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Lab 1: Bare Metal Host Lab.

Overview

- Configure SW1 and SW2 as bare metal servers connecting to Leaf-101 & Leaf-102 respectively.
- Add static paths from the Leaf-101 & Leaf-102 towards SW1 & SW2.
- Configure access policies as follows.
    - VLAN Group Name - BMH_VLAN
    - VLAN Range - 10-20 (Static VLAN)
    - PHY_Domain - BMH_DOM
    - AAEP - BMH_AAEP
    - Interface Policies should be - Speed should be 1GB/CDP & LLDP on.
    - Interface Policy Group - BMH_GROUP
    - Interface Profile - BMH_LEAF_101_PROF for Leaf-101

      BMH_LEAF_102_PROF for Leaf-102
    - Switch Profile - BMH_SW_PROF_101
      - BMH_SW_PROF_102
    - Tenant - Netmetric
    - Application Profile - ALL_BMH_APP
    - EPG - BMH_EPG
    - Static_path - VLAN_10
    - BD - BMH_BD
    - VRF - BMH_VRF
    - BD_Subnet - 192.168.1.254/24

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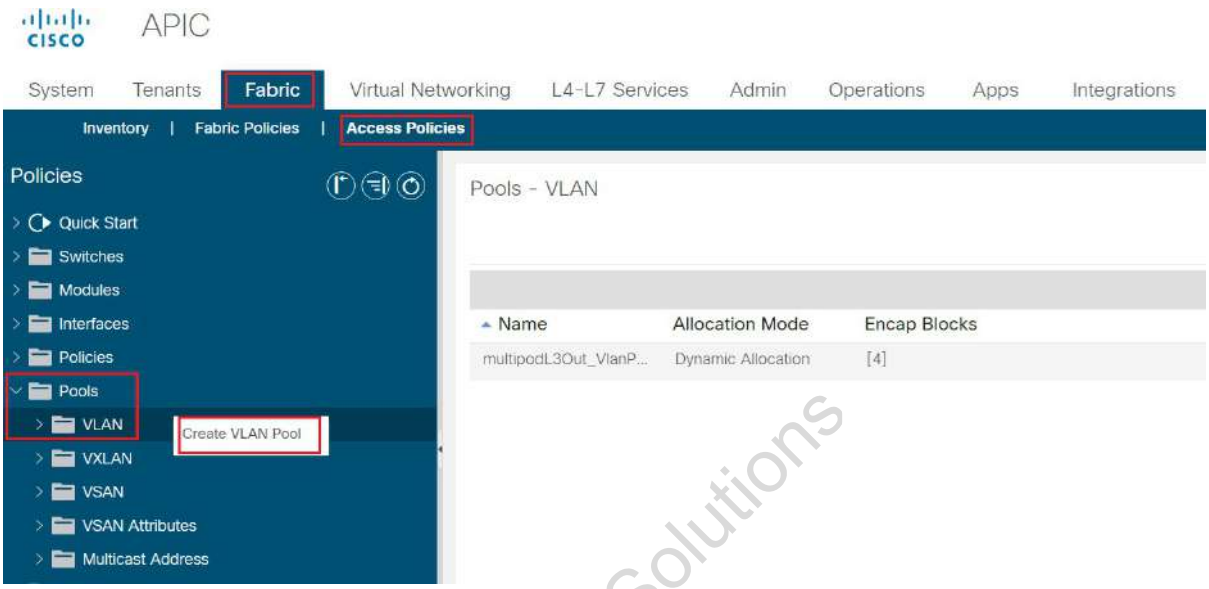
Task 1: Create VLAN Pool

