

Cisco Application Centric Infrastructure

ACI: Configuring Out-of-Band (OOB) Access for Your Fabric

Configuring Out-of-Band (OOB) connectivity to your ACI Fabric devices is a critical component to successfully maintaining and operating your data center. When it comes to configuring OOB connectivity to your devices (leaves, spines, and APIC controllers), you'll need to begin with two tasks.

1. All devices will need static OOB addresses (APIC controllers, leaves, and spines) that associate the IP address, NodeID, default GW, and management type (OOB, in this case).
2. You'll need to configure a contract that will be consumed and provided to your OOB devices. The contract will allow the system to know what traffic is allowed. (In this use case, you will use the default/common contract to permit any traffic.)

Notables and Caveats

- Although you technically configure your OOB address for all APICs during the initial setup, you will need to configure their OOB connectivity here as well, to ensure that you can reach the APICs via SNMP, etc.
- Out-of-band is required for customers planning to use MultiSite. (Multisite cannot be deployed with In-band Management.)

Provide OOB Address for Your APICs and Switches

Add the APIC(s) to the Static OOB Address List

Tenant > Tenant mgmt > Node Management Addresses > Static Node Management Addresses

- Configure a separate entry for each of your APICs.
 - Node IDs for your APIC will range from 1-3 (assuming you have a 3-node APIC cluster)
 - Node Range (use the node ID for to and from)
 - Select Out-of-Band
 - Configure your OOB IPv4 address and IPv4 Gateway
 - Click Submit

Create Static Node Management Addresses

Specify policy name and a node range, and set their IPs.

Node Range: -
From To

Config: Out-Of-Band Addresses
 In-Band Addresses

Out-Of-Band Addresses

Out-Of-Band Management EPG:

Out-Of-Band IPv4 Address:
address/mask

Out-Of-Band IPv4 Gateway:

Out-Of-Band IPv6 Address:
address/mask

Out-Of-Band IPv6 Gateway:

Tenant > Tenant mgmt > Node Management Addresses > Static Node Management Addresses

Add Your ACI Fabric Switches to the Static OOB Address List

Tenant > Tenant mgmt > Node Management Addresses > Static Node Management Addresses

- Configure a separate entry for each of your switches (both spine and leaf)
- Node Range (use the node ID for to and from)
- Select Out-of-Band
- Configure your OOB IPv4 address and IPv4 Gateway
- Click Submit

Node	Type	EPG	IPv4 Address	IPv4 Gateway	IPv6 Address	IPv6 Gateway
pod-1/node-1	Out-Of-Band	default	10.18.188.101/24	10.18.188.1	::	::
pod-1/node-2	Out-Of-Band	default	10.18.188.102/24	10.18.188.1	::	::
pod-2/node-3	Out-Of-Band	default	10.18.188.103/24	10.18.188.1	::	::
pod-1/node-101	Out-Of-Band	default	10.18.188.105/24	10.18.188.1	::	::
pod-2/node-102	Out-Of-Band	default	10.18.188.106/24	10.18.188.1	::	::
pod-1/node-201	Out-Of-Band	default	10.18.188.111/24	10.18.188.1	::	::
pod-1/node-202	Out-Of-Band	default	10.18.188.112/24	10.18.188.1	::	::
pod-1/node-203	Out-Of-Band	default	10.18.188.113/24	10.18.188.1	::	::
pod-1/node-204	Out-Of-Band	default	10.18.188.114/24	10.18.188.1	::	::
pod-2/node-205	Out-Of-Band	default	10.18.188.115/24	10.18.188.1	::	::
pod-2/node-206	Out-Of-Band	default	10.18.188.116/24	10.18.188.1	::	::

