

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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- Pods, on page 2
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- Post Installation Features for Active Blueprint, on page 97

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: rohashar	••
• 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**:
 - 1. On the Blueprint Initial Setup pane of the Cisco VIM Insight, complete the following fields:

Dashboard		Create Blueprint	onfiguration	n			Save Form Offline Valida	tion Clear
Pre-Install Bueprint Setup								
Bueprint Setup Bueprint Management		Blueprint Initial Setup	Physical Setup	OpenStack Setup				
Post-Install	۰.	Blueprint Name: *				Platform Type: *		
view Topology		Enter Blueprint Nam	0			8-series		
		Tenant Network: *				POD Type *		0
Pod User Administration		LinuxBridge/VXLAN				Fullon		
		Object Storage Backs	nd *					
		Central						
		Optional Features &		ES_REMOTE_BACKUP		NFVI Monitoring Enable Esc Priv TORSwitch Information	Swiftstack	
		R Auto Backup		LDAP		U VMTP	U NETAPP_SUPPORT	
		E Keystone v3		III TLS				
		Import Existing YAM	fie					
				Browse	Load			

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 one of the following tenant network types: • Linuxbridge/VXLAN • OVS/VLAN		

Name	Description
Pod Type drop-down list	Choose one of the following pod types:
	• Fullon(By Default)
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, 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 CVIMMON 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.

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

cisco VM	Unified Managemer	11. Celiedt C	e.	Role: Full-Phot-Access 🔰 User 10: Introduct 🔹 🔷 🗸
Dashboard Pre-Install		Create Blueprint configuration		Save Form Office Weldelon Dear
Bueprint Setup				
Biveprint Manag	gement	Burprint Initial Setup Physical Setup OpenStack Setup		
Post-restal	*			
Vew Topology		X Regulary Servers and Ro	es	
Fod User Administra	ation c	Registry User Name *	Registry Password *	0
		Enter registry Username	Enter registry password	
		Registry Ernal *		
		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).
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.

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

ahaha CISCO	VIM Unified Managemen	ti Calkoft 10.2011/6.244	~		Balac Full-Pod-Access	User D: schedur	•
Dashboard Pre-Install		Create Blueprint configuration			Save Form Office	Weldation Crear	
Bueprint Bueprint Post-Install View Topolog	t Management	Buspret Initial Setup Physical Setup OpenStack Setup X Regulary Setup X LCOM Common X Retworking X Servers and Role					
Pod User Ad		User name *		Password *		0	
		UCBM P*	۰	Resource Prefix * Resource Prefix		۰	
		QOS Policy Type NPA		Max VII Count * 20		0	
		Enable VF Performance III	0	Enable Prov R PIN D		0	

Galor is calco and/or is a similarity. An ingres internet. Cinco VM Unified Management Vensor. 2.2.2			
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		

Name	Description
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.
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.

4. Click **Networking** to advance to the networking section of the Blueprint:

-install		Create Blueprint of	configuration					Save	Form Offine Validatio	-
Bueprint Setup	*	create biocpinite								
Bueprint Management		Biueprint Initial Setup	Physical Setup ComSta	a Setup						
-install	-	and a sub-		in prop						
Topology		🗙 Registry Setup	¥ UCSM Common	R Annuala	Servers and Ro	es				
ther Administration		Domain Name : *								0
		Enter Domain Name								
		HTTP Proxy :				HTTPs P	mowy :			
		Enter HTTP Proxy				Enter I	ct this Proxy			
		IP Tables on Manager	ment Pods :	• = +	NTP Server : *		• = +	Domain Name Server : *	0 8	+
		P Address	Ψ.	Action ~	NTP server		* Action *	DNS server	 Action 	÷.
		14 4 1	11 P P		H + 1 /1	F H		H + 1 /1 +	н	
		Networks *								+
		- Van	* Segnent *	Subnet	* Subnet Pv6	Gateway	* Gateway Pv6	· Pool · Pool		
			cime						/	×
			api						/	×
			management/provis						/	×
			tenant						/	×
										×

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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.

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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.
	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.
	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 either of All or click Edit icon for details.	ulated with segments. To add clear all the table using Delete each segment and fill in the te network information in the
Edit Network	
VLAN: * Enter VLAN Segment : *	0
Nove: Solociad + Subret : *	
Enter Subnet IPv6 Subnet :	
Enter Statuet IPv6 Gateway *	
Enter Ganeway Address Pv6 Gateway :	
Enter Gateway Address(PvK) Pool : * (nutper point anges should be comme apprended)	0
Enter IP Post IPv6 Post : (Notice and require shadd be come separated Enter IPv6 Post	•
• Click + to enter new	entries (networks) to the table.
• Click + to enter new	g fields in the Edit Entry to
 Click + to enter new Specify the followin Networks dialog box 	g fields in the Edit Entry to x.
 Click + to enter new Specify the followin Networks dialog box 	g fields in the Edit Entry to x. Description
 Click + to enter new Specify the followin Networks dialog box 	g fields in the Edit Entry to x. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always <i>none</i> .
Click + to enter new Specify the followin Networks dialog box Name VLAN field	g fields in the Edit Entry to x. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always <i>none</i> . You can select any one segment from the
Click + to enter new Specify the followin Networks dialog box Name VLAN field	g fields in the Edit Entry to x. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always <i>none</i> . You can select any one segment from the drop-down list.
Click + to enter new Specify the followin Networks dialog box Name VLAN field	g fields in the Edit Entry to x. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always <i>none</i> . You can select any one segment from the drop-down list. • API
Click + to enter new Specify the followin Networks dialog box Name VLAN field	g fields in the Edit Entry to x. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always <i>none</i> . You can select any one segment from the drop-down list. • API • Management/Provision
 Click + to enter new Specify the followin Networks dialog box Name VLAN field 	g fields in the Edit Entry to x. Description Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always <i>none</i> . You can select any one segment from the drop-down list. • API • Management/Provision • Tenant

 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: 101.1.5-101.1.10,102.1.5-102.1.10 This field is only available
	This field is only available for the Mgmt/Provision.
Click Save.	

5. 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.