Activity Procedure

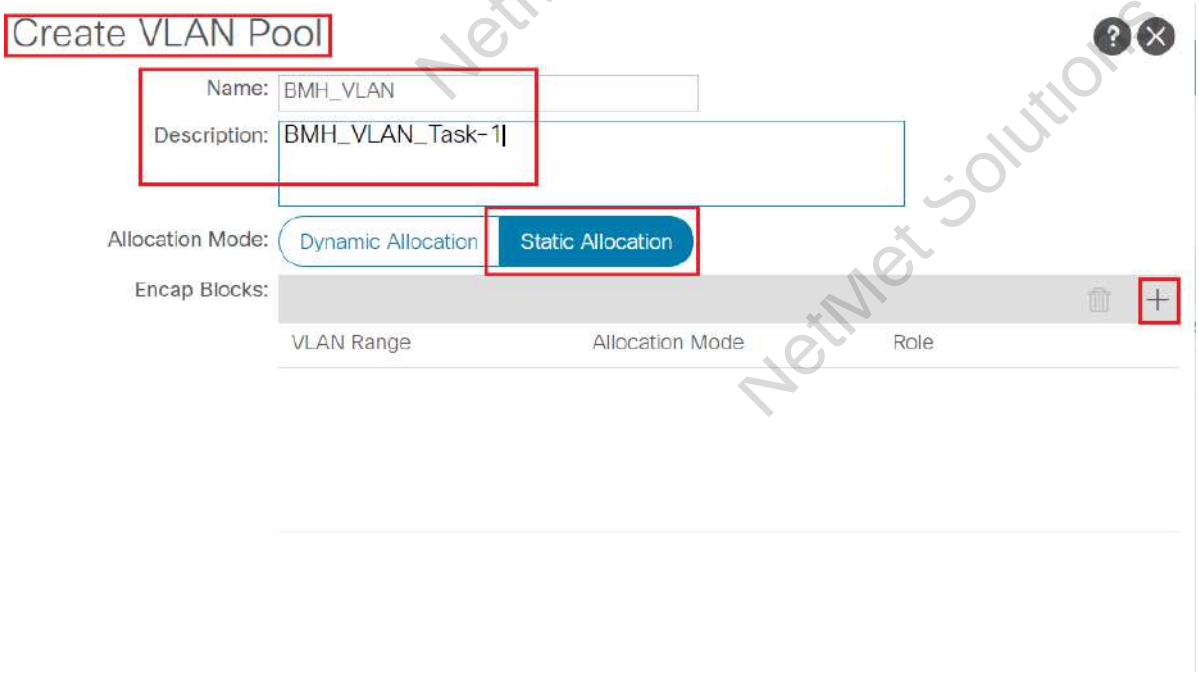
Complete the following steps:

Step 1 From your **Admin PC**, login to the APIC as needed.

Step 2 In the Menu bar, navigate to **Fabric** > **Access Policies** > **Pools**. Right-click **VLAN** and choose **Create VLAN Pool**.

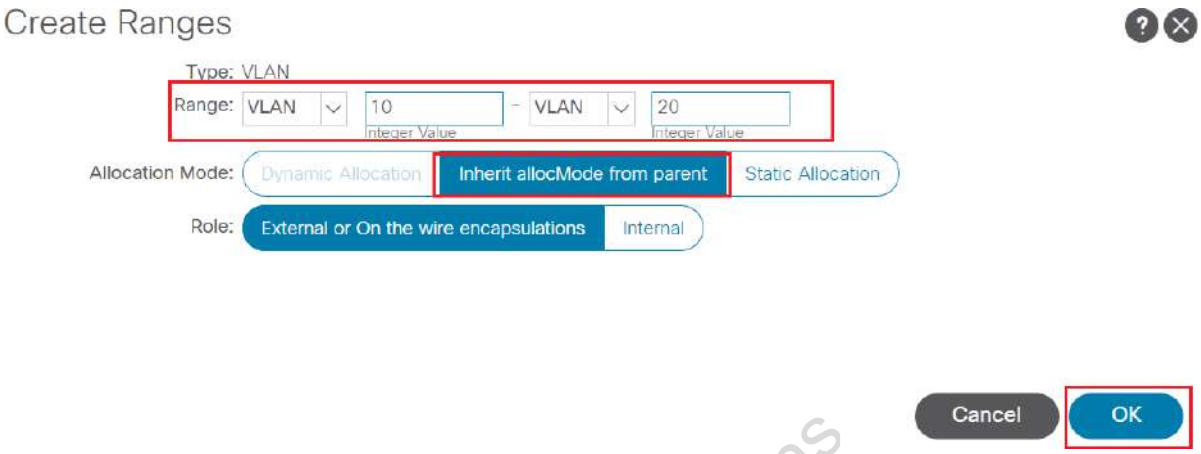


Step 3 Create a VLAN pool **POD##-Vlan** and select the Allocation Mode: **Static Allocation**.

