

## **Managing Blueprints**

The following topics tell you how to manage Cisco NFVI Blueprints.

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- Creating a Blueprint for B-Series Server Platform, on page 2
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## **Blueprints**

Blueprints contain the configuration metadata required to deploy an OpenStack system through a Cisco VIM pod in Cisco VIM Insight. You can create a blueprint in Cisco Insight or you can upload a yaml file that contains the metadata for a blueprint. You can also create a blueprint from an existing OpenStack system that you are configuring as a Cisco VIM pod.

The configuration in the blueprint is specific to the type of Cisco UCS server that is in the OpenStack system. A blueprint for a C-Series server-based OpenStack system cannot be used to configure a B-Series server-based OpenStack system. Cisco Insight will display an error if the blueprint does not match the configuration of the OpenStack system.

The blueprint enables you to quickly change the configuration of an OpenStack system. While only one blueprint can be active, you can create or upload multiple blueprints for a Cisco VIM pod. If you change the active blueprint for a pod, you update the configuration of the OpenStack system to match the new blueprint.

You can modify and validate an existing blueprint, or delete a blueprint. However, you cannot modify any of the configuration metadata in the active blueprint for a Cisco VIM pod.

## **Blueprint Activation**

A blueprint becomes active when you use it in a successful installation for a Cisco VIM pod. Any other blueprints that you created or uploaded to that pod are in non-active state.

Uploading or creating a blueprint does not activate that blueprint for the pod. You need to install a blueprint through the **Cisco VIM Suite** wizard. If the installation is successful, the selected blueprint becomes active.



Note

If you want to activate a new blueprint in an existing pod, you need to delete certain accounts and the credential policies for that pod before you activate the blueprint. See Activating a Blueprint in an Existing Pod with OpenStack Installed, on page 22.

### **Viewing Blueprint Details**

You can view the details of an OpenStack installation blueprint. To view blueprint details:

- **Step 1** Log in to Cisco VIM Insight as pod User.
- Step 2 In the Dashboard's Switch between Management Nodes, select the Cisco VIM pod with the blueprint that you want to view.
- **Step 3** Click **Menu** button at the top left corner to expand the navigation pane.
- **Step 4** Choose **Pre-Install** > **Blueprint Management.**
- **Step 5** Choose a blueprint from the list.
- Step 6 Click Preview & Download YAML.

# **Creating a Blueprint for B-Series Server Platform**

Typically, you create the blueprint when you create the Cisco VIM pod. Follow the instructions below to create an additional blueprint for a pod that uses B-Series servers.

#### Before you begin

Create a Cisco VIM Insight User Account and Register the respective Pod.

- **Step 1** Log-in to Cisco VIM Insight.
- **Step 2** In the Navigation pane, expand the Pre-Install Section.
- Step 3 Click Blueprint Setup.
- **Step 4** On the **Blueprint Initial Setup** page of the Cisco VIM Insight, complete the following fields:

Name	Description	
Blueprint Name field.	Enter the name for the blueprint configuration.	
Platform Type drop-down list.	B-Series (By Default)     C-Series	
Tenant Network drop-down. list.	Choose one of the following tenant network types:  • Linux Bridge/VXLAN  • OVS/VLAN	

Name	Description	
Ceph Mode drop-down list.	Choose one of the following Ceph types:	
	Dedicated (By Default)	
	• Central	
Optional Features and Services checkbox.	Swiftstack, LDAP, Syslog Export Settings, COLLECTD Install Mode, TorSwitch Information, TLS, Nfvmon, Poc Name, VMTP, Nfvbench, Auto Backup, Heat, Keystone v3.	
	If any one is selected, the corresponding section is visible in various Blueprint sections.	
	By default all options are disabled.	
Import Existing YAML field.	If you have an existing B Series YAML file you can use this feature to upload the file.	
	Insight will automatically fill in the fields and if any mandatory fields are missed then the respective section will be highlighted.	

