

Installing Cisco VIM through Cisco VIM Unified Management

The VIM UM has an UI admin, who has the privilege to manage the UI offering. The Insight UI admin, has the rights to add the right users as Pod administrators. Post bootstrap, the URL for the UI will be: https://br_api:9000.

The following topics helps you to install and configure Cisco Virtual Infrastructure Manager with VIM Insight:

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Unified Management Dashboard

When you login as UM admin, you will be redirected to the UM admin Dashboard.

enco VIM Unified Mar	nagement			User ID: rohashar	۰
Desitionand	Dashboard				
006	Pods Status	20 8 12	Users	5 4 1	
00-Users		Total Active Inactive		Total Registered Active	
D Administrations					
Administrations				Search Pod Name/ IP / Locaton ID,	c
	Disease and	Ravi's POD	Daney MEUDErich	MultFa	
	Dannys pod 10 23 221 180	172.31.231.17	Danny NFVBEnch (72.28.87.212	172.23.105.25	
	Pure	Pure	pune	Pune	
	✓ Reachable	× Unveachable	× Unreactable	✓ Reachable	
	Total Libers 1	Total Listers 1	Total Users 1	Total Losers 1	
	Active Lisers 6	Active Uters 0	Active Users 0	Active Coard 10	
	Danny's pod	Champage TB	Cologne	Jeevan	
	10.30 117 238 gure	172.23.105.213 San Jose	172 29.86.10 Pune	172.26.123.20+ Pure	
	× Unveachable	🖌 Reachable	× Unreachable	× Urveschable	
	Total Loans 1	Total Lowis 1	Total Lowis 1	Total Loans 1	

The UM dashboard displays the following information about the pods it is currently managing:

Pod Status

- Active Number of Pods which has health status OK (Example: Mgmt Node health of the pod is good).
- Inactive Number of Pods whose health status is not good (Example:. Mgmt Node health of the pod is not good).
- Total number of Pods Number of Pods registered in the system.

Pod Users

- Total Total number of users registered who are associated with at-least one Pod.
- Registered Number of users who have completed the registration process and are associated with at-least one Pod.
- Active Number of Online users who are associated with at-least one Pod.

You can see the list of Pod with its Pod name, description, IP address, location, Pod status along with the Total users and Active users of each pod. You can search for a Pod using Name, IP and location in the search option.

If you click Get health of current nodes icon (spin) it does the health check of the Pod.

Pods

Pods allows you to check the health status (indicated through green and red dot) of the pod respectively.

To fetch the latest health status, click Refresh which is at the upper right corner.

• Green dot – Pod is reachable and health is good.

• Red dot – Pod is not reachable.

Pod Users

The Pod Users page, gives you the details associated the pod, status (Online or Offline) and their Roles.

UM admin has the right to manage all Pod users in the system. The user with UM admin access can manage the following actions:

- Revoke User's permission from a specific Pod.
- Delete User from the system.

cisco VIM Unified Man	agement					User ID: ro
Dashboard PODS	Registered POD	Users			Record	l last updated at : 04/
POD Users	User Name	≚ Email	V IP Address	V Role Name	~ Online	× Act
POD Administrators	Rohan R	rohashar@cisco.com	10.30.116.244	Full-Pod-Access	Online	0
UM Administrators	Rohan R	rohashar@cisco.com	172.28.123.204	Full-Pod-Access	Offline	c
	Rohan R	rohashar@cisco.com	10.30.117.238	Full-Pod-Access	Offline	0
	Rohan R	rohashar@cisco.com	10.23.229.228	Full-Pod-Access	Offine	0

Revoking User

UM admin revokes the user's permission from a Pod by clicking (undo) icon. If the user is the only user with a Full-Pod-Access role for that particular Pod, then the revoke operation is not permitted. In this case, another user is granted with a Full-Pod-Access role for that Pod and then proceeds with revoking the old user.

Note

If the user is revoked from the last associated Pod, then the user is deleted from the system.

Deleting Users

UM admin can delete any user from the system by clicking **X** from an Action column. The delete operation is not permitted if the user has Full-Pod-Access. In, such case another user is granted with *Full-Pod-Access* role for that Pod and then proceed with deleting the old user. UM admin must revoke respective permission first and then proceed further.

Pod Administrator

Pod admins are the users who has the permission to register new Pods in the system. UM admin can add any number of Pod admins in the system.

cisco VIM Unified Ma	nagement		User ID: rohashar 🏼 🏠 🗸
Dashboard PODS	POD Administrators		Refresh Add Pod Administrator Record last spoked at : 04/04/2018; 16/07.15
POD Users	User Name	✓ Email	× Action ×
POD Administrators	Rohan R	rohashar@cisco.com	0
UM Administrators	Aniket C	achothe@cisco.com	c
	H	terns per page	

Adding Pod Admin

- **Step 1** Log in as **UI Admin** and navigate to POD Administrator page.
- Step 2 Click Add Pod Administrator .
- **Step 3** Select User auth for the new user. This option is enabled only if LDAP mode is true.
- **Step 4** Enter the Email ID/LDAP user id (if LDAP user attribute is set to uid) of the user.
 - If the email is already registered, the Username gets populated automatically.
 - If the email is not registered, an email is sent to the user email ID with the verification token. If User auth is set as LDAP, no verification token email is sent.
- **Step 5** Navigate to https://br_api :9000.
- **Step 6** Enter the **Email ID** and **Password** of the Pod Admin
- Step 7 Click Login as Pod User. It redirects to the landing page where the Pod admin can register a new Pod.

Revoking Pod Admin

UM admin can revoke Pod admin's permission anytime. To revoke Pod admin permission for the user, click **undo** icon.



Note

You cannot revoke self permission.

Unified Management (UM) Administrator

UM admins have the access to the UM profile. Only a UM admin can add another UM admin in the system. There should be at least one UM admin in the system.

cisco VIM Unified Ma	inagement			User ID: rohashar 🛛 🗘 🗸
Dashboard PODS	UM Administrators			Refresh Add UM Administrator Aecord last updated at: 04(04/2018; 16:18:45
POD Users	User Name		* Online	≚ Action ≚
POD Administrators	Rohan R	rohashar@cisco.com	Online	0
UM. Administrators		≥] 5 → items per page		

Adding UM Admin

To add a UM admin perform the following steps.

- **Step 1** Log in as **UI Admin** and navigate to UM Administrator page.
- Step 2 Click Add UM Administrator.
- **Step 3** Select User auth for the new user. This option is enabled only if LDAP mode is true.
- **Step 4** Enter the Email ID/ LDAP user id (if LDAP user attribute is set to uid) of the user.
 - If email is already registered, the Username gets populated automatically.
 - If email is not registered, an email is sent to the user email ID with the verification token. If User auth is set as LDAP, no verification token email is sent.
- **Step 5** Navigate to https://br api: 9000.
- **Step 6** Enter the Email ID and Password of the UM Admin.
- **Step 7** Click Log in as UM admin to view the UM dashboard.

Revoking UM Admin

UM admin can revoke another UM admin's permission. To revoke UM Admin permission for any user, click **undo** icon.



Note

You cannot revoke a self's permission. You can revoke a user if the user is not associated with any pod. After, revoking the user is deleted from the system.

Registering New Pod to Insight

Following are the steps that are required for UI Admin to register a Pod Admin:

Before you begin

UI Admin has to register a Pod Admin to allow the user to access a pod.

- **Step 1** Log in as **UM Administrator**.
- **Step 2** Navigate to Pod Administrator and click Add Pod Admin.
- **Step 3** Enter the Email ID and the Password of the Pod Admin and click Login as Pod User. Then, you will be redirected to the landing page.
- Step 4 Click Add New Pod to register a Pod. The Add New Pod popup window appears on the screen.

		(A)		User ID: rohesher	••
• Summary	Add New Pod				
	Endpoint IP Address *	Enter End Point IP			
	Management Node Name *	Enter Management Node Name			
	User Name *	admin			
	Rest Server Password *	Enter Rest Server Password			
	Location *	Errer Location		Add New Pod	
	Description	Description			
	Management Node Administratio	n			
	Root CA Certificate *	Upload Root CA Certificate	Browse Upload Devalicase		
			Register Can		
			Can	CHI	

- **Step 5** Enter the br_api of the pod management node as the **Endpoint IP Address** and **Rest Server Password** from the file /opt/cisco/ui_config.json.
- **Step 6** Enter the values for the remaining fields in Add New Pod.
- **Step 7** Click **Browse** to select the Root CA certificate.

For more information on Root CA certificate, see Managing Root CA Certificate

- **Step 8** Click **Upload Certificate** to upload the selected Root CA certificate.
- **Step 9** Click **Register** to start the Pod registration.

The newly created Pod appears on the landing page.

Configuring OpenStack Installation

Before you begin

You need to create a Blueprint (B or C Series) to initiate OpenStack Installation through the VIM.

- **Step 1** In the navigation pane, choose **Pre-Install** > **Blueprint Setup**.
- **Step 2** To create a **B Series Blueprint**:
 - a. On the Blueprint Initial Setup pane of the Cisco VIM Insight, complete the following fields:

Dashboard		Create Blueprint configur	ation		Save Form Offline Valida	tion Clear
Pre-Install	*	create blueprint configur	acion			
Blueprint Setup						
Blueprint Management		Blueprint Initial Setup Physical S	ietup OpenStack Setup			
Post-Install		Blueprint Name: *		Platform Type: *		
view Topology		Enter Blueprint Name		B-series		
		Tenant Network: *		POD Type *		0
Pod User Administration		LinuxBridge/VXLAN		Fullon		
		Object Storage Backend *				
		Central				
		Optional Features & Services:				
		Syslog Export Settings	ES_REMOTE_BACKUP	NEVI Monitoring	Swiftstack	
		Pod Name	Um Admins	Enable Esc Priv	💷 Install Mode	
		E Heat	Nivbench	TORSwitch Information	Permit Root Login	
		R Auto Backup	C LDAP	UMTP VMTP	II NETAPP_SUPPORT	
		Keystone v3	III TLS			
		Import Existing YAML file				
			Drowse Lo	ed i		

Name	Description
Blueprint Name field	Enter blueprint configuration name.
Platform Type drop-down list	 Choose one of the following platform types: B-Series (By default) choose B series for this section. C-Series
Tenant Network drop-down list	Choose tenant network type: OVS/VLAN
Pod Type drop-down list	Choose one of the following pod types: • Fullon(By Default)

Name	Description
Ceph Mode drop-down list	Choose one of the following Ceph types:
	Dedicated
	• Central (By Default) - Not supported in Production
Optional Features and Services Checkbox	Swiftstack, LDAP, Syslog Export Settings, Install Mode, ToR Switch Information, TLS, NFVMON, Pod Name, VMTP, NFV Bench, Auto-backup, Heat, Ceilometer, Keystone v3, Enable Esc Priv, Enable TTY logging, SNMP, ManagementNode_CloudAPI_Reachability.
	If any one is selected, the corresponding section is visible in various Blueprint sections. SNMP requires CVIM-MON to be enabled.
	By default, all features are disabled except Auto-backup and Management Node_CloudAPI_Reachability.
	Select Enable Read-only OpenStack Admins to add a custom role with read-only admin privileges to OpenStack resources.
Import Existing YAML file	Click Browse button to import the existing yaml file.
	If you have an existing B Series YAML file you can use this feature to upload the file.
	Unified Management automatically fill in the fields and if any mandatory field is missed then it gets highlighted in the respective section.

b. Click **Physical Setup** to navigate to the **Registry Setup** configuration page. Fill in the following details for Registry Setup:

bushboard				
tures -		Create Blueprint configuration		Save Form Office Validation Clear
Bueprint Setup				
Bueprint Management		Bueprint Initial Setup Physical Setup OpenStack Setup		
Interior te	κ.			
ew Topology		X Regulary Server	s and Roles	
d User Administration		Registry User Name *	Registry Password *	0
		Enter registry Username	Enter registry password	
		Registry Email *		
		Enter registry email		

Name	Description
Registry User Name text field	Enter the User-Name for Registry (Mandatory).
Registry Password text field	Enter the Password for Registry (Mandatory).

Name	Description
Registry Email text field	Enter the Email ID for Registry (Mandatory).

Once all mandatory fields are filled the Validation Check Registry Pane shows a Green Tick.

c. Click UCSM Common Tab and complete the following fields:

cisco	/IM Unified N	lanagemer	8	Calsoft 0.30.116.244			Role: Full-Pod-Access	User ID: nehesher	0
Dashboard Pre-Instal			Create Blueprint configuration				Save Form Office V	undation Clear	
Bueprint Se	nup								
Bueptit M			Buspret Initial Setup Physical Setup OpenStack Setup						
View Topotogy			X Registry Setup X UCSA Common X Networking	X Servers and Roles					
Pod User Admin	istation		User name *			Password *			
			admin	password		passeord			
			UCSM P*		0	Resource Prefx *		•	
			UCSM IP			Resource Prefix			
			QOS Policy Type			Max VF Count *		0	
			NW			20			
			Enable W Performance U	0		Enable Prov R PIN III		۰	

81:05	Cisco a	nd/or	its atti	lates.	AL I	ights #	ENDAN	ė
Cart	- LODGE	Line .	B.A.main	_	4.2.4	-	1.2.2	

Name	Description
User name disabled field	By default the value is Admin.
Password text field	Enter Password for UCSM Common (Mandatory).
UCSM IP text field	Enter IP Address for UCSM Common (Mandatory).
Resource Prefix text field	Enter the resource prefix(Mandatory).
QOS Policy Type drop-down	Choose one of the following types: • NFVI (Default) • Media
Max VF Count text field	Select the Max VF Count. <1-54> Maximum VF count 54, default is 20. If VF performance is enabled we recommend you to keep MAX_VF_COUNT to 20 else may fail on some VICs like 1240.