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<pre>webded we data is not in the Riscopy out the Administration</pre>	VIM Unified	Management				Cals 10.3	0.116.244					lale: Full-Pod-Access		
Busperter Management a visual a visual <t< th=""><th></th><th>~</th><th>Create Bluep</th><th>rint configuration</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>we Form Offline V</th><th>andation</th><th>•</th></t<>		~	Create Bluep	rint configuration								we Form Offline V	andation	•
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n hotal			Response in the local division of	Photos Report	Constitute Salue									
Tapongy Lister Administration K Registry Setting	stat		ordepend and a lo	nip Priyson Secip	operation setup									
Server Name Server Type Rack ID Clearsis D Blade BD Rack unit D Rale Control Management P Management			× Registry	Senip 🗙 UCSM Co	mmon X	Networking	Servers and Roles							
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Control Kickstart* O Compute Kickstart* uts-to-and-c-terfies.ks • uts-to-and-c-terfies.ks Server Host Passeord* • • Enter Server Host Passeord* • • Server Name * Server Type * Rack ID * Chassis ID * Blade ID * Rack unit ID * Role * Management IP* * Management IP*, * V Blade • • • •			Cobbler Timeo	ut.				•	Block Storage Kicksta	· .				
Server Note Password* uttr-to-and-c-series ks Enter Server Note Rokes :* * * Server Name * Server Type * Rack ID * Chassis ID * Blade ID * Rack unit ID * Role * Management IP * Management IP * * Server Name * Server Type * Rack ID * Chassis ID * Blade ID * Rack unit ID * Role * Management IP * Management IP * * blade control			45						ucs-b-and-c-serie	5.85				,
scs-b-and-c-series.ks ucs-b-and-c-series.ks Server Host Password* or Exter Server Host Password* Image: Control Additional Additiona Additiona Additional Additional Additional Additiona Additiona			Control Kickata	n				0	Compute Kickstert *					
Citter Server Host Plassword Server and Roles : * ▲ Server Name * Server Type * Raok ID * Blade ID * Raok unit ID Role * Management IP* Management IP			ucs-b-and-	c-sedes.ks						s.ks				
Citter Server Host Plassword Server and Roles : * ▲ Server Name * Server Type * Raok ID * Blade ID * Raok unit ID Role * Management IP* Management IP			Samer Most Ro	* transm										
Server and Roles : * ▲ Server Type Raok ID Chassis ID Blade ID Rack unit ID Role Management IP* Management IP* *														
Server Name Server Type Rack ID Cheasis ID Blade ID Rack unit ID Role Management IP Management IP V Diade Diade Centrol Control														
V blade compol V blade compol			Server and Rol	es : " 🏠										4
blade control			Server N	iame " Server Type	* Rack ID	* Chessis ID	" Blade ID		" Rack unit ID '	Role	* Management IP	Management Pv.:	Action	
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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	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.

Name	Description
Add Entry to Servers and Roles	

Name	e Description		
		w server and role to the table.	
	Server And Roles		
	Server Name *	0	
	Enter Server Name		
	VIC Slot Enter VIC Slot		
	CIMC IP *	Θ	
	Enter CIMC IP Address		
	CIMC User Name		
	Enter CIMC Usemame		
	CIMC Password Enter CIMC Password	0	
	Rack ID *	0	
	Enter Rack ID		
	Role *		
	Management IP	0	
	Enter Management IP Address		
	Management IPv6	0	
	Enter Management IPv6 Address		
	Save Cancel	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	
	۱۱		

Name	Description	
		provided for one server then it is mandatory to provide details for other Servers as well.
	Management IPv6	Enter the Management IPv6 Address.
	Click Save.	

6. 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 VIM Un	nified Management		Calludt 0.200 THE 2446	Role: Full-Pool Access 🔰 User ID: Inhealter 🛛 🗳 🗸
Dushbrand Pre-Instal		Create Blueprint configuration		Save Form Offline Valdation Circar
Ruspitt Geop Buspite Mangers Post-Instal Vew Topology POd User Admensional	*	Burphite Initial Samp Physical Samp Operfloads Samp Registry Samp R CARC Common R Security S Configure IDA: Torfandup Information * Plantmann User Name Password SDH P I C I J J P PH	K Sovers and Ross R To back	Ê ↓ [™] Bit ngret po. [™] Bit ngret P [™] Action [™]
			o and/or fits affiliates. All regists reserved. If Unified Management Version: 2.2.2	
Name			Description	
Configu	re ToR op	tional checkbox.	Enabling this checkbox, changes from false to true.	the configure ToR section

Name	Description
ToR Switch Information mandatory table.	

Vame	Description	
	Click (+) to add information	on 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	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.	

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

diality VIM Unified P	/anagement		Calcoft 0.33.116.244		Note: Fall-Pod-Access User ID: rol	hashar
hboard						
-instal	-	Create Blueprint configuration			Save Form Offline Validation	Chear
Blueprint Setup						
Blueprint Masagement		Blueprint Initial Setup Physical Setup OpenStack Setup				
t-instali	- C				_	
r Topology		X Registry Setup X CIMC Correson X Networking	g X Servers and Roles	Tor Switch X N511 Monton	2	
User Administration	¢	Master Admin IP: *				0
		Admin IP				
		Collector Managament VIP. *				0
		Management WP				
		Collector VM1 Info				
		Host Name: *	Θ	Pessword: *		Θ
		hosmane		password		
		COLIGER Password. *	θ	Admin IP: *		0
		password		Admin IP		
		Management IP: *	0			
		Management IP				
		Collector VM2 Info				
		Host Name: *	Θ	Pessword: *		Θ
		hosmane		password		
		COLIGER Password. *	θ	Admin IP: *		0
		password		Admin IP		
		Management IP: *	0			
		Maragement IP				
		Collector Tor Connections				
		Collector for Cannections			+	0
		V Tor Info			~ Action ~	
			No data	evolutive		
		Hellikh				
		Dispatcher				
		Robbit MQ User Name: *				0
		Rabbit MO User Name				

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

Name	Description			
Admin IP	SSH IP of Collector VM			
Management IP	Management IP of Collector	r VM		
Collector ToR Connections	 Click on (+) icon to Add Collector ToR Connection Select the ToR switches from list to add the information. It is optional and available for ToR type NCS-550 For now, it supports adding only one Collector To Connection Add Collector Tor Connections 			
	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.			

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

eate Blueprint o	onfiguration	1						Save Form	Offline Validation	Cles
ueprint Initial Setup	Physical Setup	OpenStac	k Setup							
🗙 Registry Setup		Common	× Netwo	rking	>	K Servers and Roles	V CVIMA	ו		
Enable R										
Polling Intervals										
Low Frequency		τ.								0
Low Frequency Medium Frequency	r.	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 will be 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>

While CVIMMON checkbox is checked in Blueprint Initial setup, there is a checkbox provided in the CVIMMON 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 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'
Engine_Id	For SNMPv3. ContextEngineId, min length of 5, max length of 32, unique across all managers; cannot we all 00s or FFs
Users	List of users; maximum: 3

Name	Description
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 CVIMMON is enabled and Platform type is C, then an optional feature to get SNMP traps from Cisco CIMC is available in the CVIMMON 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 cime 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.