# Step 5 Click Physical Setup to advance to the Registry Setup configuration page. Fill in the following details for Registry Setup:

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

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

### **Step 6** Click **UCSM Common** tab and fill the following fields:

Name	Description
User name disabled field.	By default 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	
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 C24 Rack servers.	
Enable UCSM Plugin optional checkbox.	Visible when Tenant Network type is OVS/VLA.	
Enable QoS Policy optional Checkbox.	Visible only when UCSM Plugin is enabled. If UCSM Plugin is disabled then this option will be set to False.	
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 like Add, Delete, Edit and Multiple Delete.	

### **Step 7** Click **Networking** to advance to the networking section of the Blueprint.

Name	Description	
Domain Name field.	Enter the domain name (Mandatory).	
NTP Servers field.	Enter a maximum of four and minimum of one IPv4 addresses in the table.	
Domain Name Servers field.	Enter a maximum of three and minimum of one IPv4 addresses.	
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.	

Description	Description	
Network table is pre-populat Networks you can either clea all or click Edit icon for each details.	ar all the table using <b>Delete</b>	
You can add, edit, or delete r table.	network information in the	
• Click <b>Edit</b> to enter new 6	entries (networks) to the table.	
• Specify the following fi <b>Networks</b> dialog:	elds in the Edit Entry to	
Segment drop-down list.	By Default already Selected.	
Management Node IP field.	Enter the IP address of the build node.	
	This field is only available for the Mgmt/Provision segment and is only Mandatory if Zenoss is selected to be a part of Blueprint.	
VALN field.	Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always none.	
Subnet ID field.	Enter the IPv4 address for the subnet.	
Gateway field.	Enter the IPv4 address for the Gateway.	
If Rack is chosen, the <b>Rack</b> Unit ID field is displayed	Enter a Rack Unit ID.	
Pool field.	Enter the pool information in the required format, for example: 10.1.1.5-10.1.1.10,102.1.5-102.1.10	
	This field is only available for the Mgmt/Provision, Storage, and Tenant segments.	
	Network table is pre-populat Networks you can either clea all or click Edit icon for eac details.  You can add, edit, or delete r table.  • Click Edit to enter new e • Specify the following fi Networks dialog:  Segment drop-down list.  Management Node IP field.  VALN field.  Subnet ID field.  Gateway field.  If Rack is chosen, the Rack Unit ID field is displayed	

Step 8 On the Servers and Roles page of the Cisco VIM Suite wizard, click Add (+) to add a new entry in the table, and complete the following fields:

Name	Description		
Add Entry to Servers and Roles.	Click <b>Edit</b> or + to add a new server and role to the table.		
	Server Name	Enter a server name.	
	Server Type drop-down list.	Choose Blade or Rack from the drop-down list.	
	Rack ID field.	The Rack ID for the server.	
	Chassis ID field	Enter a Chassis ID.	
	If Rack is chosen, the <b>Rack Unit ID</b> field is displayed.	Enter a Rack Unit ID.	
	If Blade is chosen, the <b>Blade ID</b> field is displayed.	Enter a Blade ID.	
	Select the <b>Role</b> from the drop down list.	If Server type is Blade then Control and Compute. If Rack is selected then Block Storage.	
	Management IP.	It is an optional field but if provided for one server then it is mandatory to provide it for other Servers as well.	
Click Save or Add button.	Clicking Save or Add button Servers and Roles.	Clicking <b>Save or Add</b> button, adds all information for Servers and Roles.	
	Fill in all mandatory fields.		

# Step 9 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.

Name	Description
	If you enable this checkbox, the Configure ToR section will change from false to true.

Name	Description	
<b>ToR Switch Information</b> mandatory table if you want to enter Tor information.	Click + to add information for Tor Switch.	
	Name	Description
	Name	ToR switch name.
	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 need not define if there is no peer.
	VPC Domain	Need not define if there is no peer.
	VPC Peer port	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).
On clicking Save button, Add Tor Info Connected to Fabric field will be visible.	Port Channel field.	Enter the Port Channel input.
	Switch Name field.	Enter the friendly name.