Name	Description
Enable VF Performance optional checkbox	Default is false. Set to true to apply adaptor policy at VF level.
Enable Prov FI PIN optional checkbox	Default is false.
MRAID-CARD optional checkbox	Enables JBOD mode to be set on disks. Applicable only if you have RAID controller configured on Storage C240 Rack servers.
Enable UCSM Plugin optional checkbox	Visible when Tenant Network type is OVS/VLAN.
Enable QoS Policy optional checkbox	Visible only when UCSM Plugin is enabled. If UCSM Plugin is disabled then this option is set to False.
Enable QOS for Port Profile optional checkbox	Visible only when UCSM Plugin is enabled.
SRIOV Multi VLAN Trunk optional grid	Visible when UCSM Plugin is enabled. Enter the values for network and vlans ranges. Grid can handle all CRUD operations such as Add, Delete, Edit and, Multiple Delete.

d. Click Networking to advance to the networking section of the Blueprint:

	ed Management				Calsoft 10.30.116.244)~			Role: Full-Pod-Access	User ID	nhashar
nboard -install		Create Blueprint c	onfiguration						Save Form Office	e Validation	Cear
Blueprint Setup											
Blueprint Management		Biveprint Initial Setup	Physical Setup Open52	Inth Eastern							
instal		prospens mean perup.	region perce	KX Setup							
Тороюду		🗙 Registry Setup	¥ UCSM Common	R Attacts	Servers and Ro	es					
Pod User Administration		Domain Name : *									0
		Enter Domain Name									
		HTTP Proxy :				HTTPs P	mowy :				
		Enter HTTP Proxy				Enter P	CTTPS Proxy				
		IP Tables on Managem	sent Pods :	• = +	NTP Server : *		• = +	Domain Name Server : *		• =	+
		P Address	*	Action ~	NTP server		* Action *	DNS server	~	Action ~	
			11 H H		14 4 1 /1	P H		14 4 1 11	P PI		
		14 4 1									
		Networks (*									+
			* Segment ·	" Subnet	* Subnet Pv6	Gateway	* Gateway Pv6	* Pool	Pool (pv6	E Action ~	•
		Networks *	* Segment *	5ubnet	* Subnet Pv6 *	Gateway	 Gateway Pv6 	* Pool	' Pool lavis '		
		Networks *		5ubnet	* Subnet Pv6 *	Gateway	^V Gateway Pv6	* Pool •	" Pool (pv6	Action ~	
		Networks *	cinc		* Subnet IPv6 *	Gateway	[×] Gateway Pv6	* Pool *	[™] Pooi lav6 [™]	Action ~	
		Networks *	cimc apl management/provis.		* Subnet IPv6 *	Gateway	Cateroty IPv5	Y Pool Y	^r Pool jov6 · · ·	Action ~ *	
		Networks *	cimc api management/provis. tenant		* Subnet IPv6 *	Gateway	Gateway Pv6	Y Pool	^v Pool lov6 v	Action ~ *	
		Networks *	cimc apl management/provis.		* Subnet IPv6 *	Gateway	^v Gateway Pv6.	Y Pool	Pool (pv6 · · ·	Action ~ *	
		Networks *	cenc api management/provis. tenant storage		V Subnet IPv6 1	Gateway	Gatework Pv6	Post ***	Pool (pv6 *	Action ~ *	
		Networks ; *	cenc api management/provis. tenant storage		* Subnet IPV6 *		Gateworky IPv6	Post Post	Pool (pv6)	Action ~ *	

Name	Description
Domain Name field	Enter the domain name (Mandatory).
HTTP Proxy Server field	If your configuration uses an HTTP proxy server, enter the IP address of the server.
HTTPS Proxy Server field	If your configuration uses an HTTPS proxy server, enter the IP address of the server.
IP Tables on Management Pods	Specifies the list of IP Address with Mask.
NTP Server	Enter a maximum of four and minimum of one IPv4 and /or IPv6 addresses in the table.
Domain Name Server	Enter a maximum of three and minimum of one IPv4 and/or IPv6 addresses.

Name	Description
Network options	This section is accessible only if ToR type is Cisco NCS 5500.
	vxlan-tenant:
	• Provider network name: It is a unique name.
	• BGP AS num: Takes value between 1 and 65535.
	• BGP Peers: Enter the peer route reflector IPs (IPs to be comma separated)
	• BGP router ID: The router ID is used for local GoBGP cluster.
	• Head-end replication (Optional) : You can add VTEI IP address and comma separated VNI IDs. Multiple entries are allowed.
	Note VXLAN-TENANT is allowed only when NETWORK_OPTIONS is vxlan network. The IPs defined belong to the vxlan-tenant network, but are not part of the vxlan-tenant network pool.
	VXLAN-ECN:
	• Provider network name: It is the unique name.
	• BGP AS num: It takes the value between 1 and 65535.
	• BGP Peers: Enter the peer route reflector IPs. (IPs to be comma separated)
	• BGP router ID: The router ID is used for local GoBGP cluster.
	• Head-end replication (Optional) : You can add VTEI IP address and comma separated VNI IDs. Multiple entries are allowed.
	Note • You cannot have VXLAN-ECN without vxlan-tenant segment defined, however vxlan-tenant can be defined standalone.
	• Ensure that you take care while choosing single or multi-VXLAN (two-VXLAN) option as this is a day-0 configuration.
	• VXLAN_ECN is allowed only when NETWORK_OPTIONS is vxlan network. The IPs defined belong to the vxlan-ecn network, but are not part of the vxlan-ecn network pool.

Name	Description
Network table	

Description	
Networks you can e All or click Edit icc details. You can add, edit, o	-populated with segments. To add ither clear all the table using Delete n for each segment and fill in the r delete network information in the
table:	
Edit Network	
VLAN : * Enter VLAN	•
Segment : * None Selected •	
Subnet : * Enter Subnet	
Pv8 Subnet :	
Enter Subnet IPv6 Gateway : *	
Enter Caneway Address Pv6 Gateway 1	
Enter Gateway Address(PvK) Pool : * Invites set regard doubt to serve aver	nat O
Enter IP Pool	
Pv6 Pool : (http://www.enume. Enter IPv6 Pool	upermet O
Save Cancel	
	r new entries (networks) to the table. owing fields in the Edit Entry to og box.
Specify the fol Networks dial	owing fields in the Edit Entry to og box.
Specify the fol Networks diale Name	owing fields in the Edit Entry to og box. Description
• Specify the fol Networks dial	owing fields in the Edit Entry to og box.
Specify the fol Networks diale Name	Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always none.
Specify the foll Networks diale Name VLAN field	owing fields in the Edit Entry to Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always none. n list You can select any one segment from the
Specify the foll Networks diale Name VLAN field	owing fields in the Edit Entry to og box. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always none. n list You can select any one segment from the drop-down list.
Specify the foll Networks diale Name VLAN field	owing fields in the Edit Entry to og box. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always none. n list You can select any one segment from the drop-down list. • API
Specify the foll Networks diale Name VLAN field	owing fields in the Edit Entry to og box. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always none. n list You can select any one segment from the drop-down list. • API • Management/Provision
Specify the foll Networks diale Name VLAN field	owing fields in the Edit Entry to og box. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always none. n list You can select any one segment from the drop-down list. • API • Management/Provision • Tenant

L	Description				
	Name	Description			
		Provider (optional)			
		Note Some segments do not need some of the values listed in the preceding points.			
	Subnet field	Enter the IPv4 address for the subnet.			
	IPv6 Subnet field	Enter IPv6 address. This field is available only for Management provision and API.			
	Gateway field	Enter the IPv4 address for the Gateway.			
	IPv6 Gateway field	Enter IPv6 gateway. This field is available only for Management provision and API network.			
	Pool field	Enter the pool information in the following format. For example: 10.30.1.1 or 10.30.1.1 to 10.30.1.12			
	IPv6 Pool field	Enter the pool information in the following format. For example: 10.1.1.5-10.1.1.10,102.1.5-102.1.10			
		This field is only available for the Mgmt/Provision.			

e. On the Servers and Roles page of the Cisco VIM Suite wizard, you see a pre-populated table filled with Roles: Control, Compute and Block Storage (Only if CEPH Dedicated is selected in Blueprint Initial Setup.

I

sco VIM Unified Management	t			Calsoft 10.30.116	200 <mark>(</mark>) * (1	ole: Full-Pod-Access	UserID	t rohesha
board Install ~	Create Blueprint con	figuration							ve Form Offine V	/aildation	0
Nueprint Setup											
Sueprint Management	Sueprint Initial Setup	valcal Setup 0	penStack Setup								
-instat e											
Topology	🗶 Registry Setup	¥ UCSM Comm	non 🗙 Netwo	ning 📄 🗙 Sen	ers and Roles						
	Server User Name										
User Administration <	root										
	C Disable Hyperthreading										
	COBBLER :										
	Cobbler Timeout				0	Block Storage	Kickstart *				0
	45	45 Control Rickstart *				ucs-b-and-	c-series.ks				
	Control Kickatart *					Compute Kickstart *					0
	ucs-b-and-c-series.ks				•	ucs-b-and-	c-series ka				
	Server Host Password *	Server Host Password *									
	Enter Server Host Password										
	Server and Roles : * 🛕										+
	Server Name	Server Type	Rack ID	Chassis ID	Blade ID	* Reck unit I	D ^v Role	* Management IP *	Management IPv."	Action	*
		blade					control			/	×
		blade					control			1	×
		blade					control			/	×
		blade					compute			1	^
	14 4 1 41	P P[

Name	Description
Server User Name field	Enter the username of the server.
Disable Hyperthreading	Default value is false. You can set it as true or false.

Name	Description	Description				
Cobbler	Enter the Cobbler details in	the following fields:				
	Name	Description				
	Cobbler Timeout field	The default value is 45 min.				
		This is an optional parameter. Timeout is displayed in minutes, and its value ranges from 30 to 120.				
	Block Storage Kickstart field	Kickstart file for Storage Node.				
	Admin Password Hash field	Enter the Admin Password. Password must be Alphanumeric. Password should contain minimum 8 characters and maximum of 32 characters.				
	Cobbler Username field	Enter the cobbler username to access the cobbler server.				
	Control Kickstart field	Kickstart file for Control Node.				
	Compute Kickstart field	Kickstart file for Compute Node.				
	Cobbler Admin Username field	Enter the admin username of the Cobbler.				

r	Name	Description
A	Add Entry to Servers and Roles	

Name	Description	
	Click Edit or + to add a new	v server and role to the table.
	Server And Roles	
	Jei vei rulu norea	
	Server Name *	0
	Enter Server Name	
	VIC Slot	
	Enter VIC Slot	
	CIMC IP *	0
	Enter CIMC IP Address	
	CIMC User Name	
	Enter CIMC Usemame	
	CIMC Password	0
	Enter CIMC Password	
	Rack ID *	0
	Role *	
	Management IP	0
	Enter Management IP Address	
	Management IPv6	0
	Enter Management IPv6 Address	
	Save Cancel	
	Server Name	Enter a server name.
	Server Type drop-down list	Choose Blade or Rack from the drop-down list.
	Rack ID	The Rack ID for the server.
	Chassis ID	Enter a Chassis ID.
	If Rack is chosen, the Rack Unit ID field is displayed.	Enter a Rack Unit ID.
	If Blade is chosen, the Blade ID field is displayed.	Enter a Blade ID.
	Select the Role from the drop-down list.	If Server type is Blade then select Control and Compute . If server is Rack then select Block Storage .
	Management IP	It is an optional field but if provided for one server then
		it is mandatory to provide

Name	Description	
		details for other Servers as well.
	Management IPv6	Enter the Management IPv6 Address.
	Vtep IPs	Two input fields for vxlan-tenant and vxlan-ecn ips are available, for any node having compute role, vxlan-tenant and vxlan-ecn in network option.
	BGP management addresses	Two input fields for vxlan-tenant and vxlan-ecn ips, are available for any node having control role and having vxlan-tenant and vxlan-ecn in network option.
		IPs must be from management subnet, but not from the pool.
	Click Save.	

f. Click ToR Switch checkbox in Blueprint Initial Setup to enable the TOR SWITCH configuration page. It is an Optional section in Blueprint Setup, but when all the fields are filled it is a part of the Blueprint.

cisco VM Unified	Managemen	Calacit 10 20 110 244	Sinc Lul Put Access	User Et rohanhar 🔹 🗘
Pre-Instal		Create Blueprint configuration	Save Form Other	ne Validation Clear
Durihours	Ross R Tor Sunt 3			
Pod User Administration	•	Todiart(n Information) * * Mommanne ** User Name ** Password ** SSH IP*** SSN Num ** V	VPC Paerlink [™] VPC Domain [™] VPC paer p [™] VPC paer V [™] BR regimt po [™] BR regimt P [™]	E + Action*

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Name	Description
Configure ToR optional checkbox.	Enabling this checkbox, changes the configure ToR section from false to true.

Name	Description
ToR Switch Information mandatory table.	

Name	Description	
	Click (+) to add informatio	n for ToR Switch.
	Switch Details	
	Hostname *	0
	Enter Switch Hostname	
	Username *	Θ
	Enter Switch Username	
	Password *	0
	Enter Password	
	SSH-IP *	0
	Enter IP Address	
	SSN Num	0
	Enter SSN Num	
	VPC Peer Keepalive	0
	Enter IP Address	
	VPC Domain	0
	Enter VPC Domain	
	VPC Peer Port Info	0
	Enter VPC Port	
	VPC Peer VLAN Info	0
	Enter VPC VLAN Info	
	BR Management Port Info	0
	Enter BR Port Info	
	BR Management PO Info	0
	Enter BR PO Info	
	Save Cancel	
	Name	Description
	Hostname	ToR switch hostname.
	Username	ToR switch username.
	Password	ToR switch password.
	SSH IP	ToR switch SSH IP Address.
	SSN Num	ToR switch ssn num.
	VPC Peer Keepalive	Peer Management IP. You do not define if there is no peer.
	VPC Domain	Do not define if peer is absent.