9. 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:

Name	Description		
HA Proxy	Fill in the following details:		
	Create Blueprint configuration		
	Biurprint Initial Setup Physical Setup OpenStack Setup		
	🗙 HA Proxy 🗸 Keystone 🗙 Neutron 🗸 CEPH 🗸 Glan	• •	Cinder
	External VIP Address *	0	External VP IPv
	Virtual Router ID *	0	Internal VIP Add
	Enter Virtual Router ID		Enter IP Addr
	Internal VIP IPv6 Address	0	
	Enter IPv6 Address		
	External VIP Address field Enter the IP address of External VIP.	of the	
	External VIP Address IPv6Enter the IPv6 addressfieldExternal VIP.	s of the	
	Virtual Router ID fieldEnter the Router ID f HA.	or the	1
	Internal VIP Address IPv6Enter the IPv6 addressfieldInternal IP.	s of the	1
	Internal VIP Address field Enter the IP address	6.4.	1

ame	Description	
Leystone	The following are the Pre-populated field values. This option is always set to be true.	
	Create Blueprint configuration	
	Blueprint Initial Setup Physical Setup OpenStack Setup	
	🗙 HA Proxy 🗸 Keystone 🗙 Neutron 🗸 CEPH 🗸 Glance 🗸 Cinder	
	Admin Usemame * Admin Ter	nant Name
	admin admin	
	Enter VY5ue Router ID Enter	r IP Address
	Internal VIP IPv6 Address O	
	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 Keystone v3	

Name	Description		
	This is available only when K are enabled under <i>Optional F</i> Blueprint Initial Setup.		th
	Create Blueprint configuration		
	Bioeprint Initial Setup Physical Setup Open	Stack Setup	
	🗙 HA Proxy 🖌 Keystone 🗙	Neutron 🗸 CEPH 🖌 Glance	🗸 Cinder 🔪 🗶 LDAP
	Domain Name *		Object Class for Users
	Enter Domain specific name		Enter objectClass for
	Object Class for Groups *		Domain Name Tree for
	Enter objectClass for Groups		Enter DN tree for Use
	Enter DN tree for Groups		Suffix for Domain Name Enter suffix for DN
	URL*		O Domain Name of bind a
	Enter URL		Enter DN of bind user
	Password *		O User Filter *
	Enter Password		Enter User Filter
	User ID Attribute *		User Name Attribute *
	Enter User Id Attribute		Enter User Name Attr
	User Mail Attribute		Group Name Attribute Enter Group Name Attribute
	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 port number.	g
	Domain Name of bind user field	Enter a string.	
	Password field	Enter Password as string format.	;
	User Filter field	Enter filter name as strin	ıg.

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

Name	Description
Neutron	

Name	Description		
	Neutron fields change on the basis of <i>Tenant Network Type</i> selection from Blueprint Initial Setup . Following are the options available for Neutron for OVS/VLAN:		
	Create Blueprint configuration		
	Biveprint Initial Setup Physical Setup OpenStack Se	hit	
	🗙 HA Prony 🗸 Keystone 🔪 🗙 Neutron	🗸 CEMI 🔪 🗸 Gance 🔪 🗸	Cinder X LDAP
	Tenant Network Type * VLAN		Mechanism Drivers *
	NPV Hosts *		Tenant VLAN Ranges *
	Compute Name •		Enter Tenant VLAN Ranges
	(12) (2) (2 ⁻¹) - (2) (2)		Provider VLAN Ranges Enter Provider VLAN Ranges
	Id d 1 21 P PI		Line Product screen anges
	Tenant Network Type field Mechanism Drivers field	It is Auto-filled based <i>Tenant Network Types</i> in the Blueprint Initia page. It is Auto-filled based	elected l Setup
	Mechanism Drivers field	Tenant Network Type selected in Blueprint Setup page.	
	NFV Hosts field	It is Auto-filled with Compute you added i Server and Roles.	
		If you select All in th section NFV_HOSTS is added to the Bluep you can select one pai compute. For Examp NFV_HOSTS: compute-server-1, compute-server-2.	S: ALL rint or rticular
	Tenant VLAN Ranges field	List of ranges separat comma form start:end	
	Provider VLAN Ranges field	List of ranges separat comma form start:end	
	VM Hugh Page Size (available for NFV_HOSTS option) field	2M or 1G	

Name	Description
	Enable Jumbo Frames field Enable the checkbox.
	For Tenant Network Type, Linux Bridge everything remains the same but Tenant VLAN Ranges is removed.

Name	Description
СЕРН	

Name	Descript	Description			
		Then Object Stor	age Backend is selecte al setup.	d as <i>Central</i>	
	Create	Create Blueprint configuration			
	Burph	nt Initial Setup Physical Setup	penStack Setup		
	×	IA Prov	X Neutron X CON X Gance	K Civder	
	Geot	Mode *		Cluster ID *	
		ntral		Enter Ouster ID	
	Monit	for Host *		Monitor Members *	
	10	Enter Monitor Host for CEPH		Enter Montor Monbers for CE	
	Secr	w UUD *		Nova Boot From	
	0.0	er Secret UUID for CEPH		Local	
	NOW	A RED POOL *		CEPH NAT 0	
	-				
			~		
	Cep	oh Mode	By default Ceph Mode is Central.		
	Clu	ster ID	Enter the Cluster ID.		
	Mo	nitor Host	Enter the Monitor Host for CEPH		
	Mo	nitor Members	Enter the Monitor Members for CEPH		
	Sec	Secret UUID Enter the Secr		et UUID for CEPH	
	NO	VA Boot from	You can choose CEPH or local from the drop-down list. Enter the NOVA RBD Pool (default's to vms)		
	NO POO	VA RBD OL			
	CE	PH NAT	CEPH NAT is require Ceph and when mgm not routable.		
			ge Backend is selected as <i>Dedicated</i> ial setup for dedicated Ceph.		

Name	Description	
	Blueprint Initial Setup Physical Setup OpenStack Setup	
	🗙 HA Proxy 🖌 Keystone 🗙 Neutron	EPH 🗸 G
	Ceph Mode *	Nova Boot From
	Dedicated	Ceph
	Cinder Percentage 0	Glance Percentaç
	40	30
	Nova Percentage O	Ceph OSD Cores
	30	10
	 Cinder Percentage: Available when Nova B From is <i>local</i> or <i>Ceph</i>. Glance Percentage: Available when Nova B From is <i>local</i> or <i>Ceph</i>. 	
	• Nova Percentage: Available when Nova Boo Fromis <i>Ceph</i> .	ot
	If NOVA Boot From is <i>local</i> , the total of Cinder Percentage and Glance Percentage must be 100.	
	If NOVA Boot From is <i>Ceph</i> , the total of Cinder Percentage and Glance Percentage must be 100.	
	CEPH OSD RESERVED PCORES : Default value 2. Minimum value is 2 and Maximum value is 12 (for Micropod and hyper-converged pods).	