**Step 10** Click **OpenStack Setup** tab to advance to the **OpenStack Setup** page.

**Step 11** On the **OpenStack Setup** page of the Cisco VIM Insight wizard, complete the following fields:

Name	Description	Description	
HA Proxy	Fill in the mandatory fields:		
	External VIP Address	Enter IP Address of External VIP.	
	Virtual Router ID	Enter the Router ID for HA.	
	Internal VIP Address	Enter IP Address of Internal VIP.	
Keystone	Mandatory field and pre-popul	ated. This option is always true.	
	Admin Username	admin.	
	Admin Tenant Name	admin.	
Ldap on keystone.	Ldap enable checkbox by de	fault is false.	
	Domain Namefield.	Enter name for Domain name.	
	Object class for Userfield.	Enter a string as input.	
	Object class for Group	Enter a string.	
	Domain Name tree for Groups	Enter a string.	
	Domain Name tree for User field.	Enter a string.	
	Suffix for domain name field.	Enter a string.	
	URL field.	Enter a URL with ending port number.	
	<b>Domain Name for Bind User</b> field.	Enter a string.	
	Password field.	Enter Password as string format.	

Name	Description	Description	
Neutron		Neutron fields change on the basis of <b>Tenant Network Type</b> Selection from <b>Blueprint Initial Setup</b> page.	
	Following are the options av OVS/VLAN:	wing are the options available for Neutron for VLAN:	
	Tenant Network Type	Auto Filled based on the Tenant Network Type selected in the Blueprint Initial Setup page.	
	Mechanism Drivers	Auto Filled based on the Tenant Network Type selected in Blueprint Initial Setup page.	
	NFV Hosts	Auto filled with the Compute you added in Server and Roles.	
		If you select All in this section NFV_HOSTS: ALL will be added to the Blueprint or you can select one particular compute. For Eg:	
		NFV_HOSTS: compute-server-1, compute-server-2.	
	Tenant VLAN Ranges	List of ranges separated by comma of formstart:end.	
	Enable Jumbo Frames	Check Box	
	For Tenant Network Type Lin the same except <b>Tenant VL</b> removed.	nux Bridge, everything will remain  AN Ranges which will be	
СЕРН	Ceph has two pre-populated	fields	
	• CEPH Mode: By defau	CEPH Mode: By default Dedicated.	
	• NOVA Boot from: Fro or local.	m the drop-down, choose Ceph	
GLANCE	By default Populated for CE Backend value as CEPH.	By default Populated for CEPH Dedicated with Store Backend value as CEPH.	
CINDER	By default Populated for CE <b>Driver</b> value as CEPH.	By default Populated for CEPH Dedicated with Volume Driver value as CEPH.	

Name	Description	
VMTP optional section will only be visible once VMTP is selected from Blueprint Initial Setup.	Provider Network     External Network	es to specify a VMTP network:
	For the Provider Network co	omplete the following:
	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.
	Segmentation ID field.	Enter the segmentation ID.
	Subnet	Enter the Subnet for Provider Network.
	For External Network fill i	n the following details:
	Network Name field.	Enter the name for the external network.
	Network IP Start field.	Enter the starting floating IPv4 address.
	Network IP End field.	Enter the ending floating IPv4 address.
	Network Gateway field	Enter the IPv4 address for the Gateway.
	DNS Server field.	Enter the DNS server IPv4 address.
	Subnet	Enter the Subnet for External Network.