Name	Description	
	VPC Peer Port Info	Interface for vpc peer ports.
	BR Management Port Info	Management interface of the management node.
	BR Management PO Info	Port channel number for management interface of the management node.
	ClickSave.	
On clicking save button, Add ToR Info Connected to Fabric field is visible.	Port Channel field.	Enter the Port Channel input.
	Switch Name field.	Enter the name of the Switch.

g. Click NFVI Monitoring checkbox in Blueprint Initial Setup to enable the NFVI Monitoring configuration tab.

cisco VIM Unified Manaç	ement	Color 10.20.116.244	Role: Fall-Pod-Access User ID: rohashar
shbcard			
-instal -	Create Blueprint configuration		Save Form Offline Validation Clear
Blueprint Setup			
Blueprint Management	Blueprint Initial Setup Physical Setup OpenStack Setup		
t-install c			
r Topology	X Regatry Setup X CIMC Common X Networking	X Servers and Roles V Tor Switch X NSVI Maximum	
User Administration	Master Admis IP: *		0
	Admin IP		
	Collector Management VIP: *		9
	Management VIP		
	Collector VM1 Info		
	Host Name: *	Password:* password	0
	CCUSER Password. *	Admin P; *	0
	password	Admin P	
	Management IP: *	0	
	Maragement IP		
	Collector VM2 Info Host Name: "	Password: *	Θ
	host name	Password: -	ů.
	CCUSER Password. *	Admin IP: *	0
	password	Admin IP	
	Management IP: *	0	
	Maragement IP		
	Collector Tor Connections		+ •
	V Tor Info		Action *
	TA THA		
		No data avallable	
	14 4 1 L1 P PI		
	Dispatcher		
	Rabbit MQ User Name: *		0

Name	Description
Admin IP	IP Address of Control Center VM
Management VIP	VIP for ceilometer/dispatcher to use, must be unique across VIM Pod
Host Name	Hostname of Collector VM
Password	Password of Collector VM
CCUSER Password	Password of CCUSER
Admin IP	SSH IP of Collector VM

Name	Description
Management IP	Management IP of Collector VM
Collector ToR Connections	1. Click on (+) icon to Add Collector ToR Connections
	2. Select the ToR switches from list to add the information.
	3. It is optional and available for ToR type NCS-5500
	 For now, it supports adding only one Collector ToR Connection
	Add Collector Tor Connections
	Select Tor switch for connections Port Channel * Enter port channel Switch- test-torhostname * Enter port information
	Save Cancel
	Port Channel Enter port channel.
	Switch - {torSwitch-hostname}Enter port number, E.g:eth1/15.
	Click Save
Rabbit MQ User Name	Enter Rabbit MQ username.

h. Click **CVIMMON** option in Blueprint Initial Setup to enable the CVIMMON configuration tab.

eprint Initial Setup	Physical Setup	OpenStac	k Setup				
X Registry Setup		Common	X Networking		X Servers and Roles	CVIMMON	
Enable							
R Access True •	0						
Polling Intervals							0
Low Frequency		1		m ,			0
Medium Frequenc	У	30		5.			0
							0

CVIM-MON is a built-in infrastructure monitoring service based on telegraf/prometheus/grafana.

When enabled, the telegraf service will be deployed on every node on the pod to capture infrastructure level stats (CPU, memory, network, containers, and so on) and a Prometheus server will be installed on the management node to poll for these stats and store them in its time series database. The statistics can then be viewed using the grafana server that is accessible on the management node at port 3000 (password protected).

There are three levels of polling intervals which are used by different telegraf plugins:

- · Low frequency interval is used to collect system level metrics like cpu, memory
- · Medium frequency interval is used to collect docker metrics
- High frequency interval is used to collect rabbitmq metrics

Defining polling intervals in setup data is optional, if not defined the default values will be used

PODNAME is required when	CVIM-MON is enabled
--------------------------	---------------------

Name	Description
Enable	Default is False
UI-Aaccess	Indicates either True or False. If this option is set in setupdata with a value, the same value is shown as selected in the drop-down list. If this option is not set in the setupdata, the default value of True is selected in the drop-down list.
Polling Intervals	
Low frequency	<integer (s="" following="" h)="" m="" sign="" time="" with=""> # min of 1 minute (1m) if not defined defaults to 1m, also it needs to be higher than medium interval.</integer>
Medium frequency	<integer (s="" following="" h)="" m="" sign="" time="" with=""> # min of 30 seconds (30s) if not defined defaults to 30s, also it needs to be higher than high interval.</integer>
High frequency	<integer (s="" following="" h)="" m="" sign="" time="" with=""> # min of 10 seconds (10s) if not defined defaults to 10s.</integer>

While CVIM-MON checkbox is checked in Blueprint Initial setup, there is a checkbox provided in the CVIM-MON tab area for enabling the SNMP feature. When user check this enable SNMP checkbox, Add a Manager button appears in the right area.

Clicking on this button shows various fields related to that manager. User can add up to three SNMP managers.

Name	Description
Address	IPv4 or IPv6 address of the remote SNMP manager, unique across all managers
Port	Port (1-65535) to sent the traps; default 162, unique across all managers
Version	SNMP version of the manager; default 'v2c'
Community	For SNMPv2c. Community name; default 'public'

Name	Description	
Engine_Id	For SNMPv3. ContextEngineId, min length of 5, max length of 32, unique across all managers; cannot we al 00s or FFs	
Users	List of users; maximum: 3	
Name	Username has to be unique across users for the same manager	
auth_key	Need to be min of 8 chars	
authentication	Authentication protocol; default: 'SHA'	
privacy_key	Encryption password; by default uses the same as the authentication	
encryption	Encryption protocol ; default: 'AES128'	

If CVIM-MON is enabled and Platform type is C, then an optional feature to get SNMP traps from Cisco CIMC is available in the CVIM-MON tab area. With this new feature SERVER_MON, there is a checkbox to enable or disable this feature and an input field to provide host information. You can either add comma separated server information or can have ALL to include all the servers.

Table 1:

Name	Description
Enable	True/False
Host information	ALL or list of servers.
Remote syslog severity	Optional. Indicates if cimc is programmed to send rsyslog events with this minimum severity.
	Possible syslog severity values are: <'emergency' 'alert' 'critical' 'error' 'warning' 'notice' 'informational' 'debug'>. These are optional and values can be changed.

i. Click **OpenStack Setup** tab to advance to the OpenStack Setup Configuration page. On the **OpenStack Setup** page of the Cisco VIM Insight wizard, complete the following fields:

I

Name	Description		
HA Proxy	Fill in the following details:		
	Create Blueprint configuration		
	Biusprint Initial Setup Physical Setup OpenS	itack Setup	
	🗙 HA Proxy 🗸 🗸 Keystone 🛛 🗶 N	Neutron 🗸 CEPH 🖌 Glance	Cinder
	External VIP Address *	0	External VIP IPv6 Addre
	Enter IP Address Virtual Router ID *	0	Enter IP Address
	Enter Witsail Router ID		Enter IP Address
	Internal VIP IPv6 Address Enter IPv6 Address	0	
	External VIP Address field	Enter the IP address of the	
		External VIP.	
	External VIP Address IPv6 field	Enter the IPv6 address of t External VIP.	he
	Virtual Router ID field	Enter the Router ID for the HA.	;
	Internal VIP Address IPv6 field	Enter the IPv6 address of t Internal IP.	he
	Internal VIP Address field	Enter the IP address of the Internal VIP.	

Name	Description	
Keystone	The following are the Pre-populated field values. This option is always set to be true.	
	Create Blueprint configuration	
	Biueprint Initial Setup Physical Setup OpenStack Setup	
	🗶 HA Proxy 🗸 Keystone 🗶 Neutron 🗸 CEPH 🗸 Glance 🗸 Cinder	
		Tenant Nam
	admin admin	n
	Enter Vehial Router ID	iter IP Addre
	Internal VIP IPv6 Address 0	
	Enter IPv6 Address	
	Admin Username field admin	
	Admin Tenant Name field admin	

Name	Description
LDAP (Only if Keystonev3 is enabled)NoteThis option is only available with Keystovv3	one

Description			
This is available only when Ke enabled under <i>Optional Featu</i> Initial Setup.	•		
Create Blueprint configuration			
Burprint Initial Setup Physical Setup OpenS	tack Setup		
🗙 HA Proxy 🖌 Keystone 🗙 N	ieutron 🗸 CEPH 🖌 🗸 Glance	-	Cinder 🔰 🕱 🕯
Domain Name *		θ	Object Class for U
Enter Domain specific name			Enter objectClass
Object Class for Groups *		0	Domain Name Tree
Enter objectClass for Groups		1	Enter DN tree for
Domain Name Tree for Groups * Enter DN tree for Groups		0	Suffix for Domain N Enter suffix for D
		0	
URL.*		0	Domain Name of bi
Password *		0	User Filter *
Enter Password			Enter User Filter
User ID Attribute *		0	User Name Attribut
Enter User Id Attribute		1	Enter User Name
User Mail Attribute		0	Group Name Attrib
Enter User Mail Attribute			Enter Group Nam
Domain Name field	Enter the Domain name.		-
Object Class for Users field	Enter a string as input.		
Object Class for Groupsfield	Enter a string.		
Domain Name Tree for Users field	Enter a string.		
Domain Name Tree for Groups field	Enter a string.		
Suffix for Domain Name field	Enter a string.		
URL field	Enter a URL with ending number.	, por	t
Domain Name of bind user field	Enter a string.		
Password field	Enter Password as string format.	g	

Name	Description	
	User ID Attribute field	Enter a string.
	User Name Attribute field	Enter a string.
	User Mail Attribute field	Enter a string.
	Group Name Attribute field	Enter a string.
	Group_filter field	It is optional. Enter a string.
	Group Member Attribute field.	It is optional. Enter a string.
	Group Id Attribute field	It is optional. Enter a string.
	Group Members Are Ids field.	It is optional. Enter True or False
		1

Name	Description
Neutron	

I

ame	Description	
	Neutron fields change on the basis of selection from Blueprint Initial Set options available for Neutron for OV Create Blueprint configuration	tup. Following are the
	Bueprint Willal Setup Physical Setup X HA Prony V Keystone X Keystone	EPH 🗸 Gance 🗸 🗸 Cinder 🗙 LDA
	Tenant Network Type * VLAN NEV Hosts * Compute Name =	Mechanism Drivers * Vpp Tenant VLAN Ranges Enter Tenant VLAN
	Enable Junbo Frames	Provider VLAN Range Enter Provider VLAN
		nt Network Typeselected e Blueprint Initial Setup
	Tenan	Auto-filled based on the nt Network Type selected ueprint Initial Setup
	Com	Auto-filled with the pute you added in Server Roles.
	section is add you o	u select All in this on NFV_HOSTS: ALL ded to the Blueprint or can select one particular pute. For Example:
	comp	_HOSTS: pute-server-1, pute-server-2.
		of ranges separated by na form start:end.
		of ranges separated by na form start:end.
	VM Hugh Page Size (available for NFV_HOSTS option) field2M of	or 1G

Name	Description	
	Enable Jumbo Frames field	Enable the checkbox.
	Enable VM Emulator Pin	• Optional, when NFV_HOSTS is enabled.
		• When a VM is spawned with this parameter enabled, NOVA allocates additional vCPU on top of the vCPU count specified in the flavor, and pin vCPU0 to the pCPU that is reserved in the pool.
	VM Emulator PCORES Per Socket	• Optional, if BNABLE_VM_EMULAICR_PN is enabled.
		• Enter the number of cores per socket.
		• Defaults to 1. Can be in the range of 1 to 4.
	For Tenant Network Type, Lin the same but Tenant VLAN F	

Name	Description
СЕРН	

Name	Des	Description				
	1.	 1. Uhen Object Storage Backend is selected as C in the blueprint initial setup. 				
		Create Blueprint configuration				
			enStack Setup			
		Exception of the second se	K Newton X CUPI X Gance 3	Cinder		
		Ceph Mode *		Cluster ID *		
		Central		Enter Ouster ID		
		Monitor Host * Enter Monitor Host for CEPH		Monitor Members *		
		Secret UUD *		Nova Boot From		
		Error Secret UUD for CEPH		Local		
		NOVA RED POOL *		CEPH NAT		
		una .				
		Ceph Mode	By default Ceph Mod	le is Central.		
		Cluster ID	Enter the Cluster ID.			
		Monitor Host	Enter the Monitor Ho	st for CEPH		
		Monitor Members	Enter the Monitor Me CEPH	embers for		
		Secret UUID	Enter the Secret UUI	D for CEPH		
		NOVA Boot from	You can choose CEP from the drop-down l			
		NOVA RBD POOL	L Enter the NOVA RBD Pool (default's to vms)			
		CEPH NAT	CEPH NAT is require Ceph and when mgm not routable.			
	2.		Backend is selected a setup for dedicated C			

Description		
Blueprint Initial Setup Physical Setup OpenS	tack Setup	
🗙 HA Proxy 🖌 Keystone 🗙 M	Veutron	CEPH 🗸 Glance
Ceph Mode *	0	Nova Boot From
Dedicated		Ceph
Cinder Percentage	0	Glance Percentage
40		30
Nova Percentage	0	Ceph OSD Cores *
30		10
 Cinder Percentage: Available From is <i>local</i> or <i>Ceph</i>. Glance Percentage: Available From is <i>local</i> or <i>Ceph</i>. Nova Percentage: Available w Fromis <i>Ceph</i>. If NOVA Boot From is <i>local</i>, the to Percentage and Glance Percentage If NOVA Boot From is <i>Ceph</i>, the to Percentage and Glance Percentage CEPH OSD RESERVED PCORES 	when Nova when Nova B tal of Cinde must be 100 otal of Cind must be 100 : Default val	Boot oot r 0. er 0. ue is 2.
	Blueprint Initial Setup Physical Setup OpenS X HA Proxy Keystone X Ceph Mode* Dedicated Odd Dedicated 40 Nova Percentage 30 OpenS • Ceph Mode: By default Dedicated OpenS 40 Nova Percentage 30 OpenS • Ceph Mode: By default Dedicated OpenS • Order Percentage 30 • Other Percentage: Available From is local or Ceph. • Glance Percentage: Available From is local or Ceph. • Nova Percentage: Available From is local or Ceph. • Nova Percentage: Available w From is local, the to Percentage and Glance Percentage If NOVA Boot From is local, the to Percentage and Glance Percentage If NOVA Boot From is Ceph , the to Percentage and Glance Percentage OpenSecontage If NOVA Boot From is Ceph , the to Percentage and Glance Percentage If NOVA Boot From is Ceph , the to Percentage and Glance Percentage If NOVA Boot From is Ceph , the to Percentage and Glance Percentage If NOVA Boot From is Ceph , the to Percentage and Glance Percentage	Blueprint Initial Setup Physical Setup OpenStack Setup X HA Proxy Keystone Neutron Ceph Mode* 0 Dedicated 0 40 0 Nova Percentage 0 30 30 • Ceph Mode: By default Dedicated. • NOVA Boot From: Can be Ceph or local. • Cinder Percentage: Available when Nova From is local or Ceph. • Glance Percentage: Available when Nova From is local or Ceph. • Nova Percentage: Available when Nova From is local or Ceph. • Nova Percentage: Available when Nova From is local or Ceph.

Name	Description	
	 3. When Object Storage Backend is selected as NetA the blueprint initial setup, the Create Blueprint configuration When You Prove Series Wester Configuration Configuration Ceph Mode: NetApp is selected by default. Cinder Percentage: Enter Cinder percentag Ceph. 	Cinder Percentage
	 Glance Percentage: Enter glance percentage Ceph Total of Cinder Percentage and Glance Percent must be 100. 	