I

Name	Description 3. When Object Storage Backend is selected as NetApp in the blueprint initial setup, the Create Blueprint configuration	
	Burpret Initial Setup Physical Setup OpenStack Setup	
	🗙 HA Provy 🗸 Keystone 🗸 Neutron 🔪 CDPH 🗙 Nect	φρ
	Ceph Mode *	O Cinder Percentage
	netapp Glance Percentage	60
	40	
	 Ceph Mode: NetApp is selected by defaute Cinder Percentage: Enter Cinder percente Ceph. Glance Percentage: Enter glance percente Ceph Total of Cinder Percentage and Glance Percente must be 100. 	tage for tage for

Name	Description	
GLANCE	1. When Object Storage Back the blueprint initial setup.	end is selected as Central in
	Create Blueprint configuration	I
	Bueprint Initial Serup Physical Serup OpenStack Setup	
	🗙 HA Proxy 🗸 Keystone 🖌 Mestron	X CEPH X Gausse X Cinder
	Store Backand *	Glance RSD Pool *
	CEPH	images
	Glance Client Key *	
	Enter GLANCE 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 Back in the blueprint initial setup. Create Blueprint configuration	end is selected as <i>Dedicated</i>
	Busprint Initial Setup Physical Setup OpenGlack Setup	
	🗙 HA Prosy 🗸 Keystone 🗸 Neutron	X CEPH X CANCE X CANSE
	Store Backend *	
	CEPH	
	By default Populated for CEP Backend value as CEPH.	H Dedicated with Store

I

Name	Description	Description	
CINDER	By default Populated for <i>C</i> Driver value as CEPH .	EPH Dedicated with Volume	
	Create Blueprint configuration	I	
	Bueprint Initial Senup Physical Senup OpenStack S	nto	
	🗙 HA Proxy 🗸 Keystone 🗸 Neutro	n 🗙 CEPH 🗙 Glance 🗙 Cinder	
	Volume Driver *	Cinder RBD Pool *	
	CEPH	volumes	
	Cinder Client Kay*		
	Enter CN/DER Clent. Key		
	Volume Driver	By default CEPH.	
	Cinder RBD Pool field	By default volumes.	
	Cinder Client Key	Enter Cinder Client Key	
		eutron X CEPH X Glance X Cinder	

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

I

	Description	
	Check one of the check boxes to specify a VMTP netwo	
	Provider Network	
	• External Network	
	For the Provider Network complete the following:	
	40	
	🗙 Ish Proxy 🗸 Keystone 🗸 Neutro	x CEPH X Gance X Cinder X VI
	Provider Network 🗐	
	Network Name *	O Subnet*
	Enter Network Name	Enter Subnet
	Network IP Start *	Network IP End*
	Enter IP Address	Enter IP Address
	Network Gateway *	O DNS Server *
	Enter Network Gateway	Enter Dh5 Server
	Segmentation ID * Enter Segmentation ID from 2 to 4004	0
	Network Name field	Enter the name for the external network.
	Subnet field	Enter the Subnet for Provider Network.
	Network IP Start field	Enter the start of the floating IPv4 address.
	Network IP End field	Enter the end of the 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.

Name	Description				
	Network Name field	Enter the name for the external network.			
	Subnet field	Enter the Subnet for the external Network.			
	Network IP Start field	Enter the start of the floating IPv4 address.			
	Network IP End field	Enter the endof the floating IPv4 address.			
	Network Gateway field	Enter the IPv4 address for the Gateway.			
	DNS Server field	Enter the DNS server IPv4 address.			
TLS This optional section will only be visible once TLS is selected from Blueprint Initial Setup Page.	-				

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Name	Description	
Under the OpenStack setup tab, Vim_admins tab	Following are the field descri	iptions for VIM Admins:
will be visible only when Vim_admins is selected from the Optional Features & Services under the Blueprint Initial setup tab	 Add Username, Passwor non-root login. 	rd, Public key or both for the
	• At least one Vim Admin Permit root login is false	n must be configured when e.
	Create Blueprint configuration	1
	Blueprint Initial Setup Physical Setup	OpenStack Setup
	🗙 HA Proxy 🗸 Keystone	✓ Neutron X CEPH X Glance X Cinc
	Username*	Password Public key
	Note: Remove empty records before valid	tation.
	Permit root login	
	Γ	
	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 . If you select Keystonev3, swiftstack will not be suppled for configuration	Following are the options the SwiftStack: Create Blueprint configuration	nat needs to be filled for
available for configuration.	Biurprint Initial Setup Physical Setup OpenStad	k Setup
	🗶 HA Proxy 🗸 Keystone 🗸 Nes	
	Cluster End Point * Enter Cluster End Point IP:Domain Admin User * Enter Admin User name Admin Tenant * Enter Admin Tenant name	Pessler Prefix * Emer Reselter Pr Admin Plassword * Emer Plassword Protocol * http
	Cluster End Point field	IP address of PAC (Proxy-Account-Container) endpoint.
	Admin User field	Admin user for swift to authenticate in keystone.
	Admin Tenant field	The service tenant corresponding to the Account-Container used by the Swiftstack.
	Reseller Prefix field	Reseller_prefix as configured for Keysone Auth,AuthToken support in Swiftstack. Example: KEY_
	Admin Password field	swiftstack_admin_password
	Protocol	http or https

10. For SolidFire, enter the following:

Name	Description

tysical Setup	OpenStack Setup				
Keystore					
	✓ Neutron	🗸 аян	🖌 Glasos	~	Crider
Cluster MVP + 172.23.105.217			0	Cluster SVIP •	
Admin Username *				0	Admin Password *
1				=	
	-	IP of Sol	lidFire		
ield St	orage VIP o	f SolidF	ire cluster		
me Ao	dmin user of	n SolidF	ire cluster		
	-	ord on S	olidFire		
ï	M ch deld St me Ad rd Ad	Management i cluster. ield Storage VIP o me Admin user of	Management IP of Sol cluster. aeld Storage VIP of SolidF me Admin user on SolidF rd Admin password on S	Management IP of SolidFire cluster. aeld Storage VIP of SolidFire cluster me Admin user on SolidFire cluster rd Admin password on SolidFire	 Management IP of SolidFire cluster. Storage VIP of SolidFire cluster. Admin user on SolidFire cluster rd Admin password on SolidFire

11. For NetApp, enter the following:

Name	Decription
	Optional NETAPP configuration. No dedicated Ceph allowed.

Name	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.