Name	Description	
TLS section will be visible if TLS is selected from Blueprint Initial Setup Page.	<ul> <li>TLS has two options:</li> <li>External LB VIP FQDN - Text Field.</li> <li>External LB VIP TLS - True/False. By default this option is false.</li> </ul>	
SwiftStack optional section will be visible if	Following are the options that needs to be filled for SwiftStack:	
SwiftStack is selected from Blueprint Initial Setup Page. SwiftStack is only supported with KeyStonev2 . If you select Keystonev3, swiftstack cannot be configured.	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

# Step 12 If Syslog Export or NFVBENCH is selected in Blueprint Initial Setup Page, then Services Setup page would be enabled for user to view. Following are the options under Services Setup Tab:

Name	Description	Description	
Syslog Export.	Following are the option	Following are the options for Syslog Settings:	
	Remote Host	Enter Syslog IP Address.	
	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	Enable checkbox which by default is <b>false</b> .	
	Add Tor information connected to switch:	
	• Select a TOR Switch and Enter the Switch name.	
	• Enter the port number. For example: eth1/5	
	• 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 NFVBench.	

- **Step 13** Click **Offlinevalidation** button to initiate an offline Blueprint validation.
- Step 14 Once the Offlinevalidation is successful, Save option will be enabled which will redirect you to the Blueprint Management page.

# **Creating a Blueprint for C-Series Server Platform**

Typically, you create the blueprint when you create the Cisco VIM pod. You can use this procedure to create an additional blueprint for a pod that uses C-Series servers.

#### Before you begin

Create a Cisco VIM Insight User Account and register the respective Pod.

- Step 1 Log-in to CISCO VIM Insight.
- Step 2 In the Navigation pane, expand the Pre-Install Section.
- Step 3 Click Blueprint Setup.
- Step 4 On the Blueprint Initial Setup page of the Cisco VIM Insight, complete the following fields:

Name	Description
Blueprint Name field	Enter the name for the blueprint configuration.
Platform Type drop-down list	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
	• ML2VPP/VLAN

Name	Description	
Ceph Mode drop-down list	Choose one of the following Ceph types:	
	Dedicated (By Default)	
	• Central	
Optional Features and Services checkbox.	Swiftstack, LDAP, Syslog Export Settings, COLLECTD, Install Mode, TorSwitch Information, TLS, Nfvmon, Pod Name, VMTP, Nfvbench, Auto Backup, Heat, Keystone v3	
	If any one is selected, the corresponding section is visible in various Blueprint sections.	
	By default all options are disabled.	
Import Existing YAML file	If you have an existing C Series YAML file you can use this feature to upload the file.	
	Insight will automatically fill in the fields and if any mandatory field is missed then would highlight it in the respective section.	

# Step 5 Click Physical Setup to advance to the Registry Setup configuration page. Fill in the following details for Registry Setup.

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

Once all Mandatory fields are filled, the Validation Check Registry page will indicate a green tick.

### **Step 6** Click **CIMC Common** tab and complete the following fields:

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

### **Step 7** Click **Networking** to advance to the networking section of the Blueprint.

Name	Description
Domain Name field.	Enter the domain name (Mandatory).
NTP Servers field.	Enter a maximum of four and minimum of one IPv4 addresses in the table.

Name	Description
Domain Name Servers field	Enter a maximum of three and minimum of one IPv4 addresses
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.
Networks table	Network table is pre-populated with segments. To add Networks you can either clear all the table using <b>Delete</b> all or click <b>Edit</b> icon for each segment and fill in the details.
	You can add, edit, or delete network information in the table.

Step 8 Click Edit to enter new entries (networks) to the table. Specify the following fields in the Edit Entry to Networks dialog:

Name	Description
Segment drop-down list	By default Selected.
Management Node IP field.	Enter the IP address of the build node. This field is only available for the Mgmt/Provision segment and is only Mandatory if Zenoss is selected as part of Blueprint.
VLAN field	Enter the VLAN ID. For Segment - Provider, the VLAN ID value is always <b>none</b> .
Subnet field	Enter the IPv4 address for the subnet.
Gateway field	Enter the IPv4 address for the Gateway.
Pool field	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
	This field is only available for the Mgmt/Provision, Storage, and Tenant segments.
Click Save.	