Name	Description	Description					
GLANCE	1. When Object Storage Ba the blueprint initial setup.	1. When Object Storage Backend is selected as <i>Central</i> in the blueprint initial setup.					
	Create Blueprint configuration	I					
	Burprist Initial Setup Physical Setup OpenDiack Setu	0					
	🗙 HA Proxy 🗸 Kinjstone 🗸 Neutron	X CEPH X Canver X Cinder					
	Store Backand *	Glance RBD Pool *					
	CEPH	Images					
	Giance Client Key *						
	Store Backend	By default CEPH.					
	Glance RBD Pool field	By default images.					
	Glance Client Key	Enter GLANCE Client Key					
	2. When Object Storage Ba the blueprint initial setup. Create Blueprint configuration	ckend is selected as <i>Dedicated</i> in					
	Bueprint Initial Setup Physical Setup OpenStack 5	ietup					
	🗙 HA Proxy 🗸 Knystone 🗸 Neutro	n 🗙 CEPH 🗙 Gance 🗙 Cinder					
	Store Backend * CDH						
		• PH Dedicated with Store Backend					

I

CINDER By default Populated for <i>CEPH Dedicated</i> with Volume Driver value as CEPH . Create Blueprint configuration Water Date: The Conder RBD Pool field By default CEPH. Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Water Date: Create Blueprint configuration Create Blueprint configuration Create Blueprint configuration	Name	Description	Description					
Weight Hind Sing Payora Sing Carel K C	CINDER							
Image: Station of Station Image: Station of Station of Station Image: Station of Station		Create Blueprint configuration	I					
Warren Brief Conserver Warren Brief Conserver Conserver By default CEPH. Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Create Blueprint configuration Warren Brief Payson Server Y HA Proof Keystone Y HA Proof Y Haveon		Bueprint Initial Senap Physical Senap Openditack Setup						
CENH Center Cherk Kay* Ever Child Clene Kay Volume Driver By default CEPH. Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Dueprit total Stelp Paysical Stelp Yearson X Gance X HA Proxy Yearson X HA Proxy		🗙 HA Proxy 🗸 Keystone 🗸 Neutron	X CEPH X Glance X Crocker					
Volume Driver By default CEPH. Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Deprive total Setup Weyene total Setup Physical Setup Volume Veloce Volume Driver Notion X His Provy Veloce Veloce Veloce Veloce		Volume Onliver *	Cinder RID Pool *					
Item CMDDR Cheen tay Volume Driver By default CEPH. Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Enter Cinder Client Key Weight initial Setup Physical Setup Y Keystone Neuron Y Users Driver*		CEPH	volumes					
Volume Driver By default CEPH. Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Bueprint initial Setup Physical Setup Volume Diver* Keystone		Cinder Client Key *						
Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Bueprint httal Setup Physical Setup Years Neuron X CEPH X Cance Yearse Dileer*		Enter CINDER Client Key						
Cinder RBD Pool field By default volumes. Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Bueprint httal Setup Physical Setup Years Neuron X CEPH X Cance Yearse Dileer*								
Cinder Client Key Enter Cinder Client Key Create Blueprint configuration Bueprint Initial Setup Physical Setup Y HA Proxy Keystone Neutron X CEPH X Giance X Cover Volume Driver*		Volume Driver	By default CEPH.					
Create Blueprint configuration Biveprint Initial Setup Physical Setup X HA Proxy Volume Driver* Volume Driver*		Cinder RBD Pool field	By default volumes.					
Biueprint Initial Setup Physical Setup OpenStack Setup X HA Prony V Keystone V Neutron X CEPH X Glance X Choler Volume Driver *		Cinder Client Key	Enter Cinder Client Key					
		Blueprint Initial Setup Physical Setup OpenStack Setue X HA Proxy Keystone Neutron Volume Driver *						

Name	Description
VMTP	
VMTP optional section will only be visible once VMTP is selected from Blueprint Initial Setup.	

ne	Description	Description					
	Check one of the check box	Check one of the check boxes to specify a VMTP network: • Provider Network					
	Provider Network						
	External Network	• External Network For the Provider Network complete the following:					
	For the Provider Network						
	Provider Network 🖻						
	Network Name *	0	Subnet * ©IPV4 ®II				
	Enter Network Name		Enter Subnet for I				
	Network IP Start *	0	Network IP End *				
	Enter IP Address		Enter IP Address				
		0					
	Network Gateway * Enter Network Gateway	0	Enter DNS Server				
	Segmentation ID * Enter Segmentation ID from 2 to 4094	0	IPV6 Mode				
	Enter Segmentation ID from 2 to 4094		Select IPV6 MOD				
	VNIC Type	0	PHYSNET NAME				
	direct		phys_prov_fia				
	Network Name field	Enter the name of the	e				
		provider network.					
	IPv4 Or IPv6 field	Select either IPv4 or	IPv6				
	Subnet field	Enter the Subnet for H Network.	Provider				
	Network IP Start field	Enter the start of the IPv4/IPv6 address.	floating				
	Network IP End field	Enter the end of the f	loating				
		IPv4/IPv6 address.					
	Network Gateway field	Enter the IPv4/IPv6 a for the Gateway.	address				
	DNS Server field	Enter the DNS server IPv4/IPV6 address.	r				
	Segmentation ID field	Enter the segmentation	on ID.				
	IPv6 Mode field	Enter the IPv6 addres with the prefix, if IPv is selected.					
	VNIC Type	For B-series, Direct is value. For C –series, either 'Default' or 'N	it is				

Name	Description					
	PHYSNET NAME	s vhere				
	For External Network fill i	in the following details:				
	External Network 🖾		I			
	Network Name *		Subnet *			
	Enter Network Name		Enter Subnet			
	Network IP Start *		Network IP End *			
	Enter IP Address		Enter IP Address			
	Network Gateway *		DNS Server *			
	Enter Network Gateway		Enter DNS Serve			
	VNIC Type	0				
	direct					
	Network Name field	Enter the name for the external network.				
	Subnet field					
	Network IP Start field	Enter the start of the floa IPv4 address.	ating			
	Network IP End field	Enter the endof the float IPv4 address.	ing			
	Network Gateway field	Enter the IPv4 address for Gateway.	or the			
	DNS Server field	v v4				
TLS This optional section will only be visible once TLS is selected from Blueprint Initial Setup Page.	TLS has two options: • External LB VIP FQDNText field.					
	• External LB VIP TLS option is false.	5 True/False. By default thi	s			

Name	Description					
Under the OpenStack setup tab, Vim_admins tab will be visible only when Vim_admins is selected from the Optional Features & Services under the Blueprint Initial setup tab	Add Username, Passwo non-root login.	rd, Public key or both for the				
	Create Blueprint configuration	n				
	Blueprint Initial Setup Physical Setup	OpenStack Setup				
	🗙 HA Proxy 🗸 Keystone	✓ Neutron ¥ CEPH ¥ Glance ¥				
	Username*	Password Public key				
	Note: Remove empty records before vali	dation.				
	Permit root login					
	User Name	Enter username for Vim Admin.				
	Password	Password field. Admin hash password should always start with \$6.				
	Public Key	Public key for vim admin should always start with 'ssh-rsa AAAA'				

Name	Description				
SwiftStack optional section will be visible once SwiftStack is selected from Blueprint Initial Setup Page. SwiftStack is only supported with KeyStonev2	Following are the options that needs to be filled for SwiftStack:				
. If you select Keystonev3, swiftstack will not be available for configuration.	Create Blueprint configuration				
	Biveprint Initial Setup Physical Setup OpenStack	Setup			
	🗙 HA Proxy 🗸 Keystone 🖌 Neut	ron 🗙 CEPH 🗙 Glance	🗙 Cinder 🗸 🖌 TLS		
	Cluster End Point *		O Reseller Prefx *		
	Enter Cluster End Point IP/Domain		Enter Reseller Prefix		
	Admin User * Enter Admin User name		Admin Password * Enter Password		
	Admin Tenant *		Protocol *		
	Enter Admin Tenant name	http			
		(Proxy-Account-C endpoint.			
	Admin User field				
		authenticate in key	ystone.		
	Admin Tenant field	The service tenant corresponding to t Account-Containe the Swiftstack.	he		
	Reseller Prefix field	Reseller_prefix as for Keysone Auth, support in Swiftst Example: KEY_	AuthToken		
		and Orthophy and Inches	1		
	Admin Password field	swiftstack_admin	password		

j. For SolidFire, enter the following:

Name	Description

SolidFire is visible for configuration on day0 SolidFire is not allowed as a day-2 deployment option	Create Blueprint configuration						0	5		
SolidFire is always available with CEPH.	>		Biveprint Initial Serup	Physical Se	mp	OpenStack Setup				
		X HA Prosy	🗸 Keyste	re	✓ Neutron	V CAPH V Glance	🖌 Glanos	>~	Cinder	
		Cluster MVP *					0	Cluster SVIP •		
	172.23.105.217						-	10.3.3.55		
	Admin Username * orderstadmin						Admin Passw			
	Cluster MVIP Management IP of SolidFire field		dFire clust	ter.						
		Cluster SVII	P field	Sto	rage VIP o	of SolidF	ire cluster	:		
	4	Admin User	name	Adı	nin user o	er on SolidFire cluster				
	4	Admin Passy	word	Adı clus	nin passw ster.	ord on S	olidFire			

k. For NetApp, enter the following:

Name	Decription
NETAPP	Optional NETAPP configuration. No dedicated Ceph allowed.

Decription
• Server Hostname: It is the IPv4/IPv6/Hostname/FQDN of NetApp management/API server.
• Server Port: It is the port of NetApp management/API server. 80 for HTTP 443 for HTTPS.
• Transport Type: It is HTTP or HTTPS. Server port depends on Transport type.
• Username : It is the username of Netapp API Server.
• Password: It is the password of NetApp API Server.
• Cinder NFS Server: It is the data path IP of NFS Server. Provide the IPv4/IPv6/Hostname/FQDN
• Cinder NFS Path: It is the path of NFS Server.
• Nova NFS Server: It is the data path IP of NOVA NFS server. Provide the IPv4/IPv6/Hostname/FQDN.
• Nova NFS Path: It is the path of NOVA NFS.
• V Server: SVM for Cinder NFS volume. Provide the IPv4/IPv6/Hostname/FQDN.
Glance NFS Server : It is the data path of glance NFS server. Provide the IPv4/IPv6/Hostname/FQDN
Glance NFS Path: It is the path of glance NFS server.

1. If **Syslog Export** or **NFVBENCH** is selected in **Blueprint Initial Setup**, the **Services Setup** pane is enabled for the user to view.

Following are the options under Services Setup tab:

Name	Description	
Syslog Export	Following are the option	s for Syslog Settings:
	Create Blueprint configuration	
	Blueprint Initial Setup Physical Setup OpenSt	ack Setup Services Setup
	K Sysley Doort X NFVERICH	
	Remote Host *	O Protocol *
	Enter IP Address	UDP
	Facility * local5	Severity * debug
	Port *	· Oroug
	514	ELK.
	L	
	Remote Host	Enter Syslog IP address.
	Protocol	Only UDP is supported.
	Facility	Defaults to local5.
	Severity	Defaults to debug.
	Clients	Defaults to ELK.
	Port	Defaults to 514 but can be modified by the User.

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Name	Description					
NFVBENCH	NFVBENCH enable checkbox which by default is <i>False</i> .					
	Create Blueprint configuration					
	Blueprint Initial Setup Physical Setup OpenStack Setup Services Setup					
	X Syslog Export X NEVTLENCH					
	Enable TORSWITCH details are empty, Add TORSWITCH details to configure NFVBENCH					
	NIC Ports: INT1 0 INT2 1 2					
	Add ToR information connected to switch: • Select a TOR Switch and enter the Switch name.					
	 Enter the port number. For example:eth1/5. VTEP VLANS (mandatory and needed only for VXLAN): Enter 2 different VLANs for VLAN1 and VLAN2 					
	• NIC Ports: INT1 and INT2 optional input. Enter the 2 port numbers of the 4-port 10G Intel NIC at the management node used for the NFVbench.					
	For mechanism driver VPP, two optional fields are available if network option is present:					
	• VTEP IPs : It is mandatory for NFVbench with VXLAN. Comma separated IP pair in vxlan-tenant network, but not in the tenant pool. This option is not required.					
	• VNIs: It is mandatory for NFVbench with VXLAN and must be comma separated vnid_id pairs.					
	For mechanism driver VTS:					
	VTEP Ips : Mandatory only for VTS/VXLAN. Comma separated IP pair belongs to tenant network segment, but not in tenant network pool.					
ENABLE_ESC_PRIV	Enable the checkbox to set it as True. By default it is <i>False</i> .					

Step 3 To create a C Series Blueprint:

a. On the Blueprint Initial Setup page of the Cisco VIM Insight, complete the following fields:

dudu VM Unified	I Management	6	Culter# 10:30.116.344)~	Role, Full-Pod-Access User	D. sheder C
shboard r-Instal		Create Blueprint configuration	n		Save Form Office Validation	n Cear
Bueprint Setup						
Bueprint Management		Bueprint Initial Setup Physical Setup	OpenStack Setup			
er-instat	10	Bueprint Name: *		Platform Type: *		
ne Topology		Errier Unieprint Name		C-series		
d User Administration	*	Tenant Network: *		POD Type *		•
		Linuxdiridge/VXLAN		Fution		
		Object Storage Backand *				
		Central				
		Optional Peatures & Services:				
		🗆 Syslog Export Swilings	II ES_REMOTE_BACKUP	II NEVI Monitoring	III (bellisters	
		Pod Neme	Wm.Admine	C Enable Esc Priv	C Install Mode	
		Heat Permit Root Login	II Mildench If Auto Beckup	SROV CARD TYPE	TORSwitch Information VMTP	
		I NETAPP_SUPPORT	C Keystone v3	C TLS		
		Import Existing 1984, file				

Name	Description
Blueprint Name field.	Enter the name for the blueprint configuration.
Platform Type drop-down list	Choose one of the following platform types:
	• B-Series (By default)
	• C-Series (Select C Series)
Tenant Network drop-down list	Choose one of the following tenant network types:
	• Linux Bridge/VXLAN
	• OVS/VLAN
	• VTS/VLAN
	• VPP/VLAN
	• ACI/VLAN
	Note when VTS/VLAN or ACI/VLAN is selected then respective tabs are available on Blueprint setup. When Mechanism driver OVS or ACI is selected, VM_HUGEPAGE_PERCENTAGE field is enabled for all standalone compute nodes, when NFV_HOSTS is enabled.