12. 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:

I

Name	Description						
Syslog Export	Following are the option	ns for Syslog Settings:					
	Create Blueprint configuration						
	Blueprint Initial Setup Physical Setup OpenStack Setup Services Setup						
	R Syring Export R NPVBENCH						
	Remote Host *	O Protocol *					
	Enter IP Address	109					
	Facility* local5	Seventy * debug					
	Port *	Clients *					
	534						
	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 which by default is <i>False</i> .					
	Create Blueprint configuration					
	Biueprint Initial Setup Physical Setup OpenStack Setup Services Setup					
	X Syslog Export X NEVELINCH					
	Enable TORSWITCH details are empty, Add TORSWITCH details to configure NFVBENCH					
	NIC Ports: INT1 Ø INT2					
	1					
	 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.					
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:

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

hboard						Save Form Office	Validation Clear
-Install	÷	Create Blueprint configuration					
Burprint Setup							
Bueprint Management		Bueprint Initial Setup Physical Setup	OpenStack Setup				
e-install		Buspfet Name: *			Platform Type: *		
Topology		Errer Elurgritt Name			C-series		
d User Administration		Tenant Network: *			POD Type *		•
		Linuxdindge/VXLAN			Futor		
		Object Storage Backand *					
		Central		•			
		Optional Peatures & Services:					
		🗄 Syslog Export Settings	C ES_REMOTE_BACKUP		II NFVI Monitoring	III Swiftstack	
		Pod Name Heat	Vin Admine Nybench		Enable Esc Priv SROV CARD TYPE	Install Mode TORSwitch Information	
		Permit Root Login	# Auto Beckup		LDAP	U VMTP	
		C NETAPP_SUPPORT	C Keystone v3		D TLS		

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 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			
	• UMHC pod type is only supported OVS/VLAN tenant type.	for		
	• NGENAHC is supported for VPP/VI tenant type with no SRIOV	LAN		
	Pod type micro is supported for OVS/VLAN, ACI/VLAN, VPP/VL	AN.		
Ceph Mode drop-down list	Choose one of the following Ceph types:			
	• Dedicated (By Default)			
	Central. Central is not supported in Production	n		
Optional and Services Features checkbox	Swiftstack, LDAP, Syslog Export Settings, Install M TorSwitch Information, TLS, NFVMON, Pod Nar VMTP, NFVBench, Autbackup, Heat, Keystone v Enable Esc Priv.	ne,		
	If any one is selected, the corresponding section is various Blueprint sections.	isible		
	By default all features are disabled except Auto Bac	kup.		
Import Existing YAML file	If you have an existing C Series YAML file you ca this feature to upload the file.	n use		
	Insight will automatically fill in the fields and any mis mandatory field will be highlighted in the respective section.			

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

officities VIM Unified	Managemen		Calaot 10.30 116 244	Role: Full-Pod-Access Upper ID: Inhushur
ashboard te-ivistat Biveprint Setup		Create Blueprint configuration		Save Form Office Validation Clear
Bueprint Management tost-tostall New Topology	8	Burprint Initial Setup Physical Setup OpenStack Setup Reputy Setup X CMC Common X Networking	¥ Servers and Roles	
fod Uber Administration		Registry User Name * Erect registry Username Registry Erect * Exect registry email	Registry Password * Croser registry password	•
Name			Description	
Dogistry Us	or Non	ne text field	User Name for Registry (Mandatory)

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.

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

cisco VI	M Unified Managemen	C Cels 10.3	an 1116.244 🙆 Y	Role: Full-Pod-Access User ID: rohoshar 🔷 🗸
Dashboard Pre-Install		Create Blueprint configuration		Save Form Offline Validation Clear
Bueprint Sett Blueprint Mar Post-Install View Topology		Burprint Initial Setup Physical Setup OpenStack Setup X Registry Setup X COMO Common X Networking X	Servers and Roles	
Pod User Adminis	entron 4	Usenane * admit	Password *	•

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

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

board		Create Blueprint co	ofiguration						Save Form Office	Validation
Rueprint Setup										
lueprint Management		Biveprint Initial Setup	Physical Setup OpenSta	Cit Setup						
install Topology	1	× Registry Setup	¥ UCSM Common	Ketworks	Servers and Role					
		Domain Name :*								
ser Administration	*	Enter Domain Name								
		HTTP Proxy :				HTTPs Pre	ory :			
		Enter HTTP Proxy				Enter H	TTPS Proxy			
		IP Tables on Manageme	nt Pode :	• = +	NTP Server : *		• = +	Domain Name Server :		• = +
		P Address	* ,	Action ~	NTP server		* Action *	DNS server	w.	Action ~
		4 4 1 1	1 (+) (+)		14 4 1 11	E FI		H K L		
		Networks *								
		- Van	* Segnent *	Subnet	* Subnet IPv6 *	Gaterway	* Gateway Pv6	* Pool	* Pool lov6 *	Action ~
			cime							/ ×
			api							/ ×
			management/provis							/ x
										/ ×
			tenant							· •

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Citro							

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	

Name	Description		
	Network table is pre-populated with Segments. To add Networks you can either clear all the table with Delete all or click edit icon for each segment and fill in the details.		
	You can add, edit, or delete table.	e network information in the	
	Edit Network		
	table. Specify the following 	new entries (networks) to the fields in the Edit Entry to	
	Networks dialog:	1	
	Name	Description	
	VLAN field	Enter the VLAN ID. For Segment - Provider, the VLAN ID value is 'none'.	
	Segment drop-down list	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 • Management/provision • Tenant	

Description	
	Storage
	• 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	

Name	Description
	Enter the pool information in the required format. For example: 10.1.1.5-10.1.1.10,10.2.1.5-10.2.1.10
	Click Save.

5. 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.

art												
		Create Blueprint config	uration							Sectors 05	ine Talidation	Clear
eprint Setup												
eprint Management		Buepret Inter Letup Physic	diffete Constitute for	-								
April 1												
geogy		H Repary Seta	CINC Common	K Aetworking	· Servers and Home							
er Administration	1	Server User Name								Inel SROV VES		
		nost			X 1101	NK SHOP	1	D Cites VIC Hell 5	RIOV			
		Disible Hypertheading										
		COBBLER										
		Cubbler Timeout				•	Block Storage					. 0
						-						
		Control Kickatart * ucs-d-andr-c-serves to				•	Compute Kicks					. •
						•						
		Server Host Password * Error Server Host Password										
		Server and Roles * 🔺										+
		Server Name *	CMC P 0	MC User name *	CMC Password	Fach 8	e 1	Refe C	Management I	P * Managament Put	* Action	
								control			1	×
								coresi			1	×
								control			1	×
								compute			1	×

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 the	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 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 Entry 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 Exa	ample:	
Roles		
• Bl	ock Storage	
	• -Server 1	
	• -Server 2	
	• -Server 3	
• Co	ontrol	
	• -Server 1	
	• -Server 2	
	• -Server 3	
• Co	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	server and role to the table.
	when compute role is chosen; NFV_HOSTS is set to ALL;	OVS or ACI, an additional GE_PERCENTAGE is shown This option is only valid when If no value is entered then the AGE_PERCENTAGE is used.
	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 *	θ
	Enter Rack ID	
	Role *	·
	Management IP	0
	Enter Management IP Address	
	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.
	Management IP	It is an optional field but if