Step 9 On the Servers and Roles page of the Cisco VIM Suite wizard, click Add (+) to add a new entry in the table, and complete the following fields:

You can edit or delete existing entries in the Server and Roles table.

Name	Description	
Add Entry to Servers and Roles .	Click <b>Edit</b> or + to add a new server and role to the table.	
	Server Name	Entry a friendly name.
	Boot Drive drop-down list.	Choose LOCALHDD or SDCARD from the drop-down list.
	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 <b>Role</b> from the drop down list.	Choose Control or Compute or BlockStorage from the drop-down list.
	Management IP	It is an optional field but if provided for one server then it is mandatory to provide it for other servers.
If <b>ToR</b> checkbox is selected with an entry, this	• Port Channel field.	Enter the Port Channel input
field will be displayed.	• Switch Name field.	• Enter the friendly name
If Intel NIC support is checked in server and roles with ToR being selected.	Add SRIOV ToR info connected to switch.	Enter the switch-name.
If Intel NIC is checked with an entry of integer value, then <b>Add DP</b> ToR info is connected to switch filed.	Port Channel field.     Switch-Name field.	Enter the Port channel.     Enter the string.
Click Save or Add button.	If all mandatory fields are filled click <b>Save or Add</b> button information for Servers and Roles	

# Step 10 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, it becomes a part of the Blueprint.

Name	Description
Configure TOR optional checkbox.	If you enable this checkbox configure tor section would be changed from false to true.

Name	Description	
TOR Switch Information mandatory table if	Click + to add information for ToR Switch.	
you want to enter ToR information.	Name	Description
	Name	ToR Switch Name.
	Username	TOR switch username
	Password	ToR switch Password
	SSH IP	TOR switch ssh ip
	SSN Num	TOR switch ssn num
	VPC Peer Keepalive	Peer Management IP. Do not define if there is no peer
	VPC Domain	Do not 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.		

### Step 11 Click OpenStack Setup Tab to advance to the OpenStack Setup page.

**Step 12** In the **OpenStack Setup** page of the Cisco VIM Insight wizard, complete the following fields:

Name	Description		
HA Proxy	Mandatory Field. Fill in the	Mandatory Field. Fill in the following details:	
	External VIP Address	Enter IP Address of External VIP	
	Virtual Router ID	Enter the Router ID for HA	
	Internal VIP Address	Enter IP Address of Internal VIP	

Name	Description	
Keystone	Mandatory field and prepopulate be true.	ated. This option would always
	Admin Username	admin
	Admin Tenant Name	admin
Ldap on keystone	Ldap enable checkbox by default is false.	
	<b>Domain Name</b> field.	Enter name for Domain name.
	Object class for Userfield.	Enter a string as input.
	Object class for Group	Enter a string.
	Domain Name tree for Groups	Enter a string.
	<b>Domain Name tree for User</b> field.	Enter a string.
	Suffix for domain name field.	Enter a string.
	URL field.	Enter a URL with ending port number.
	<b>Domain Name for Bind User</b> field.	Enter a string.
	Password field.	Enter Password as string format.

Name	Description		
Neutron		ge on the basis of <b>Tenant Network print Initial Setup</b> . Following are eutron for OVS/VLAN:	
	Tenant Network Type	Auto Filled based on the Tenant Network Type selection in Blueprint Initial Setup page.	
	Mechanism Drivers	Auto Filled based on the Tenant Network Type selection in Blueprint Initial Setup page.	
	NFV Hosts	Auto filled with the Compute you added in Server and Roles. If you select All in this section NFV_HOSTS: "ALL" will be added to the Blueprint or else you can select particlula computes as well for eg: NFV_HOSTS: "compute-server-1, compute-server-2"	
	Tenant VLAN Ranges	Only with VTS/VLAN and VPP/VLAN	
	Enable Jumbo Frames	Check Box default is false	
		inux Bridge everything will remain  N Ranges will be removed.	
СЕРН	Ceph has two pre-populate	d fields	
	• CEPH Mode: By de	fault Dedicated.	
	NOVA Boot from: Dechoose Ceph or local.	rop Down selection. You can	
GLANCE	By default populated for CE value as CEPH.	By default populated for <b>CEPH Dedicated</b> with Store Backend value as <b>CEPH</b> .	
CINDER	By default Populated for C Driver value as CEPH.	EPH Dedicated with Volume	