Name	Description
Pod Type drop-down list	Choose one of the following pod type :
	• Fullon(By Default)
	• Micro
	• UMHC
	• NGENAHC
	Note • UMHC pod type is only supported for OVS/VLAN tenant type.
	• NGENAHC is supported for VPP/VLAN tenant type with no SRIOV
	• Pod type micro is supported for OVS/VLAN, ACI/VLAN, VPP/VLAN.
Ceph Mode drop-down list	Choose one of the following Ceph types:
	• Dedicated (By Default)
	Central. Central is not supported in Production
Optional and Services Features checkbox	Swiftstack, LDAP, Syslog Export Settings, Install Mode, TorSwitch Information, TLS, NFVMON, Pod Name, VMTP, NFVbench, Autbackup, Heat, Keystone v3, Enable Esc Priv.
	If any one is selected, the corresponding section is visible in various Blueprint sections.
	By default all features are disabled except Auto Backup.
Import Existing YAML file	If you have an existing C Series YAML file you can use this feature to upload the file.
	Insight will automatically fill in the fields and any missed mandatory field will be highlighted in the respective section.

b. Click **Physical Setup** to advance to the **Registry Setup** configuration page. Fill in the following details for Registry Setup:

bhuodria				Save Form Offline Weldation Clear
e-install		Create Blueprint configuration		
Bueprint Setup				
Bueprint Management		Burprint Initial Setup Physical Setup OpenStack Setup		
restat	×.			
w Topology		X Registry Server X CIMC Common X Retworking X	Servers and Roles	
User Administration		Registry User Name *	Registry Password *	0
		Enter registry Username	Enter registry password	
		Registry Email *		
		Enter registry email		

Name	Description
Registry User Name text field	User-Name for Registry (Mandatory).
Registry Password text field	Password for Registry (Mandatory).
Registry Email text field	Email ID for Registry (Mandatory).

Once all the mandatory fields are filled the Validation Check Registry Page will be changed to a Green Tick.

c. Click CIMC Common Tab and complete the following fields:

cisco (VIM Unified Manageme	nt	Color() 10:30:116:344	Role: Full-Pud-Access User ID: mhashar 🏼 🔕
Dashboard Pre-Install	÷	Create Blueprint configuration		Save Form Offsire Valdadon. Clear
Bueprint Se Bueprint M Post-Instalt Vew Topology	lanagement	Busprist Initial Setup Physical Setup OpenStack Setup X Registry Setup X CMC Common X Networking	X Servers and Roles	
Pod User Admi	natration 4	Coenane * admin	Password *	•

Name	Description
User Name disabled field	By default value is Admin.
Password text field	Enter Password for UCSM Common (Mandatory).

d. Click Networking to advance to the networking section of the Blueprint.

I

Isco VM Unified	Management				Calsoft (<u></u>			Relie: Full-Pod	-Access Use	r D. nhashar
hound		Create Blueprint o	onfiguration						Save Form	Offine Validari	on Clear
Bueprint Setup											
Nueprint Management		Biurprint Initial Setup	Physical Setup ComSta	in France							
instal	2	products seals beauti	Physical Setup	x setup							
Topology		🗙 Registry Setup	¥ UCSM Common	R Actorete	Servers and	Roles					
ber Administration		Domain Name : *									0
		Enter Domain Name									
		HTTP Proxy :				HTTPs	moxy :				
		Enter HTTP Proxy				Enter	HTTPS Proxy				
		IP Tables on Manager	nent Poda :	• = +	NTP Server : *		• = +	Domain Name Sen	wer : *	0	+
		P Address	× ,	Action ~	NTP server		* Action *	DNS server		 Action 	*
		14 4 1			H 4 1	1		14 4 1	11 1 1		
		Networks : *									+
		 Van 	" Segnent "	Subnet	* Subnet Pv6	* Gateway	Gateway Pv6	* Pool	Pool lov6	 Action 	Ψ
			cimc							/	×
			api							/	×
			management/provis							/	×
			tenant							/	×
			tenant storage							;	

0.2018 C	1000	initi/or	15 0	1 Bones	C ART	rights	10540	NRBID.
Citto	VALUE	Inified	Man	ageme	in W	rokon	22	2

Name	Description
Domain Name field	Enter the domain name. (Mandatory)
HTTP Proxy Server field	If your configuration uses an HTTP proxy server, enter the IP address of the server.
HTTPS Proxy Server field	If your configuration uses an HTTPS proxy server, enter the IP address of the server.
IP Tables on Management Pods	Specifies the list of IP Address with Mask.
NTP Servers field	Enter a maximum of four and minimum of one IPv4 and/or IPv6 addresses in the table.
Domain Name Servers field	Enter a maximum of three and minimum of one IPv4 and/or IPV6 addresses.

Name	Description
Networks table	

Description			
Networks you can either c all or click edit icon for ea details.			
table.	You can add, edit, or delete network information in the table.		
Edit Network			
VLAN: * Enter VLAN	•		
Segment : *			
None Soliticitid • Subnet : *			
Enter Subnet			
PV6 Subnet : Enter Subnet PV6			
Gateway *			
Enter Canteway Address IPv6 Gateway 1			
Enter Galeway Address((PvII)			
POSE : * Invalues poor anges should be somme approximat Enter IP POCE	•		
IPv6 Pool : (Hotipin and require about the corrers approximat	•		
Enter IPv6 Pool			
table.	new entries (networks) to the		
Specify the following Networks dialog:	fields in the Edit Entry to		
	fields in the Edit Entry to Description		
Networks dialog:			
Networks dialog: Name	Description		
Networks dialog:	Description Enter the VLAN ID. For Segment - Provider, the		
Networks dialog: Name VLAN field	DescriptionEnter the VLAN ID.For Segment - Provider, the VLAN ID value is 'none'.When you add/edit new segment then following segments types are available in the form of dropdown list and you can		
Networks dialog: Name VLAN field	Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is 'none'. When you add/edit new segment then following segments types are available in the form of dropdown list and you can select only one.		
Networks dialog: Name VLAN field	Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is 'none'. When you add/edit new segment then following segments types are available in the form of dropdown list and you can select only one. • API		

Name	Description	
		• External
		• Provider
		• ACIINFRA
		Note Aciinfra segment is available only when ACI/VLAN tenant type is selected) Depending upon the segment some of the entries below are not needed. Please refer to the example file in openstack-configs dir for details.
	Subnet field	Enter the IPv4 address for the subnet.
	IPv6 Subnet field	Enter IPv6 address. This field will be available only for Management provision and API
	Gateway field	Enter the IPv4 address for the Gateway.
	Gateway IPv6 field	Enter the IPv6 address for the gateway. This will support for API and management provision.
	Pool field	Enter the pool information in the required format, for example: 101.1.5-101.1.10,102.1.5-102.1.10
		This field is available only for the Mgmt/Provision, Storage, and Tenant segments.
	IPv6 Pool field	Enter the pool information in the required format. For example: 101.1.5-101.1.10,102.1.5-102.1.10

Name	Description
	Click Save.

e. On the Servers and Roles page of the Cisco VIM Suite wizard, a pre-populated table filled with Roles : Control, Compute and Block Storage (Only if CEPH Dedicated is selected in Blueprint Initial Setup is available.

entooerd	3 4	Create Blueprint con	leuration							See Form Office	nindation	Ces
e-initial	_	ereere oneeprint con	-Berneren									
Bueprint Setup Bueprint Management												
-mail		Buspert Initial Setup PR	stol Setar Open	Stock Setup								
	2	K Repary Setup	CIMC Common	Networking	· ·							
w Topology			-									
User Administration	1	Server User Name								W SROV VFS		
		root			× 110	NK Suppo	C)	D CHILL VIC HIM	- SRIOV			
		Disible Hypertreading										
		COBBLER										
		Cubbler Timeout		Block Storage Kickstart *				•				
		15			activity and increasing the							
		Control Kokulart *		Compute Kolatert*								0
		903-0-310-0-series x8		 active and -channels was 								
		Server Host Password *	0									
		four favor vot Passed										
		Server and Roles										
												• •
		Server Name	CMC P	" CIMC User name "	CIMC Password	Fack E		Refe	Management IP	" Management Pu6	Actio	•
								0040101			1	*
								001010			1	
								control			1	*
								compute			1	
								condense			1	<u> </u>
		14 4 1 21										

Note If you choose mechanism driver as OVS or ACI, VM_HUGEPAGE_PERCENTAGE field column is available for compute nodes, where you can fill values from 0 to 100%, when NFV_HOSTS: ALL is chosen. Also, option of NIC Level Redundancy appears only when Intel Nic Support is set to true. This is applicable only in the case of M5 based pods.

Name	Description
Server User Name field	Enter the username of the server.
Disable Hyperthreading	Default value is false. You can set it as true or false.

Name	Description				
Cobbler	Enter the Cobbler details in th	e following fields:			
	Name	Description			
	Cobbler Timeout field	The default value is 45 min.			
		This is an optional parameter. Timeout is displayed in minutes, and its value ranges from 30 to 120.			
	Block Storage Kickstart field	Kickstart file for Storage Node.			
	Admin Password Hash field	Enter the Admin Password. Password should be Alphanumeric. Password should contain minimum 8 characters and maximum of 32 characters.			
	Cobbler Username field	Enter the cobbler username to access the cobbler server.			
	Control Kickstart field	Kickstart file for Control Node.			
	Compute Kickstart field	Kickstart file for Compute Node.			
	Cobbler Admin Username field	Enter the admin username of the Cobbler.			

Name		Description
Add E	ntry to Servers and Roles	
Note	when Pod type micro is selected then all the three servers will be associated with control, compute and block storage role.	
For Ex	ample:	
Roles		
• Bl	lock Storage	
	• -Server 1	
	• -Server 2	
	• -Server 3	
• Ce	ontrol	
	• -Server 1	
	• -Server 2	
	• -Server 3	
• Ce	ompute	
	• -Server 1	
	• -Server 2	
	• -Server 3	
Note	When Pod type UMHC is selected then auto ToR configuration is not supported and the ToR info at server and roles level is not allowed to be entered.	

Name	Description			
	Click Edit or + to add a new s	server and role to the table.		
	optional field VM_HUGEPAG when compute role is chosen; NFV_HOSTS is set to ALL; I	If mechanism driver is either OVS or ACI, an additional optional field VM_HUGEPAGE_PERCENTAGE is show when compute role is chosen; This option is only valid whe NFV_HOSTS is set to ALL; If no value is entered then th global value of VM_HUGEPAGE_PERCENTAGE is use Server And Roles		
	Server Name *	0		
	VIC Slot			
	Enter VIC Slot			
	CIMC IP *	0		
	Enter CIMC IP Address			
	CIMC User Name			
	Enter CIMC Usemame			
	CIMC Password	0		
	Enter CIMC Password			
	Rack ID *	Θ		
	Enter Rack ID			
	Role *			
	Management IP Enter Management IP Address	U		
	Management IPv6	0		
	Enter Management IPv6 Address			
	Save Cancel	Entry the name of the server.		
	Rack ID field	The rack ID for the server.		
	VIC Slot field	Enter a VIC Slot.		
	CIMC IP field	Enter a IP address.		
	CIMC Username field	Enter a Username.		
	CIMC Password field	Enter a Password for CIMC.		
	Select the Role from the drop down list	Choose Control or Compute or Block Storage from the drop-down list. If Podtype is fullon and selected role type is Block storage, an		

I

Name	Description				
		additional field Osd_disk_type is displayed where you can choose either HDD or SSD.			
	Management IP	It is an optional field but if provided for one Server then it is mandatory to provide it for other Servers as well.			
	Management IPv6	Routable and valid IPv6 address. It is an optional field but if provided for one server then it is mandatory for all other servers as well.			
	BGP speaker addressees	Optional, only when NETWORK_OPTIONS is vxlan network, for controller node only, IP belongs to the vxlan-tenant network but not part of the pool.			
Click Save or Add .	On clicking Save or Add all and Roles gets saved.	information related to Servers			
If Configure ToR checkbox is True with at-least one switch detail, these fields will be displayed for each server and this is similar to DP Tor: Port Channel and Switch Name (Mandatory if Configure ToR is true)	 Port Channel field Switch Name field Switch Port Info field 	 Enter the port channel input. Enter the switch name. Enter the switch port information. 			
DP ToR (Only for Control and Compute) : Mandatory if Intel NIC and Configure TOR is True.	 Port Channel field Switch Name field Switch Port Info field 	 Enter the port channel input. Enter the switch name. Enter the switch port information. 			
SRIOV TOR INFO (Only for Compute Nodes). It is mandatory in server and roles if Intel NIC and Configure TOR is True. with TOR TYPE Nexus. For TOR TYPE NCS-5500 these fields are optional Switch Name (Mandatory if Configure ToR is true). This field appears only when Intel NIC support is true, as Auto TOR config is not supported in VIC_NIC combo	Switch Name field Switch Port Info field	 Enter the switch name. Enter the switch port information. 			

L

Name	Description
Intel SRIOV VFS (valid for Intel NIC testbeds) and can be integer.	For SRIOV support for Intel NIC. By Default, SRIOV support is disabled. To enable, define a value in the range # * 1-32 when INTEL_NIC_SUPPORT is set True (X710 Max VFs = 32) # * 1-63 when CISCO_VIC_INTEL_SRIOV is set True (X520 Max VFs = 63)
INTEL_SRIOV_PHYS_PORTS (valid for Intel NIC test beds) and can be of value 2 or 4 (default is 2)	In some cases the # of Physical SRIOV port needed is 4; to meet that requirement, define the following: # this is optional, if nothing is defined code will assume it to be 2; the only 2 integer values this parameter # takes is 2 or 4 and is true when INTEL_NIC_SUPPORT is True and INTEL_SRIOV_VFS is valid For NCS-5500 this value is set to 4 and is non-editable.
Click Save or Add .	If all mandatory fields are filled click Save or Add to add information on Servers and Roles.
Disable Hyperthreading	Default value is false. You can set it as true or false.
Click Save	

Note Maximum two ToR info needs to be configured for each connection type on each node (control, compute and block_storage node).