Name	Description				
		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. 			
Intel SRIOV VFS (valid for Intel NIC testbeds) and can be integer.	support is disabled. To enab # * 1-32 when INTEL_NIC	le, define a value in the range SUPPORT is set True (X710 CISCO_VIC_INTEL_SRIOV			

Name	Description
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.
- 6. 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.	VM Unified Manage	ment	Calsoft 10:30:116:244	Relie: Full Pool Access User Dt Infordier 🔹 🚯
Dashboard Pre-leasal Daepin Daspin Post-instal Vrew Topol	int Setup Int Management	Create Blueprint configuration Burprint Initial Serup Physical Serup Coperdiack Serup K Regiony Serup K Calc Common K Remon S Configure ROR Tordination Information (*	orting X Servers and Roles X The human	Save Form Office Validation ⊂Cvar Save Form Office Validation ⊂Cvar E ↓ C pear p* VPC peer V* Bit mgmt po* Bit mgmt p* Action *
		920	118 Cisco and/or its affiliales. All rights reserved. Cisco VMI Unified Management Version: 2.2.2	

Name		Descri	ption
Configu Note	IF UMHC is selected as podtype,	Enablir 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.	

Name	Description	
	Click (+) to add information	n for ToR Switch.
	Switch Details Hostname Enter Switch Hostname Username Enter Switch Username Password Enter Password SSH-IP Enter IP Address SSN Num Enter SSN Num VPC Peer Keepalive Enter IP Address	
	Enter IP Address VPC Domain Enter VPC Domain VPC Peer Port Info Enter VPC Port VPC Peer VLAN Info Enter VPC VLAN Info BR Management Port Info Enter BR Port Info BR Management PO Info Enter BR PO Info Save Cancel	0
	Name	Description
	Name Username	ToR switch name.
	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 peer.

Name	Description		
	VPC Domain	Cannot define if there is no 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).	
Splitter Optic 4x10	For C Series platform type, Tena Type is either fullon or Micro, a provided to select the TOR Type NCS-5500, then user can config	e. If selected TOR type is	
Click Save.			

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

Name		Descri	ption
Configu Note	Ire ToR optional checkbox. If UMHC is selected as podtype, configure TOR is not allowed.	Enablin false to Note	ng this checkbox, changes the configure ToR section from true. 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		
	Click (+) to add information	for ToR Switch.	
	Switch Details		
	Hostname *		0
	Enter Switch Hostname		
	Usemame *		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		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	Description	
	Name	Description	
	Name	ToR switch nam	e.
	Username	ToR switch user	name.
	Password	ToR switch pass	word.
	SSH IP	ToR switch SSH	I IP.
	SSN Num	ToR switch ssn	num.
	VPC Peer Keepalive	Peer Manageme cannot define if peer.	

Name	Description		
	VPC Domain	Cannot define if there is no 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).	
Click Save.			

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

Description	
 Is not checked, as by defau	lt 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
I	
Save Cancel	
Save Cancel Host Name	ToR switch name.
	ToR switch name. Enter Peer must be exist pair.
Host Name	Enter Peer must be exist
Host Name VPC Peer keep alive	Enter Peer must be exist pair.

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

Name		Descript	ion
Note I	e ToR optional checkbox If NSC-5500 is selected as TOR_TYPE, configure TOR is set as mandatory.		g 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	Description	
	Click (+) to add information for NCS-5500 Switch.	
SHICH Deals		
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		
VPC Peer Port Info	0	
Enter VPC Port		
VPC Peer Port Address	0	
Enter VPC Port Address		
ISIS Loopback Address	0	
Enter ISIS Loopback Addre	205	
ISIS Net Entity Title	0	
Enter ISIS net entity title		
ISIS Prefix SID	0	
Enter ISIS Prefix SID		
BR Management Port Info	0	
Enter BR Port Info		
BR Management PO Info	0	
Enter BR PO Info		
Enter ISIS net entity tide ISIS Prefix SID Enter ISIS Prefix SID BR Management Port Info Enter BR Port Info BR Management PO Info	•	
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 Address.	
11		
VPC Peer Link	Peer management IP.	

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).

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

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cisco VIM Unified	Management		Calsoft 10.30.116.244		Role: Fall-Pod-Access User ID: ro	hashar
shboard -Install	ŭ.	Create Blueprint configuration			Save Form Offine Validation	Clear
Bueprint Setup Bueprint Management z-Install	×	Bhasprint Initial Serup Physical Setup Oper/Glack Setup	3 X Servers and Roles	✓ Ter Switch ¥ N211 Marriage	2	
w Topology 8 User Administration	. с.,	Mater Admin IP: * Admin IP				0
		Collector Management VIP. * Management VIP				0
		Collector VM1 Info Host Name: * Inconstructe	0	Password: * password		0
		OCUSER Password: * password Management IP: *	•	Admin P: • Admin P		θ
		Management IP Oelecter VA2 Into Host Name: * Restruine	9	Pessword: * password		0
		CCUSER Password * password Management IP: * Management IP:	•	Admin IP: * Admin IP		0
		Collector Tor Connections			+	0
		 Tor Info 	10.000		✓ Action ✓	
		la a T Li b bi Dispektor	No dala	PARADA		_
		Rabbit MQ User Name: * Rabbit MQ User Name				•

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 Connection
	2. Select the ToR switches from list to add the information.
	3. It is optional and available for ToR type NCS-55
	 For now, it supports adding only one Collector T Connection
	Add Collector Tor Connections
	Select Tor which for connections Image: International Select Tor which is the select torm of the select
	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.

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

eate Blueprint c	onfiguration	1					Save Form	Offline Validation	c
ueprint Initial Setup	Physical Setup	OpenStac	k Setup						
🗙 Registry Setup		Common	X Networkin	9	X Servers and Roles	V CVIMAG	en		
Enable R									
Polling Intervals									
Polling Intervals		t		m	•				0
	Y	t 30		m					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>

9. 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:

Name	Description	
HA Proxy	Fill in the following details:	
	Create Blueprint configuration	
	Biueprint Initial Setup Physical Setup OpenStack	
	Keysone X Neur External VP Address *	on 🗸 CEPH 🗸 Glance 🗸 Cinder 0 External VP IPv6 Address
	Enter IP Address Virtual Router ID * Enter Virtual Router ID	Enter IP Address Internal VIP Address Enter IP Address
	Internal VIP IPv6 Address Enter IPv6 Address	0
	External VIP Address field	Enter IP address of External
		VIP.
	External VIP Address IPv6 field	Enter IPv6 address of External VIP.
	Virtual Router ID field	Enter the Router ID for HA.
	Internal VIP Address IPv6 field	Enter IPv6 address of Internal IP.
	Internal VIP Address field	Enter IP address of Internal VIP.
Keystone	Mandatory fields are pre-popul	lated.
	Create Blueprint configuration	
	Bueprint Initial Setup Physical Setup Coenditack Setup HA Provy Revealed X Neutron X Neutron	🗸 CEPH 🔰 🗸 Gauce 🗸 🗸 Cinder
	Admin Username * admin	Admin Tenart Name * admin
	Admin User Name	admin.
	Admin Tenant Name	admin.