Name	Description	
VMTP optional section will only be visible once VMTP is selected from Blueprint Initial Setup.	Check one of the check boxe  • Provider Network  • External Network	es to specify a VMTP network:
	For the <b>Provider Network</b> complete the following:	
	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.
	Segmentation ID field	Enter the segmentation ID.
	Subnet	Enter the Subnet for Provider Network.
	For External Network fill i	n the following details:
	Network Name field	Enter the name for the external network.
	Network IP Start field	Enter the starting floating IPv4 address.
	Network IP End field	Enter the ending floating IPv4 address.
	Network Gateway field	Enter the IPv4 address for the Gateway.
	DNS Server field	Enter the DNS server IPv4 address.
	Subnet	Enter the Subnet for External Network.

Name	Description	
TLS This optional section will only be visible once TLS is selected from Blueprint Initial Setup Page.	TLS has two options:  • External LB VIP FQE  • External LB VIP TLS option is false.	ON - Text Field True/False. By default this
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 available for configuration.	Following are the options that needs to be filled for SwiftStack:	
	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 ?

**Step 13** 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:	
	Remote Host	Enter Syslog IP Address
	Protocol	Drop-down selection for UDP and TCP. By default its UDP
	Facility	Defaults to local5
	Severity	Defaults to debug
	Clients	Defaults to ELK
	Port	Defaults to 514 but can be modified by the User.

NFVBENCH	enable checkbox which by default is <b>false</b> .	
	Add Tor info connected to switch:	
	• Select a TOR Switch Switch- (switch name)	
	• Enter the port number, e.g. eth1/5	
	• NIC Ports: INT1 & INT2 Optional input, enter the 2 port numbers of the 4-port 10G Intel NIC at the management node used for NFVBench	

- **Step 14** Click **Offlinevalidation** button to initiate an offline validation of the Blueprint.
- Step 15 Once the Offlinevalidation is successful, Save option will be enabled for you which when clicked would redirect you to the Blueprint Management Page.

## **Creating a Blueprint using Upload Functionality**

#### Before you begin

- You should have a YAML file (B series or C Series) on your system.
- Only one blueprint can be uploaded at a time. To create a blueprint off-line, please refer to the setup\_data.yaml.B\_Series\_EXAMPLE or setup\_data.yaml.C\_Series\_EXAMPLE.
- The respective keys in the sample YALM should match or the corresponding section will not be populated during upload.
- Step 1 Log-in to CISCO VIM Insight.
- **Step 2** In the **Navigation** pane, expand the **Pre-Install** Section.
- Step 3 Click Blueprint Setup.
- Step 4 Click the Browse button in the Blueprint Initial Setup page.
- Step 5 Click Select.
- Step 6 Click on Load button in the Insight UI Application.

All the fields present in the YAML file will be uploaded to the respective fields in the UI.

**Step 7** Provide a Name for the Blueprint.

Make sure the blueprint name is unique while saving it.

- **Step 8** Click **Offline Validation**.
  - If all the mandatory fields in the UI are populated, then Offline Validation of the Blueprint will commence, or else a pop up message indicating the section of Blueprint Creation that has missing information error shows up.
- **Step 9** On Offline Blueprint Validation being successful, **Save Blueprint** and **Cancel** button will be enabled.