- **Note** If pod type UMHC is selected then CISCO_VIC_INTEL_SRIOV is enabled to be TRUE. CISCO_VIC_INTEL_SRIOV is also supported on Micro pod with expanded computes
- **Note** For Tenant type **ACI/VLAN**, port channel for each ToR port will not be available in servers and roles, as APIC will automatically assign port-channel numbers. Also, for ACI in full on mode you can select Intel NIC Support in the "Servers and Roles" section.
- f. Click ToR Switch checkbox in Blueprint Initial Setup to enable the TOR SWITCH configuration page. It is an Optional section in Blueprint Setup but once all the fields are filled in then it will become a part of the Blueprint.

cisco VIM Unified Ma		10.00 X M	epar 🔘 v		
nhourd		Create Blueprint configuration		Save Form Offline Vol	daton Dear
Bueprint Setup Bueprint Management st-Install	4	Biurprint Initial Senue Physical Senue Operations Senue X Beginny Senue X C&XC Common X Networking X Serve	ers and Roles X The Search		
View Topology Pod User Administration	1	Configure 10R Terfleriton Information * Hosthame * UserName * Persecond * 50H IP * 50N Nem	" VPC Readles" VPC Donein " VPC peer p.," VPC peer V.,"	Bil mont pp." - Bil mont P" - Ar	1 +
		(H)(K) 1 /1 (F)(H)			

	92319 Osco anti/or ma attitutes. At rights resorted. Circo VMI Unified Management Vensor; 2.2.2				
Name		Descri	Description		
Config Note	ToR optional checkbox. If UMHC is selected as podtype,	Enablin false to	ng this checkbox, changes the configure ToR section from true.		
	configure TOR is not allowed.	Note	Configure tor is true then ToR switch info maps in servers		

Name	Description
ToR Switch Information mandatory table if you want to enter ToR information.	

ame	Description	
	Click (+) to add information	n for ToR Switch.
	Hostname *	0
	Enter Switch Hostname	
	Username *	0
	Enter Switch Username	
	Password * Enter Password	0
	SSH-IP • Enter IP Address	0
	SSN Num	0
	Enter SSN Num	
	VPC Peer Keepalive	0
	Enter IP Address	
	VPC Domain	0
	Enter VPC Domain	
	VPC Peer Port Info	0
	Enter VPC Port	
	VPC Peer VLAN Info	0
	Enter VPC VLAN Info	
	BR Management Port Info	0
	Enter BR Port Info	
	BR Management PO Info	0
	Enter BR PO Info	
	Name	Description
	Name	ToR switch name.
	Username	ToR switch username.
	Password	ToR switch password.
	SSH IP	ToR switch SSH IP.
	SSN Num	ToR switch ssn num.
	VPC Peer Keepalive	Peer Management IP. You cannot define if there is no pee

ame Description	
	peer.
VPC Peer Port Info	Interface for vpc peer ports.
VPC Peer VLAN Info	VLAN ids for vpc peer ports (optional).
BR Management Port Info	Management interface of build node.
BR Management PO Info	Port channel number for management interface of build node.
BR Management VLAN info	VLAN ID for management interface of build node (access).
For C Series platform type, Tenant Type is VPP/VLAN and Pod Type is either fullon or Micro, an additional choice will be provided to select the TOR Type. If selected TOR type is NCS-5500, then user can configure splitter cable parameters.	
	VPC Peer Port Info VPC Peer VLAN Info BR Management Port Info BR Management PO Info BR Management VLAN info For C Series platform type, Tena Type is either fullon or Micro, a provided to select the TOR Type

Note When tenant type ACI/VLAN is selected, the TOR switch information table differs and is mandatory.

Name		Description Enabling this checkbox, changes the configure ToR section from false to true.		
Configure ToR optional checkbox.NoteIf UMHC is selected as podtype,				
	configure TOR is not allowed.	Note	Configure tor is true then ToR switch info maps in servers	

Name	Description
ToR Switch Information mandatory table if you want to enter ToR information.	

Name	Description	Description		
	Click (+) to add information	for ToR Switch.		
	Switch Details			
	Hostname *	0		
	Enter Switch Hostname			
	Username *	0		
	Enter Switch Username			
	Password *	0		
	Enter Password			
	SSH-IP *	0		
	Enter IP Address			
	SSN Num	0		
	Enter SSN Num			
	VPC Peer Keepalive	0		
	Enter IP Address			
	VPC Domain	0		
	Enter VPC Domain			
	VPC Peer Port Info	0		
	Enter VPC Port			
	VPC Peer VLAN Info	Θ		
	Enter VPC VLAN Info			
	BR Management Port Info	0		
	Enter BR Port Info			
	BR Management PO Info	0		
	Enter BR PO Info			
	Save Cancel	Description		
	Name	ToR switch name.		
	Username	ToR switch username.		
	Password	ToR switch password.		
	SSH IP	ToR switch SSH IP.		
	SSN Num	ToR switch ssn num.		
	VPC Peer Keepalive	Peer Management IP. You cannot define if there is no pee		
	VPC Domain	Cannot define if there is no		

Name Description	
	peer.
VPC Peer Port Info	Interface for vpc peer ports.
VPC Peer VLAN Info	VLAN ids for vpc peer ports (optional).
BR Management Port Info	Management interface of build node.
BR Management PO Info	Port channel number for management interface of build node.
BR Management VLAN info	VLAN id for management interface of build node (access)
	VPC Peer Port Info VPC Peer VLAN Info BR Management Port Info BR Management PO Info

Note When the Tenant type ACI/VLAN is selected, the ToR switch information table differs and is mandatory.

	Description	
Configure ToR	Is not checked, as by default	ACI will configure the ToRs
	Switch Details	
	Hostname *	0
	Enter Switch Hostname	
	VPC Peer Keepalive *	0
	Enter IP Address	
	VPC Domain *	0
	Enter VPC Domain	
	BR Management Port Info	0
	Enter BR Port Info	
	Node ID *	0
	Enter Node ID	5. S. S.
	Swe Cancel Host Name VPC Peer keep alive	ToR switch name. Enter Peer must be exist pair.
	VPC Domain	Enter an integer.
	BR management port info	Enter BR management port info eg. Eth1/19 ,atleast one pair to be exist.
	Enter Node ID	Entered integer must be unique.

Note If TOR_TYPE is selected as NCS-5500, the TOR switch information table differs and is mandatory.

Name		Descri	ption
Configu Note	Ire ToR optional checkbox If NSC-5500 is selected as TOR_TYPE, configure TOR is set as mandatory.		ng this checkbox, changes the configure ToR from false to true. Configure TOR is true then ToR switchinfo maps in servers.

Name	Description
If you want to enter NCS details fill in the NCS-5500 Information table.	

Description	
Click (+) to add inform Switch Details	nation for NCS-5500 Switch.
Hostname *	0
Enter Switch Hostname	
Username *	0
Enter Switch Username	
Password *	0
Enter Password	
SSH-IP *	0
Enter IP Address	
VPC Peer Keepalive	0
Enter IP Address	1
VPC Peer Port Info	0
Enter VPC Port	Ť
VPC Peer Port Address	9
Enter VPC Port Address	· · · · · ·
	•
Enter ISIS Loopback Address	· · · · ·
ISIS Net Entity Title	•
Enter ISIS net entity title	
ISIS Prefix SID	•
Enter ISIS Prefix SID	
BR Management Port Info	0
Enter BR Port Info	
BR Management PO Info	0
Save Cancel	
Name	Description
Name	Enter the NCS-5500 hostname.
User Name	Enter the NCS-5500 username.
Password	Enter the NCS-5500 password.
SSH IP	Enter the NCS-5500 ssh II
550 11	Address.

ame Description	
Name	Description
BR Management PO Info	Port channel number for management interface of build node.
BR Management VLAN info	VLAN id for management interface of build node (access).
VPC Peer Port Info	Interface for vpc peer ports.
VPC Peer Port Address	Address for ISIS exchange.
ISIS Loopback Interface address	ISIS loopack IP Address.
ISIS net entity title	Enter a String.
ISIS prefix SID	Integer between 16000 to 1048575.
	Name BR Management PO Info BR Management VLAN info VPC Peer Port Info VPC Peer Port Address ISIS Loopback Interface address ISIS net entity title

When TOR-TYPE selected as NCS-5500 and 2 NCS-5500 are configured it is mandatory to configure MULTI_SEGMENT_ROUTING_INFO

Name	Description
BGP AS Number field	Integer between 1 to 65535.
ISIS Area Tagfield	A valid string.
Loopback Interface namefield	Loopback Interface name.
API bundle IDfield	Integer between 1 to 65535.
API bridge domain field	String (Optional, only needed when br_api of mgmt node is also going through NCS-5500; this item and api_bundle_id are mutually exclusive).
EXT bridge domain field	A valid string (user pre-provisions physical, bundle interface, sub-interface and external BD for external uplink and provides external BD info setup_data).

g. Click NFVI Monitoring checkbox in Blueprint Initial Setup to enable the NFVI Monitoring configuration tab.

s mail Create Elleprint Configuration Freed Biogrammer Freed Bi	inter Image: Second S	cisco VIM Unified Mana	ement Colort 10.201162	uu 🔍 Y	Role: Fall-Pod-Access User ID: rohashar
Stand Crede Blaghtin Configuration Reparts lang </td <td>and Catele Bluepoint Configuration Barget Barget</td> <td>shboard</td> <td></td> <td></td> <td></td>	and Catele Bluepoint Configuration Barget	shboard			
Buyer Margeman Bayer Margeman <td>New Coll Areas Taylor A region for for the for</td> <td>a lasted</td> <td>Create Blueprint configuration</td> <td></td> <td>Save Form Offline Validation Cloar</td>	New Coll Areas Taylor A region for for the for	a lasted	Create Blueprint configuration		Save Form Offline Validation Cloar
Register Left for Support Left for Suppo	harpen langen lange harpen langen lan				
ne rate data da la construir de la construir d	tandar Tandar MARAMENANNA ARA ANDERSANNA ARA ANDERSANNA A				
ne Typegy	Transformer Annotantication of a standing o	an-instali	Endprint Heat Setup		
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A data d' " Adata d' Adata d	A data D * A data	ew Topology			
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Name	Description
Admin IP	IP Address of Control Center VM
Management VIP	VIP for ceilometer/dispatcher to use, must be unique across VIM Pod
Host Name	Hostname of Collector VM
Password	Password of Collector VM
CCUSER Password	Password of CCUSER
Admin IP	SSH IP of Collector VM
Management IP	Management IP of Collector VM

Name	Description
Collector ToR Connections	1. Click on (+) icon to Add Collector ToR Connections
	2. Select the ToR switches from list to add the information.
	3. It is optional and available for ToR type NCS-5500
	 For now, it supports adding only one Collector ToR Connection
	Add Collector Tor Connections
	Select To swhich for connections PeterForthomanane PeterForthomanane PeterForthomanane PeterForthomanane PeterForthomanane Sevent Cauced
	Port Channel Enter port channel.
	Switch - {torSwitch-hostname}Enter port number, For example, eth1/15.
	Click Save
Rabbit MQ User Name	Enter Rabbit MQ username.

h. Click CVIMMON checkbox in Blueprint Initial Setup to enable the CVIMMON configuration tab.

are prospinited	nfiguration				Save	C
eprint Initial Setup	hysical Setup	OpenStack Set	φ			
X Registry Setup		ommon X	Networking	X Servers and Roles	V CYMMON	
Enable R						
Polling Intervals						
Polling Intervals		1	m			0
11.05.014/2.52		t 30	m 5			0 0 0

CVIM-MON is a built-in infrastructure monitoring service based on telegraf/prometheus/grafana.

When enabled, the telegraf service will be deployed on every node on the pod to capture infrastructure level stats (CPU, memory, network, containers, and so on.) and a Prometheus server will be installed on the management node to poll for these stats and store them in its time series database. The statistics can then be viewed using the grafana server that is accessible on the management node at port 3000 (password protected).

There are three levels of polling intervals which are used by different telegraf plugins:

• Low frequency interval is used to collect system level metrics like cpu, memory.

- Medium frequency interval is used to collect docker metrics.
- High frequency interval is used to collect rabbitmq metrics.

Defining polling intervals in setup data is optional. If not defined, the default values are used.

CVIM-MON is mutually exclusive to NFVIMON.

PODNAME is required, when CVIM-MON is enabled.

Name	Description
Enable	Default is False
Polling Intervals	
Low frequency	<integer (s="" following="" h)="" m="" sign="" time="" with=""> # min of 1 minute (1m) if not defined defaults to 1m, also it needs to be higher than medium interval.</integer>
Medium frequency	<integer (s="" following="" h)="" m="" sign="" time="" with=""> # min of 30 seconds (30s) if not defined defaults to 30s, also it needs to be higher than high interval.</integer>
High frequency	<integer (s="" following="" h)="" m="" sign="" time="" with=""> # min of 10 seconds (10s) if not defined defaults to 10s.</integer>

i. Click **OpenStack Setup** Tab to advance to the **OpenStack Setup** Configuration page. On the **OpenStack Setup** Configuration page of the Cisco VIM Insight wizard, complete the following fields:

I

Name	Description	Description		
HA Proxy	Fill in the following details:	Fill in the following details:		
	Create Blueprint configuration			
	Diveprint Initial Setup Physical Setup OpenOtack	Setup		
	🗙 HA Pravy 🗸 Keystone 🗙 Neutri	an 🔪 🛩 CEPH 🔷 🛩 Glance 🔷	Cinder	
	External VIP Address *	6		
	Enter IP Address		Enter IP Address	
	Virtual Router ID * Enter Virtual Router ID	0	Enternal VIP Address *	
	Internal VP IPv6 Address	0		
	Enter IPv6 Address		1900	
	Futow at VID Address Cald	Enter ID address of F	utomal	
	External VIP Address field	Enter IP address of E: VIP.	xternal	
	External VIP Address IPv6 field	Enter IPv6 address of VIP.	External	
	Virtual Router ID field	Enter the Router ID f	or HA.	
	Internal VIP Address IPv6 field	Enter IPv6 address of IP.	Internal	
	Internal VIP Address field	Enter IP address of In VIP.	iternal	
Keystone	Mandatory fields are pre-popul	ated.		
	Create Blueprint configuration		'	
	Shupprint Initial Setup Physical Setup OpenStack Setup			
	🗶 HA Prony 💉 Krystow 🗶 Neutron	V CEPH V Giance V Cinder		
	Admin Username *	Admin Ter admin	sant Name *	
		2010		
	Admin User Name	admin.		
	Admin Tenant Name	admin.		