Name	Description
LDAP	

Name	Description		
	LDAP enable checkboxwhich enabled on keystone.	by default is fal s	se, if LDAP is
	Create Blueprint configuration		I
	Bueprint Initial Setup Physical Setup OpenStack Setup		
	🗙 HA.Proxy 🖌 Keystone 🔪 🗙 Neutron	✓ CEH	Cheer
	Domain Name * Enter Comain specific name		Object Class for Users * Enter objectClass for Users
	Object Class for Groups *		Domain Name Tree for Users*
	Enter object/Class for Groups		Enter DN Inte for Users
	Domain Name Tree for Groups *		Suffix for Domain Name *
	Enter DN tree for Groups		Enter suffix for DN
	URL * Enter URL		Domain Name of bind user* Emer DN 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 Utor Mal Attribute		Enter Group Name Attribute
	Domain Name field	Enter name for	Domain name.
	Object Class for Users field	Enter a string a	ıs 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 w number.	vith ending port
	Domain Name of Bind User field	Enter a string.	
	Password field	Enter Password format.	1 as string
	User Filter field	Enter filter nan	ne 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

Description			
Type Selection from Blueprint	Neutron fields would change on the basis of Tenant Network Type Selection from Blueprint Initial Setup . Following are the options available for Neutron for OVS/VLAN:		
Create Blueprint configuration			
Bueprint Initial Setup Physical Setup OpenStack Setup	1		
🗙 HA Proxy 🗸 Keystone 🗙 NewSork	V CEPH V Gance V Cred	er 🗙 LDAP	
Tenant Network Type * VLAN		echanism Drivers •	
NPV Hosts *	74	nant VLAN Ranges*	
Compute Name -		Enter Tenant VLAN Ran	
[4 4 1 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ovider VLAN Ranges Enter Provider VLAN R	
Tenant Network Type field	Auto Filled based on Tenant Network Type in the Blueprint Initia page.	selected	
Mechanism Drivers field	Auto Filled based on Tenant Network Type in Blueprint Initial Set	selected	
NFV Hosts field	Auto filled with the C you added in Server ar	- I	
	If you select All in thi NFV_HOSTS: ALL added to the Blueprin can select one particu compute. For example	will be t or you lar	
	NFV_HOSTS: compute-server-1, compute-server-2.		
Tenant VLAN Ranges field	List of ranges separate comma form start:enc		
Provider VLAN Ranges field	List of ranges separate comma form start:end		
VM Hugh Page Size (available for NFV_HOSTS option) field	2M or 1G (optional, do 2M)	efaults to	
VM_HUGHPAGE_PERCENTAGE	Optional, defaults to 10 range between 0 and		

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_VSWIICH_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 Bridge everything remains the same but Tenant VLAN Ranges will be removed.		

Name	Description
СЕРН	

Name	De	Description		
	1.	1. When Object Storage Backend is selected Central in blueprint initial setup.		d Central in
	Create Blueprint configuration Burgerst Initial Design Physical Design Openditack Server		I	
		🗙 HA Provy 🗸 Keystone	X Neutron X Clini X Garice 3	Cinder
		Geph Mode *		Cluster ID *
		Central Monitor Heat *		Enter Ouster ID
		Enter Monitor Host for CEPH.		Monitor Members * Enter Monitor Members for CEPH
		Secret UUD *		Nova Boot From
		Ermin Secret UUID for CEPH		Local
		NOVA RED FOOL *		CEPH NAT 0
		CEPH Mode	By default Central.	
		Cluster ID	Enter Cluster ID.	
	Monitor HostEnter Monitor Host for CEPHMonitor MembersEnter Monitor Members for CSecret UUIDEnter Secret UUID for CEPHNOVA Boot fromDrop down selection. You can CEPH or local.			
			ers for CEPH	
			Enter Secret UUID fo	or CEPH
				You can choose
		NOVA RBD POOL	Enter NOVA RBD Pc vms)	ool (default's to
		CEPH NAT	Optional, needed for C when mgmt network	
	2.	When Object Storage Backend is selected Dedicated in blueprint initial setup.		Dedicated in
			entitasik flatusi	
		X HAProv		Cinder 🗙 LDAP
	Ceph Mode * Nove Boot From		Nove Boot From Local	
	3.	CEPH or local.	efault Dedicated. drop down selection y e Backend is selected 1	
		blueprint initial setup		

Name	Description
	Create Blueprint configuration
	Biurprint Initial Setup Physical Setup OpenStack Setup
	🗙 HA Proxy 🗸 Keystone 🗸 Neutron 🔀 CETHI 🗶 Neutop
	Ceph Mode * retapp
GLANCE	1. When Object Storage Backend is selected Central in blueprint initial setup.
	Biospinit Initial Serup Physical Serup Openditack Serup
	X HA Proxy V Keysteine V Neuron X CERNI X Cinder
	Store Backand * Grance RBD Pool *
	CEPH • images Glance Client Key *
	Enter GLANCE Citent Key
	When Object Storage Backend is selected Dedicated in blueprint initial setup.
	Create Blueprint configuration
	Bueprint Initial Setup Physical Setup OpenStack Setup
	🗙 HA Proxy 🗸 Keystone 🖌 Neutron 🗶 CEPH 🗙 Gance 🗶 Cinder
	Store Backend * CDPH *
	Note By default Populated for CEPH Dedicated with Store Backend value as CEPH.

Name	Description
CINDER	By default Populated for CEPH Dedicated with Volume Driver value as CEPH .
	Create Blueprint configuration
	Brueprint Initial Senap Physical Senap OpenStack Senap
	🗙 HA Proxy 🖌 Keystone 🖌 Neutron 🗶 CEPH 👷 Giance 🗙 Cindar
	Volume Driver * Cinder RDD Pool *
	CEPH + volumes
	Cinder Client Key *
	Enter CINDER Client Key
	Create Blueprint configuration
	Diseprint initial Setup Physical Setup OpenStack Setup
	X HA Proxy V Keystone V Neutron X CEPH X Glance X Cender
	Volume Driver *
	CEPH .
	Note By default Populated for CEPH Dedicated with
	Volume Driver value as CEPH.