Note

If the Blueprint Validation Fails, only the Cancel button will be enabled.

## Activating a Blueprint in an Existing Pod with OpenStack Installed

#### Before you begin

You must have a POD which has an active Installation of OpenStack. If the OpenStack installation is in Failed State, then Insight UI will not be able to fetch the Blueprint.

- **Step 1** Go to the **landing page** of the Insight Login.
- Step 2 Click Register Management Node.
- **Step 3** Enter the following details:
  - Management Node IP Address.
  - Management Node Name (Any friendly Name).
  - REST API Password (/opt/cisco/ui config.json).
  - Description about the Management Node.
  - POD Admin's Email ID.

A notification email will be sent to the email id entered during registration.

- **Step 4** Login using the same email id and password.
- **Step 5** In the Navigation pane, click **Pre-Install** > **Blueprint Management**.

In the Blueprint Management Page you will see NEWSETUPDATA.

This is the same setup data which was used by ciscovimclient to run the installation on the Management Node.

## **Downloading Blueprint**

#### Before you begin

You must have atleast one blueprint (In any state Active/In-Active or In-progress), in the **Blueprint Management Page**.

- Step 1 Log-in to CISCO VIM Insight.
- **Step 2** In the **Navigation** pane, expand the **Pre-Install Section**.
- Step 3 Click Blueprint Management.
- Step 4 Go-to **Download** button for any Blueprint under Action title. (**Download Button** > **Downward Arrow** (with tooltip Preview & Download YAML).
- **Step 5** Click the **Download** icon.

A pop to view the Blueprint in the YAML format will be displayed.

Step 6 Click the **Download** button at the bottom left of the pop-up window. YAML will be saved locally with the same name of the Blueprint.

### **Validating Blueprint**

- Step 1 Log-in to CISCO VIM Insight.
- Step 2 In the Navigation pane, expand the Pre-Install Section.
- Step 3 Click Blueprint Creation.
- **Step 4** Upload an existing YAML, or create a **New Blueprint**.

Fill all the mandatory fields so that all Red Cross changes to **Green Tick**.

- **Step 5** Enter the name of the Blueprint.
- Step 6 Click the Offline Validation button.

Only if the Validation is successful, the Insight will allow the user to save the blueprint.

#### What to do next

If you see any errors, then hyperlink will be created for those errors. Click on the link to be navigated to the page where error has been encountered.

## **Managing Post Install Features**

Cisco VIM provides an orchestration that helps in lifecycle management of a cloud. VIM is responsible for pod management activities which includes fixing both hardware and software issues with one-touch automation. VIM Insight provides the visualization of the stated goal. As a result, it integrates with POST install features that Cisco VIM offers through its Rest API. These features are enabled only if there is an active Blueprint deployment on the pod.

## **Monitoring the Pod**

In VIM 2.0, we use 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 In the Navigation pane, click Post-Install > Monitoring.

  The Authentication Required browser pop up is displayed.
- **Step 2** Enter the **username** as Admin.
- **Step 3** 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

You can also view Kibana Logs in a new tab by clicking the Click here to view Kibana logs in new tab link.

### **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 the link Click here to view Horizon logs in new tab. You will be redirected to Horizon landing page in a new tab.

#### Run VMTP

Run VMTP is divided in two sections:

- **Results for Auto Run**: This will show the results of VMTP which was run during cloud deployment (Blueprint Installation).
- **Results for Manual Run**: Here you have an option to run the VMTP on demand. To run VMTP on demand just click **Run VMTP** button.



Note

If VMTP stage was skipped/not-run during Blueprint Installation, this section of POST Install would be disabled for the user.

### **Run CloudPulse**

Following are the tests supported in CloudPulse:

- 1. cinder\_endpoint
- 2. glace\_endpoint
- 3. keystone endpoint
- 4. nova\_endpoint
- 5. neutron\_endpoint
- 6. rabbitmq check
- 7. galera check
- 8. ceph check