Name	Description
LDAP	

I

ame	Description		
	LDAP enable checkboxwhich b	by default is false , if LDAP is	
	enabled on keystone.		
	Create Blueprint configuration		
	🗶 HA Prosy 🗸 Keystone 🗙 Neutron	🗸 CEHI 🗸 🗸 Gance 🗸 Cinder 🔪 🕱 LDAP	
	Domain Name *	Object Class for Users *	
	Enter Comain specific name	Enter objectClass for Users	
	Object Class for Groups *	Domain Name Tree for Users Enter DV tree for Users	
	Enter objectiClass for Groups		
	Domain Name Tines for Groups * Enter DN tree for Groups	Suffix for Domein Name * Enter suffix for Div	
	URL *	O Domain Name of bind user *	
	Enter URL	Ermer Div of bind user	
	Password *	O User Filter *	
	Enter Password	Enter User Filter	
	User ID Attribute *	O User Name Attribute *	
	Enter User Id Attribute	Enter User Name Attribute	
	User Mail Attribute	O Group Name Attribute *	
	Enter User Mail Annbure	Enter Group Name Attribute	
	Domain Name field	Enter name for Domain name.	
	Object Class for Users field	Enter a string as input.	
	Object Class for Groups field	Enter a string.	
	Domain Name Tree for Users field	s Enter a string.	
	Domain Name Tree for Groups field	Enter a string.	
	Suffix for Domain Name field	Enter a string.	
	URL field	Enter a URL with ending port number.	
	Domain Name of Bind User field	Enter a string.	
	Password field	Enter Password as string format.	
	User Filter field	Enter filter name as string.	
	User ID Attribute field	Enter a string.	
	User Name Attribute field	Enter a string.	
	User Mail Attribute field	Enter a string.	

Name	Description	
	Group Name Attribute field	Enter a string.

Name	Description
Neutron	

I

e	Description	Description	
	Neutron fields would change or Type Selection from Blueprint options available for Neutron for	Initial Setup. Following are th	
	Create Blueprint configuration		
	Brueprint Initial Serup Physical Serup OpenStack Setup		
	🗙 HA Prony 🖌 Keystone 🗙 Newson	🗸 CEPH 🗸 Gance 🗸 Cinder 🗙 LDV	
	Tenant Network Type *	Mechanism Drivers	
	VLAN	• vpp	
	NPV Hosts *	Tenant VLAN Ranger	
	Compute Name -	Enter Tenant VLAN	
		Provider VLAN Rang Enter Provider VLA	
	Enable Junto Frames		
	Tenant Network Type field	Auto Filled based on the Tenar Network Type selected in the Blueprint Initial Setup page.	
	Mechanism Drivers field	Auto Filled based on the Tenar Network Type selected in Blueprint Initial Setup page.	
	NFV Hosts field	Auto filled with the Compute you added in Server and Role	
		If you select All in this section NFV_HOSTS: ALL will be added to the Blueprint or you can select one particular compute. For example:	
		NFV_HOSTS: compute-server-1, compute-server-2.	
	Tenant VLAN Ranges field	List of ranges separated by comma form start:end.	
	Provider VLAN Ranges field	List of ranges separated by comma form start:end.	
	VM Hugh Page Size (available for NFV_HOSTS option) field	2M or 1G (optional, defaults 2M)	

Name	Description	
	VSWITCH_WORKER_PROFILE	Allowed only for VPP
		Available options are:
		 numa_zero: The reserved cores always reside in NUMA node 0. Even : The reserved cores are evenly distributed across all NUMA
	NR_RESERVED_VSWITCH_PCORES	Allowed only for VPP Number of cores associated to VPP, defaults to 2. Takes value of 2 through 6.
	Enable Jumbo Frames field	Enable the checkbox
	For Tenant Network Type Linux same but Tenant VLAN Range	

Name	Description
СЕРН	

Save For

I

Name	Des	escription		
	1.	1. When Object Stor blueprint initial setup	age Backend is selected p.	d Central in
		Create Blueprint configuration		I
		Burprint Initial Setup Physical Setup Op	enőlteck Setup	
		🗙 HA Proxy 🗸 Keystone 🗧	x Nextron X Gance X	Cinder
		Ceph Mode *		Cluster ID *
		Central Monitor Host *		Enter Cluster ID Monitor Members *
		Enter Monitor Host for CEPH		Enter Montor Members for CEPH
		Secret UUD * Errer Secret UUD for CEPH		Nova Boot From Local
		NOVA RED POOL *		CEPHINAT O
				1
		CEPH Mode	By default Central.	
		Cluster ID	Enter Cluster ID.	
		Monitor Host	Enter Monitor Host fo	
		Monitor Members	Enter Monitor Membe	
		Secret UUID	Enter Secret UUID fo	
		NOVA Boot from	Drop down selection. CEPH or local.	You can choose
		NOVA RBD POOL	Enter NOVA RBD Po vms)	ol (default's to
		CEPH NAT	Optional, needed for C when mgmt network i	
	2.	When Object Storag blueprint initial setup	e Backend is selected I p.	Dedicated in
		Create Blueprint configuration		
		Breprit Initial Setup Physical Setup	erdhack Setup	
		🗙 HAProy 🔪 🖌 Keystone 🔰 🛪	e Neutron 🔪 🗸 CLINI 🗸 Clance 🗸	Cinder 🗙 LDAP
		Ceph Mode * Dedicated		Nova Boot Prom Local
		• CEPH Mode: By d	efault Dedicated.	
		• NOVA Boot: From CEPH or local.	drop down selection y	ou can choose
	3.	When Object Storage initial setup.	Backend is selected Ne	tApp in blueprint

Name	Description
	Create Blueprint configuration Blueprint Initial Setup X NA Provy X Keystone X Neutron X CEPN X NetApp Ceph Mode * netapp
GLANCE	1. When Object Storage Backend is selected Central in blueprint initial setup. Create Blueprint configuration University with Serie Project Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie Coerditact Serie
	When Object Storage Backend is selected Dedicated in blueprint initial setup. Create Blueprint configuration
	Bueprint Initial Setup Physical Setup Openditack Setup X HA Proxy V Keystone V Neutron X CEPH X Gauss X Cinder
	Store Eacland * CDH *
	Note By default Populated for CEPH Dedicated with Store Backend value as CEPH.

le	Description	
DER	By default Populated for CEPH De value as CEPH .	edicated with Volume Driver
	Create Blueprint configuration	
	Burprint Initial Senap Physical Senap OpenStack Senap	
	🗙 HA Proxy 🗸 Keystone 🖌 Neutron 🗙 CEPH	X Gance X Croor
	Volume Onliver *	Cinder RBD Pool *
	CEPH	volumes
	Cinder Client Key*	
	Enter CNDER Client Key	
	2. When Object Storage Backend is blueprint initial setup.	s selected Dedicated in
		s selected Dedicated in
	blueprint initial setup.	s selected Dedicated in
	Create Blueprint configuration Blueprint Initial Setup Physical Setup OpenStack Setup	s selected Dedicated in
	Create Blueprint configuration Blueprint Initial Setup Physical Setup OpenStack Setup	
	Blueprint initial setup. Create Blueprint configuration Blueprint Initial Setup Physical Setup Y HA Proxy Keystone Neutron	
	Create Blueprint configuration Blueprint Initial Setup Physical Setup K HA Proxy Keystone Neutron K Volume Diver*	CEPH X Glance X Conder

Name	Description
VMTP optional section, this will be visible only if VMTP is selected from Blueprint Initial Setup. For VTS tenant type Provider network is only supported.	

Description	
Check one of the check box	xes to specify a VMTP network:
Provider Network	
External Network	
For the Browider Notwork	complete the following:
For the Provider Network	complete the following:
Create Blueprint configuration	
Bueprint Initial Senup Physical Senup OpenGlack Ser	he
🗙 HA Procy 🗸 Kaystone 🗙 Neutron	✓ CEPH ✓ Gance ✓ Cinder 🗙 WITP 🗶 LE
Provider Network 🗇	
Network Name *	O Subnet*
Enter Network Name	Enter Subret
Network IP Start *	O Network IP End *
Erner IP Address	Erner P Address
Network Geteway * Enter Network Gateway	ChtS Server* Enser DhtS Server
Segmentation ID *	Date on server
Enter Segmentation ID from 2 to 4004	·
Network Name field	Enter the name for the external network.
Subnet field	Enter the Subnet for Provider Network.
Network IP Start field	Enter the starting floating IPv4 address.
Network IP End field	Enter the ending floating IPv4 address.
Network Gatewayfield	Enter the IPv4 address for the Gateway.
DNS Server field	Enter the DNS server IPv4 address.
Segmentation ID field	Enter the segmentation ID.
For External Network fill	in the following details:
Formal National (1)	
External Network 0	
Network Name *	Subnet*
Enter Network Name	Enter Subnet
Network IP Start *	Network IP End *
Enter IP Address	Enter IP Address
Network Gateway	DNS Server*
Enter Network Gateway	Enter DNS Server

Name	Description		
	Network Name field	Enter the name for the external network.	
	IP Start field	Enter the starting floating IPv4 address.	
	IP End field	Enter the ending floating IPv4 address.	
	Gateway field	Enter the IPv4 address for the Gateway.	
	DNS Server field	Enter the DNS server IPv4 address.	
	Subnet field	Enter the Subnet for External Network.	
TLS optional section, this will be visible only if TLS is selected from Blueprint Initial Setup Page.	-		

Name	Description	
Under the OpenStack setup tab, Vim_admins tab will be visible only when Vim_admins is selected from the Optional Features & Services under the Blueprint Initial setup tab	 Following are the field descript Add Username, Password, non-root login. At least one Vim Admin n root login is false. 	
	Create Blueprint configuration	
	Blueprint Initial Setup Physical Setup	OpenStack Setup ✓ Neutron ★ CEPH ★ Glance ★ Cinder
	Username* Note: Remove empty records before validation	Password Public key
	Permit root login	
	User Name	Enter username for Vim Admin.
	Password	Password field. Admin hash password should always start with \$6.
	Public Key	Public key for vim admin should always start with 'ssh-rsa AAAA'

Name	Description	
SwiftStack optional section will be visible only if SwiftStack is selected from Blueprint Initial	Following are the options t	hat needs to be filled for SwiftStack:
Setup Page. SwiftStack is only supported with	Create Blueprint configuration	
KeyStonev2 . If you select Keystonev3 , swiftstack will not be available to configure.	Bueprint Initial Serup Physical Serup OpenStack Serup	
	🗙 HA.Prosy 🗸 Keystone 🗙 Neutron	V CEPH V Gance V Cinder X WITP V TLS
	Cluster End Point * Enter Cluster End Point P/Domain	Reseller Prefs Enter Reseller Prefs
	Admin User *	Admin Paseword *
	Enter Admin User name	Enter Password
	Admin Tenant *	O Protocol *
	Enter Admin Tenant name	Inp
	Cluster End Point	IP address of PAC (proxy-account-container) endpoint.
	Admin User	Admin user for swift to authenticate in keystone.
	Admin Tenant	The service tenant corresponding to the Account-Container used by Swiftstack.
	Reseller Prefix	Reseller_prefix as configured for Keysone Auth,AuthToken support in Swiftstack E.g KEY_
	Admin Password	swiftstack_admin_password
	Protocol	http or https

Name		Description				
APICINFO tab is available in Openstack setup, when the Tenant type ACI/VLAN is selected in blueprint initial setup. Note When ACI/VLAN is selected then ToR switch from initial setup is mandatory.		Name	Description			
		APIC Hosts field	Enter host input. Example: <ip1 host1>:[port] . max of 3, min of 1, not 2;</ip1 host1>			
		apic_username field	Enter a string format.			
		apic_password filed	Enter Password.			
	apic_system_id field	Enter input as string. Max length 8.				
		apic_resource_prefix field	Enter string max length 6.			
	apic_tep_address_ pool field	Allowed only 10.0.0/16				
	multiclass_address_pool field	Allowed only 225.0.0.0/15				
	apic_pod_id field	Enter integer(1- 65535)				
		apic_installer_tenant field	Enter String, max length 32			
		apic_installer_vrf field	Enter String, max length 32			
		api_l3out_network field	Enter String, max length 32			
VTS tab is available in Openstack setup, when Tenant Type is VTS/VLAN selected.		Name	Description			
If vts day	0 is enabled then SSH username and	VTS Day0 (checkbox)	True or false default is false.			
SSH password is mandatory. If SSH_username is input present then SSH	VTS User name	Enter as string does not contain special characters.				
password	l is mandatory vice-versa	VTS Password	Enter password			
		VTS NCS IP	Enter IP Address format.			
		VTC SSH Username	Enter a string			
		VTC SHH Password	Enter password			

j. For SolidFire, enter the following:

Name	Description

SolidFire is visible for configuration on day0 SolidFire is not allowed as a day-2 deployment option		Create Blueprint	configurati	on				
SolidFire is always available with CEPH.		Biveprint Initial Setup	Physical Sen	OpenStack Setup				
	>	🗙 на Ртоку	🖌 Keystore	✓ Nestron	🗸 арн	🖌 Glance	> ~	Cinder
		Cluster MVP *					0	Cluster SVIP
		172.23.105.217					-	10.3.3.53
		Admin Username *						Admin Pass
	11	Cluster MV ïeld	IP I	Management I	P of Soli	dFire clus	ter.	
		Cluster SVII	P field	Storage VIP o	of SolidF	ire cluster	:	
	1	Admin User	name	Admin user of	n SolidF	ire cluster		
	1	Admin Pass		Admin passw eluster.	ord on S	olidFire		

k. If **Syslog Export** or **NFVBENCH** is selected in **Blueprint Initial Setup** Page, then **Services Setup** page will be enabled for user to view. Following are the options under **Services Setup** Tab:

Name	Description							
Syslog Export	Following are the options for Syslog Settings:							
	User can add maximum of three entries.							
	To add new SysLog information, click on Add SysLog button, fill all the require information listed below and hit Save button.							
	Burgenie Instal Setup Physical Setup OpenStack Setup Services Setup							
	Systop Export O							
	Remote host "Protocol " Facility " Sevenity " Port " Clients " Action "							
	1.1.1.1 udp local5 debug 514 ELK X 22.2.2 udp local5 debug 514 ELK X							
	Remote Host Enter Syslog IP address.							
	Protocol Only UDP is supported.							
	Facility Defaults to local5.							
	Severity Defaults to debug.							
	Clients Defaults to ELK.							
	Port Defaults to 514 but can be modified by the User.							

Name	Description						
NFVBENCH	NFVBENCH enable checkbox by default isfalse.						
	Add ToR information c	onnect to Swi	tch:				
	Bueprint Initial Setup Physical Setup OpenD	lack Setup					
	V NOVERNOL						
	a Enable						
	Add for info connected to switch: Select YOR Switches *		Switch- 113-10037295-2 *	0			
	TOR Buildes		eth1/33,eth1/34				
	H H T ZI P H						
	NG Ports: INT1	•	INT2	0			
	1 NO Skit		2				
	2						
		ber. For Exam	the Switch name. nple: eth1/5 . VTEP VL : Enter 2 different VLA				
			onal input. Enter the 2 gagement node used for				
	NIC Slot: Optional input, should be in the range of 1-6, indicates which I to use in case there are multiple NICs. If nic_slot is defined, then nic_pot has to be defined and vice-versa.						
	Enable the checkbox to set it as True. By default, it is False .						

