache to this folder" checkbox and enter I:\indexcache (or the appropriate drive letter or mount point) in the index cache path field. Then click Next.

Optional Settings			
 ❑ Job results to this folder ☑ Index cache to this folder ☑ Install to this folder ❑ CVD Port ❑ CommServe Override 	I: UndexCache 8400 8400 Note: Client connects back to the CommServe with this alternate host name. For client connecting to the CommServe through NAT/Gateway, enter the Gateway	hostname.	

11. On the Network Route Configuration page, click Next (if no configuration is required).

iliilii cisco

Installer		×		
Network Route Configuration				
There is Firewall between Client machine and Com	mServe			
Olient machines can open connection to CommS	Serve on tunnel port			
O CommServe can open connection towards client machines				
O CommServe is reachable only through proxy				
Please specify the port number, on which we sh HTTP/HTTPS port' configurable in "Incoming Ports port-mapping Gateway in front of it.	ould open tunnel connections toward the CommServe. This is same as 'Tunnel s' tab of the CommServe Network Properties adjusted for a possible			
CommServe HTTP/HTTPS tunnel port number	0			
Proxy client name	V			
These fields are required when installing software pack	rages for the first time			
< Back Next >	Advanced Script Finish Cancel He	p		

12. On the Please Select When To Run The Job page, click Next.

© Installer	×
Please Select When To Run The Job	
Job Initiation	
() Immediate	
Run this job now	
Configure Schedule Pattern Configure	
< Back Next > Advanced Save As Script Finish Cancel Hel	P

13. On the Summary page, click Finish. An install software job will be initiated. Monitor this job in the job controller window.

Summe	ny
Client	Inty all the selected options and click Finish to run the job immediately or click Save As Script to save the job options as a script.
Select Select Reuse	Type Of Installation: Windows Type Of Client Discovery: Manually select computers Active Directory credentials: No
Client	Authentication for Job
User N Passw	vame: domain/administrator ord: ****
Installe	r Option
Remo Reque User: Opera Comn	te Client: No est Type: PRE DECLARE CLIENT COMMVAULT-NJ/bclarke ttion Type: Install Client aServe Host Name: islvmcs11
Install	Flags
Instal Instal Disabl Reboo Kill B	l 32-bit instead of default 64-bit packages(Linux_x86_64 and Windows X64 only): No l new Instance (if required): No le Windows Firewall: No t (if required): No rowser Processes (if required) : Yes

After the MediaAgent software is installed, you need to create the storage pool. This process will configure the disk library and create a storage policy so that clients can back up their data. More than one storage pool may be required depending on the design. For the drive dedicated for the disk library, format the drive with an OS block size of 64 KB.

1. Log on to AdminConsole.



2. In the left pane, expand Storage, select Storage pools, and select Disk/Cloud.



3. Give the storage pool a name and select MediaAgent and the path for the disk library. Then click Next.

Admin Console							
Filter navigation	Create storage pool						
🔆 Getting started	5 1						
Dashboard		General		Deduplication			
🗞 CommCell							
a Servers							
Server groups			General o				
jobs		Nama	atomo Paral				
Alerts		Name	StoragePool				
Events		Configure storage					
Plans Plans		New storage O Use existing storage					
Reports >		MediaAgent	mediaagent	<u>^</u>			
🥃 Storage 🗸 🗸							
🥃 Storage pools		Cocal patri O Network pa	atri				
🤤 Storage Targets		Path	L:\DiskLibrary	Browse			
📱 Arrays							
Security >				Next			
🔅 System 🔸							

4. Select the same MediaAgent again and select the path for the DDB. Click Add Partition and then click Finish.

Admin Console						
Filter navigation	Create storage pool					
K Getting started						
Dashboard		General		1		Dedupli
歳 CommCell						
Servers						
Server groups			Dedup	lication inform	natior	١
Jobs						
Alerts			Partition settings			
≜ ≓ Events			MediaAgent	mediaagent 🗘		
Plans			Partition path		Browse	Add partition
🕍 Reports 🔶						
🤤 Storage 🗸 🗸			Partition list			
🥃 Storage pools			mediaagent and G:\DDB			×
Storage Targets				_		
📮 Arrays					Previous	Finish

5. The disk library is now ready for use.

For more information

For additional information, see the following:

- Cisco UCS S3260 Storage Server: <u>http://www.cisco.com/c/en/us/products/servers-unified-computing/ucs-s-series-storage-servers/index.html</u>
- Cisco UCS 6000 Series Fabric Interconnects:
 http://www.cisco.com/c/en/us/products/servers-unified-computing/fabric-interconnects.html
- Cisco UCS Manager:
 <u>http://www.cisco.com/c/en/us/products/servers-unified-computing/ucs-manager/index.html</u>
- Achieve Optimal Network Throughput on the Cisco UCS S3260 Storage Server (Cisco white paper): <u>http://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-s-series-storage-servers/Whitepaper_c11-738722.html</u>
- Commvault:
 <u>https://www.commvault.com/solutions/by-function/data-protection-backup-and-recovery</u>

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