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	Description	
Check one of the check b	poxes to specify a VMTP network:	
• Provider Network		
• External Network	• External Network	
For the Provider Netwo	rk complete the following:	
Create Blueprint configuration	I	
Burorint Initial Serup Physical Serup OpenState	ik Setup	
🗙 HA Proxy 🗸 Keystone 🗙 Nex	atron 🗸 CEPH 🗸 🗸 Gance 🗸 🗸 Cinder 🔀 WIDP 🗙 LDAP	
Provider Network 🛛		
Network Name *	O Subnet*	
Enter Network Name	Enter Subnet	
Network IP Start * Enter IP Address	Network IP End * Enser IP Address	
Network Gateway *	O DNS Server*	
Enter Network Gateway	Enter DNS Server	
Segmentation ID *	0	
Enter Segmentation ID from 2 to 4094		
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 Start field Network IP End field	5 5	
	address. Enter the ending floating IPv4 address.	
Network IP End field	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the	
Network IP End field Network Gatewayfield	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address.	
Network IP End fieldNetwork GatewayfieldDNS Server fieldSegmentation ID field	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address.	
Network IP End fieldNetwork GatewayfieldDNS Server fieldSegmentation ID fieldFor External Network f	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address. Enter the segmentation ID.	
Network IP End field Network Gatewayfield DNS Server field Segmentation ID field For External Network f	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address. Enter the segmentation ID. ill in the following details:	
Network IP End field Network Gatewayfield DNS Server field Segmentation ID field For External Network f External Network f Network Server	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address. Enter the segmentation ID. ill in the following details:	
Network IP End field Network Gatewayfield DNS Server field Segmentation ID field For External Network for External Network for Network Name* EnterName	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address. Enter the segmentation ID. ill in the following details:	
Network IP End field Network Gatewayfield DNS Server field Segmentation ID field For External Network for Second Network Tome Network PSurt*	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address. Enter the segmentation ID. ill in the following details:	
Network IP End field Network Gatewayfield DNS Server field Segmentation ID field For External Network for External Network for Network Name* EnterName	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address. Enter the segmentation ID. ill in the following details:	
Network IP End field Network Gatewayfield DNS Server field Segmentation ID field For External Network for Second Network Tome Network PSurt*	address. Enter the ending floating IPv4 address. Enter the IPv4 address for the Gateway. Enter the DNS server IPv4 address. Enter the segmentation ID. ill in the following details:	

Name	ne 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.	 f TLS has two options: • External LB VIP FQDN - Text Field. • External LB VIP TLS - True/False. By default this option is false. 	

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	non-root login.	iptions for VIM Admins: rd, Public key or both for the n must be configured when Permit
	Create Blueprint configuration	1
	Blueprint Initial Setup Physical Setup	OpenStack Setup
	🗙 HA Proxy 🗸 Keystone	✓ Neutron X CEPH X Giance X Ci
	Username*	Password Public key
	Note: Remove empty records before valid	lation.
	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'

I

Name	Description	
SwiftStack optional section will be visible only if SwiftStack is selected from Blueprint Initial	Following are the options that	needs to be filled for SwiftStack:
Setup Page. SwiftStack is only supported with KeyStonev2 . If you select Keystonev3 , swiftstack will not be available to configure.	Create Blueprint configuration	
	Dissprint Initial Serup Physical Serup OpenQuark Serup	
	🗙 HA.Proxy 🗸 Keystone 🗙 Neutron 🖌	CEPH 🗸 Gance 🗸 🗸 Cinder 🔪 🗙 Wittip 🔪 🗸 TLS
	Ouster End Point *	Reseller Prefs
	Enter Cluster End Point IP/Domain	Enter Reseller Prefix
	Admin User "	Admin Password *
	Enter Admin Uber name	Enter Password
	Admin Tenant * Enter Admin Tenant name	Protocol * Insp
	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		Name	Description	
Note When ACI/VLAN is selected then ToR switch from initial setup is	APIC Hosts field	Enter host input. Example: <ip1 host1>:[port] . max of 3, min of 1, not 2;</ip1 host1>		
	mandatory.	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	
	is available in Openstack setup, when type is VTS/VLAN selected.	Name	Description	
If vts day	y0 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	password 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	

10. For SolidFire, enter the following:

Name	Description

SolidFire is visible for configuration on day0 SolidFire is not allowed as a day-2 deployment option	Cr	reate Blueprint	configura	tion				<u>.</u>
SolidFire is always available with CEPH.	2	Buoprim Initial Serup X HA Proxy Cluster MVP * 172.23.105.217 Admin Username *	Physica Se		• аян	✓ filarce	•	Cinder VIP * Cluster SVIP * 10.3.3.53 Admin Password *
	-	codestadme		Management cluster.	IP of Sol	idFire		
				Storage VIP of Admin user of A			_	
		dmin Pass	word	Admin passw cluster.				

11. 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 required information listed below and hit Save button.		
	Bueprint Initial Setup Physical Setup OpenStock Setup Services Setup		
	V Synop Export		
	Serilog Econt O		
	Remote host " Protocol " Facility " Sevenity " Port " Clients " Action "		
	1.1.1.1 vdp local5 entug 514 ELK 🖌 🗶		
	2.2.2.2 vdp local5 debug 514 ELK X 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	NFVBENCH enable checkbox by default is false .				
	Add ToR information	Add ToR information connect to Switch:				
	Bueprint Initial Setup Physical Setup Ope	Blueprint Initial Setup Physical Setup OpenStack Setup Services Setup				
	W MYMERICH					
	ie Enuble	g fruite				
	Add for info connected to switch: Suject VOR Switches *	Switch- (13-M037399-2 *				
	TOR Switches	* #851(3),#851/34				
	✓ /13-980372996-2					
	14 4 1 21 1 1					
	NG Ports: INT1	O INT2	0			
	3	2				
	NBC Stor	•				
	• Enter the port num and needed only and VLAN2.	itch and enter the Switch name. nber. For Example: eth1/5 . VTE for VTS/VXLAN,): Enter 2 differ and INT2 optional input. Enter th	ent VLANs for VLAN1			
	4-port 10G Intel NIC at the management node used for NFVBench.					
	NIC Slot: Optional input, should be in the range of 1-6, indicates which NIC to use in case there are multiple NICs. If nic_slot is defined, then nic_port has to be defined and vice-versa.					
ENABLE_ESC_PRIV	Enable the checkbox t	o set it as True. By default, it is F	alse.			

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 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 NFV Bench

One can **Run NFV Bench** for **BandC** series Pod, through Cisco VIM Insight. On a pod running with CVIM , 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
Run NDR/PDR test	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

- 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.
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, migration to Keystone v3, NFVBench, NFVIMON 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
NFVIMON	False

Optional Features	Repeated re-deployment Options
PODNAME	False
PROVIDER_VLAN_RANGES	True
SWIFTSTACK	True
SYSLOG_EXPORT_SETTINGS	False
TENANT_VLAN_RANGES	True
TORSWITCHINFO	False
VIM_ADMINS	True
VMTP	False
VTS_PARAMETERS	False
AUTOBACKUP	,
	True
Heat	False
Keystone v3	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.