Step 4 Click **Offlinevalidation**, to initiate an offline validation of the Blueprint.

Step 5 Blueprint can also be created using an **Upload functionality**:

- In Blueprint Initial Setup.
- Click Browse in the blueprint initial setup.
- Select the YAML file you want to upload.
- Click Select button.
- Clicking on load button in the Insight UI Application. All the fields present in the YAML file would be uploaded to the respective fields in UI.
- Enter the name of the Blueprint (Make sure you enter unique name while saving Blueprints. There would be no two Blueprints with same name.)
- Click Offline Validation.
- If all the mandatory fields in the UI are populated, then Offline Validation of the Blueprint will start else a pop up would be visible which will inform which section of Blueprint Creation has a missing information error.

- On Validation Success of Blueprint Save Blueprint button will be enabled with Cancel button
- A pop up will be generated asking to initiate the deployment with **Blueprint Name** and the stages you need to run.

On Validation Failure of Blueprint Cancel button will be enabled.

Once the **Offlinevalidation** is successful, **Save** option will be enabled which will redirect you to the Blueprint Management Page.

The wizard advances to the Blueprint Management page. On the Blueprint Management page you can select the recently added valid Blueprint and click **Install** button which is disabled by default.

A pop up will be generated asking to initiate the deployment with Blueprint Name and the stages you need to run.

By default all stages are selected but you can also do an incremented install.

In case of Incremented Install you should select stages in the order. For Example: If you select **Validation Stage** then the 2nd stage Management Node Orchestration will be enabled. You cannot skip stages and run a deployment.

Once you click Proceed the Cloud Deployment would be initiated and the progress can be viewed from "Dashboard".

Note Once the Blueprint is in Active State, the Post-Install features listed in Navigation Bar will changed to Active stage.

Post Installation Features for Active Blueprint

This option is only available to a pod, which is successfully deployed. There are multiple sublinks available to manage the day-n operation of the pod. However, often Insight cross-launches the relevant services, through delegating the actual rendering to the individual services.

Monitoring the Pod

Cisco VIM uses ELK (elasticsearch, logstash and Kibana) to monitor the OpenStack services, by cross-launching the Kibana dashboard.

To cross launch Kibana, complete the following instructions:

Step 1 Login as POD User	Step 1	Login as P	I GOY	Jser.
--------------------------	--------	------------	-------	-------

- Step 2 Naviagte to POD.
- Step 3 Navigate to Post-install
- Step 4 Click Monitoring

The **Authentication Required** browser pop up is displayed.

- **Step 5** Enter the **username** as admin.
- Step 6 Enter the ELK_PASSWORD password obtained from /root/installer-<tagid>/openstack-configs/secrets.yaml in the management node. Kibana is launched in an I-Frame

Note Click **Click here to view Kibana logs in new tab** link to view Kibana Logs in a new tab.

Cross Launching Horizon

Horizon is the canonical implementation of Openstack's Dashboard, which provides a web based user interface to OpenStack services including Nova, Swift and, Keystone.

 Step 1
 In the Navigation pane, click Post-Install > Horizon.

 Step 2
 Click Click here to view Horizon logs in new tab.

 You will be redirected to Horizon landing page in a new tab.

NFVI Monitoring

NFVI monitoring is a Cross launch browser same as Horizon. NFVI monitoring link is available in the post install only if the setupdata has NFVI Monitoring configuration during the cloud deployment which basically pings the monitoring and checks status of **Collector VM1 Info** and **Collector VM2 Info**.

- Step 1 Login as POD User.
- **Step 2** Naviagte to **POD**.
- Step 3 Navigate to Post-install
- Step 4 Click Reconfigure.
- Step 5 Click NFVI Monitoring
- **Step 6** Click the link **Click here to view NFVI monitoring.**

You will be redirected to NFVI monitoring page

Run VMTP

VIM 2.0, provides an integrated data and control plan test tool (called VMTP).VMTP helps you to test the cloud at any given time.

Run VMTP is divided in two sections:

- **Results for Auto Run**: Auto run shows the results of VMTP which was run during the cloud deployment (Blueprint Installation).
- Results for Manual Run: To run VMTP on demand click Run VMTP.



Note If VMTP stage was skipped or not-run during Blueprint Installation, this section of POST Install gets disabled for the user.

Run CloudPulse

In VIM, we provide an integrated tool, called Cloud Pulse, that periodically checks the cloud services endpoint. The results of these tests are reflected under the Cloud Pulse link. You can also run these API endpoint tests on demand, and fetch the result of these tests by refreshing the table.

Endpoints Tests:

- 1. cinder_endpoint
- 2. glace_endpoint
- 3. keystone_endpoint
- 4. nova_endpoint
- 5. neutron_endpoint
- 6. all_endpoint_tests

Operator Tests:

- 1. rabbitmq_check
- 2. galera_check
- 3. ceph_check
- 4. node_check
- 5. docker_check
- 6. all_operator_tests

Run NFVbench

You can execute **Run NFV Bench** for **B**and**C** series Pod, through Cisco VIM Insight. On a pod running with Cisco VIM, click on the NFVbench link on the NAV-Menu.

You can run either fixed rate test or NDR/PDR test. As the settings and results for the test types differ, the options to run these tests are presented in two tabs, with its own settings and results.

NDR/PDR Test

Step 1 Log-in to CISCO VIM Insight.

- Step 2 In the Navigation pane, click Post-Install >Run NFV Bench.
- **Step 3** Click on NDR/PDR test and complete the following fields.

Name	Description		
Iteration Duration	Select duration from 10 to 60 sec. Default is 20 sec		
Frame Size	Select the correct frame size to run		

Name	Description		
	Click on Run NDR/PDR test. Once NDR/PDR test is finished it will display each type of test with its own settings and results.		

Fixed Rate Test

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- Step 1 Log in as POD User.
- **Step 2** Navigate to **POD**.
- Step 3 Navigate to Postinstall.
- Step 4 Click Run NFV Bench.
- **Step 5** Click Fixed rate test and complete the following fields.

Name	Description		
Rate	Rate: Select right configuration pps or bps from drop down-list and enter values:		
	For pps: minimum: 2500pps; maximum: 14500000pps (=14.5Mpps); default: 1000000pps (=1Mpps) For bps: minimum: 1400000bps; maximum: 1000000000bps (=10Gbps); default: 1000000000 (=1Gbps)		
Iteration Duration	Select duration from 10-60Sec. Default is 20sec.		
	Select duration from 10-60Sec. Default is 20sec.		
Frame Size	Select the right frame size(64,IMIX,1518) to run.		
Run Fixed Rate Test	Click Run Fixed Rate Test. Once Fixed rate test is finished, it displays each type of test with its own settings and results.		

POD Management

One of the key aspects of Cisco VIM is that it provides the ability for the admin to perform pod life-cycle management from a hardware and software perspective. Nodes of a given pod corrupts at times and VIM provides the ability to add, remove or replace nodes, based on the respective roles with some restrictions. Details of pod management will be listed in the admin guide, however as a summary the following operations are allowed on a running pod:

Step 1 Add or Remove Storage Nodes: You can add one node at a time, given that we run Ceph as a distributed storage offering.

Step 2 Add or Remove Computes Nodes: N-computes nodes can be replaced simultaneously; however at any given point, at least one compute node should be active.

Step 3 Replace Control Nodes: We do not support double fault scenarios, replacement of one controller at a time is supported.

System Update

As part of the lifecycle management of the cloud, VIM has the ability to bring in patches (bug fixes related to code, security, etc.), thereby providing the additional value of seamless cloud management from software perspective. Software update of the cloud is achieved by uploading a valid tar file following initiation of a System Update from the Insight as follows:

- Step 1 Login as POD User.
- **Step 2** Naviagte to **POD**.
- Step 3 Navigate to Post-install
- Step 4 Click System Update.
- Step 5 Click Openstack Password
- Step 6 Click Browse button.
- **Step 7** Select the valid tar file.
- **Step 8** Click **Open** > **Upload and Update**.

Message stating System Update has been initiated will be displayed. Logs front-ended by hyperlink would be visible in the section below before Update Logs to help see the progress of the update. During the software update, all other pod management activities will be disabled. Post-update, normal cloud management will commence.

Reconfiguring CIMC Password through Insight

Update the cimc_password in the CIMC-COMMON section, and/or the individual cimc_password for each server and then run the update password option.

To update a password, you need to follow the password rules:

- Must contain at least one lower case letter.
- Must contain at least one upper case letter.
- Must contain at least one digit between 0 to 9.
- One of these special characters !\$#@%^-_+=*&
- Your password has to be 8 to 14 characters long.

Before you begin

You must have a C-series pod up and running with Cisco VIM to reconfigure CIMC password.



Note

Reconfigure CIMC password section would be disabled if the pod is in failed state as indicated by ciscovim install-status.

- Step 1 Login as POD User.
- Step 2 Naviagte to POD.
- Step 3 Navigate to Post-install
- Step 4 Click Reconfigure.
- Step 5 Click Openstack Password

Name	Description	
CIMC_COMMON old Password	CIMC_COMMON old password field cannot be edited.	
CIMC-COMMON new Password	Enter new CIMC-COMMON password. Password should be alphanumeric according to the password rule.	
Click Update Password	Old CIMC-COMMON password will be updated with new CIMC-COMMON password.	

Reconfiguring OpenStack Password

Cisco VIM has been designed with security to accommodate users password policy.

There are two options to regenerate the Password:

- 1. Regenerate all passwords: Check the Regenerate all passwords checkbox and click Set Password. This automatically regenerates all passwords in alphanumeric format.
- 2. Regenerate single or more password: If you want to set a specific password for any service like Horizon's ADMIN_USER_PASSWORD you can add it by doing an inline edit. Double click field under Password and then enter the password which enables **Set Password**.

Note

During the reconfiguration of password, all other pod management activities are disabled. Postupdate, normal cloud management commences.

Reconfiguring OpenStack Services, TLS certs and ELK configurations

Cisco VIM supports the reconfiguration of OpenStack log level services, TLS certificates, and ELK configuration. Listed below are the steps to reconfigure the OpenStack and other services:

- Step 1 Login as POD User.
- **Step 2** Naviagte to **POD.**
- Step 3 Navigate to Post-install
- Step 4 Click Reconfigure OpenStack Config.
- **Step 5** Click on the specific item to be changed and updated; For TLS certificate it is the path to certificate location.

Step 6 Enter **Set Config** and the process will commence.

During the reconfiguration process, all other pod management activities will be disabled. Post-update, normal cloud management will commence.

Reconfiguring Optional Services

Cisco VIM offers optional services such as heat, NFVbench, CVIM-MON and so on, that can be enabled as post-pod deployment. Optional services can be un-configured as post-deployment in Cisco VIM feature set. These services can be enabled in one-shot or selectively. Listed below are the steps to enable optional services:

- **Step 1** Login as **POD User.**
- **Step 2** Naviagte to **POD**.
- Step 3 Navigate to Post-install
- Step 4 Click Reconfigure Optional Services.
- **Step 5** Choose the right service and update the fields with the right values.
- **Step 6** Enter **Reconfigure** to commence the process.

During the reconfiguration process, all other pod management activities will be disabled. Post-update, normal cloud management will commence. Once reconfigure is initiated than optional feature would be updated in active blueprint. If reconfigure of Optional Services fail in the time of reconfigure process then it is advised to contact CiscoTAC to resolve the situation through CLI.

Note All reconfigure operation feature contains repeated deployment true or false.

- Repeated re-deployment true Feature can be re-deployed again.
- Repeated re-deployment false- Deployment of feature allowed only once.

Deployment Status :

Optional Features	Repeated re-deployment Options
APICINFO	True
EXTERNAL_LB_VIP_FQDN	False
EXTERNAL_LB_VIP_TLS	False
INSTALL_MODE	True
LDAP	True
NETWORKING	True
NFVBENCH	False
PODNAME	False
PROVIDER_VLAN_RANGES	True

Optional Features	Repeated re-deployment Options
SWIFTSTACK	True
SYSLOG_EXPORT_SETTINGS	False
TENANT_VLAN_RANGES	True
TORSWITCHINFO	False
VIM_ADMINS	True
VMTP	False
VTS_PARAMETERS	False
AUTOBACKUP	,
	True
Heat	False
Ceilometer	False
HTTP Proxy Server	True
HTTPS Proxy Server	True
Enable TTY LOGGING	False
MGMTNODE_EXTAPI_REACH	False
Cobbler	True
SNMP	True

Pod User Administration

Cisco VIM Insight offers Users (Pod Admin(s) or Pod Users) to manage Users and roles associated with them.

Managing Users

To add new User

- Step 1 Click Login as POD User.
- Step 2 Navigate to POD User Administration.
- Step 3 Click Manage Users.
- Step 4 Click Add Users to add a new user.
- **Step 5** Complete the following fields in the Add Users page of the Cisco VIM Insight:

Field Name	Field Description
Email ID	Enter the Email ID of the User.
User Name	Enter the User Name if the User is new. If the User is already registered to the Insight the User-Name gets auto-populated.
Role	Select the Role from the drop-down list.

Step 6 Click Save.

Managing Roles

To create a new Role:

- Step 1 Click Log in as POD User.
- **Step 2** Navigate to **Pod User Administration** and click **Manage Roles**. By default you will see a full-pod-access role in the table.
- **Step 3** Click Add Role to create a new role.
- Step 4 Complete the following fields on the Add Roles page in Cisco VIM Insight:

Field Name	Field Description
Role	Enter the name of the role.
Description	Enter the description of the role.
Permission	Check the Permission checkbox to select the permission.

- **Step 5** Click **Save**. Once, the Blueprint is in an Active state all the permissions are same for C-series and B-series Pods other than Reconfigure CIMC Password which is missing for B-series Pod.
 - **Note** Permissions are divided in the granular level where viewing *Dashboard* is the default role that is added while creating a role.

Managing Root CA Certificate

You can update the CA Certificate during the registration of the POD. Once, logged in as POD User and if you have the permission to update the certificate you can view under POD User Administration>> Manage Root CA Certificate.

To update the Certificate:

- Step 1 Click Login as POD User
- Step 2 Navigate to POD User Administration>>Manage Root CA certificate.
- **Step 3** Click **Browse** and select the certificate that you want to upload.

Step 4 Click Upload.

- If the certificate is Invalid, and does not matches with the certificate on the management node located at (var/www/mercury/mercury-ca.crt) then Insight will revert the certificate which was working previously.
- If the Certificate is valid, Insight will run a management node health check and then update the certificate with the latest one.

Note The CA Certificate which is uploaded should be same as the one which is in the management node.