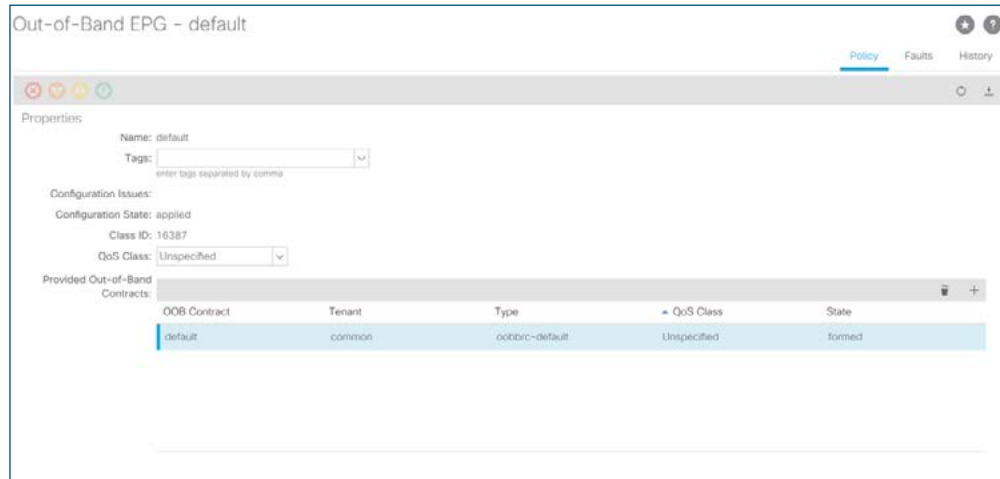
Tenant > Tenant mgmt > Node Management Addresses > Static Node Management Addresses

Provide and Consume Contracts for Your OOB Devices Using Default/Common Contract (Permit Any/Any)

Step 1 - Providing the contract

Tenant > Tenant mgmt > Node Management EPGs > Out-of-Band EPG default

- Under the “Provided Out-of-Band Contracts” in the policy window, provide the appropriate contract. (This could be a the default/common contract or a specific contract you have created and modified). Click Submit.

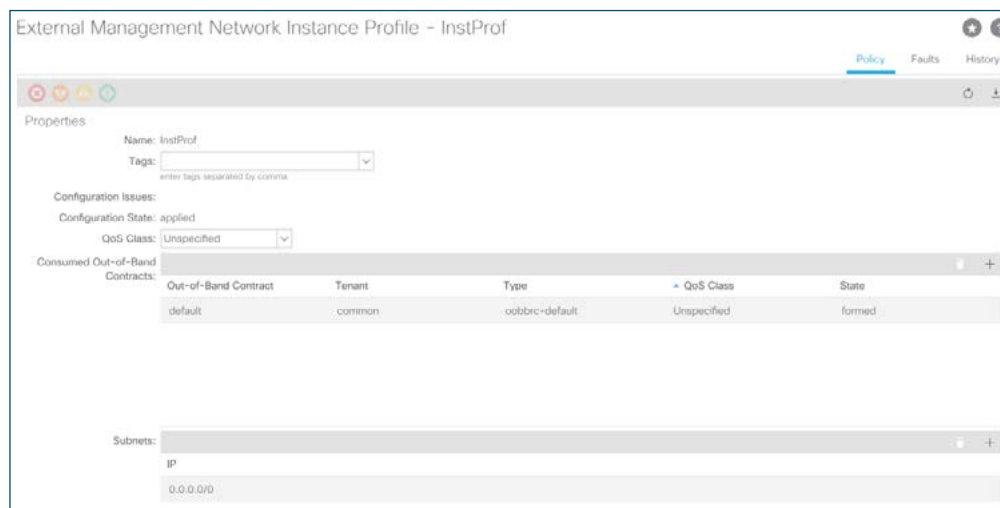


Tenant > Tenant mgmt > Node Management EPGs > Out-of-Band EPG default

Step 2 - Consuming the contract

Tenant > Tenant mgmt > External Management Network Instance Profiles > YourInstanceProfile

- Consume the same contract that you provided in the previous step.
- Enter the subnets that are allowed to have access to the APIC. (0.0.0.0/0 will permit all).



Tenant > Tenant mgmt > External Management Network Instance Profiles > YourInstanceProfile