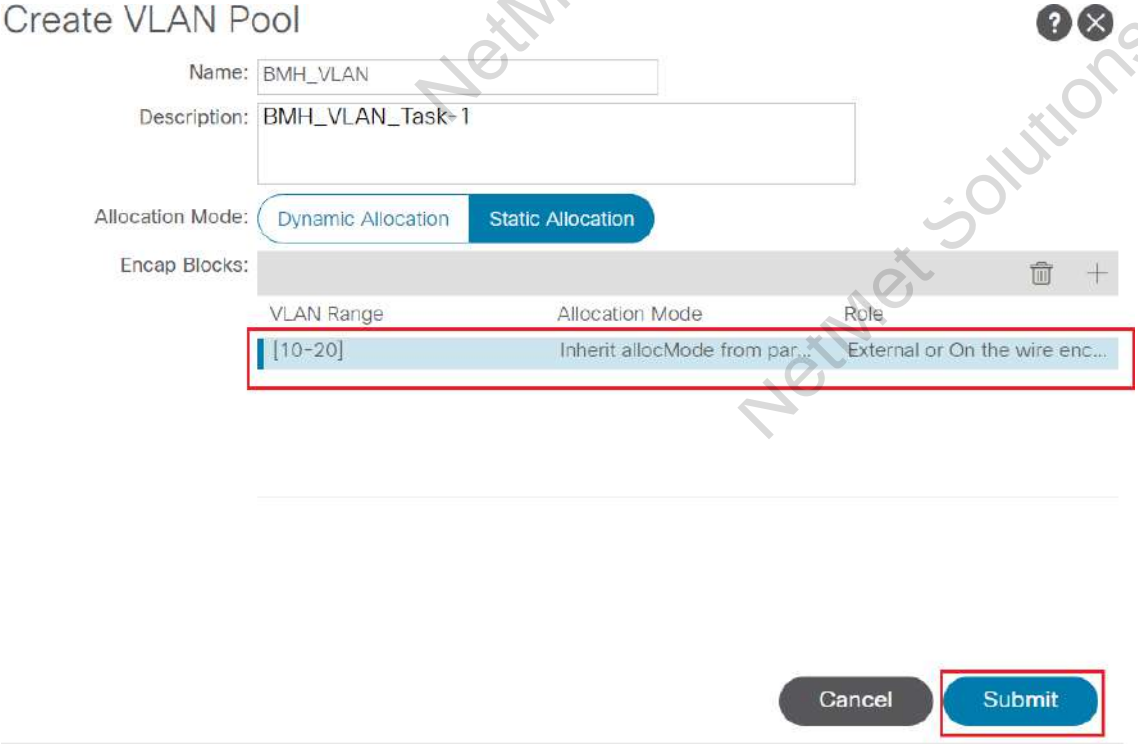


Step 3 Configure the vlan range as #0 - #9 where # is your POD ID.

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Step 4 Click ok and submit



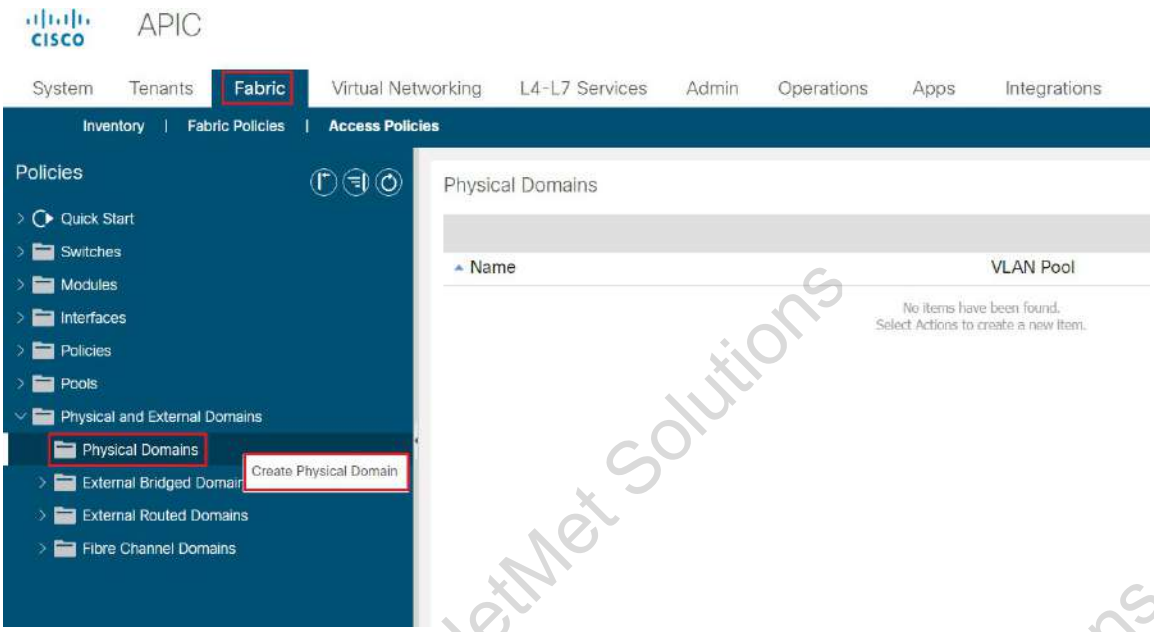
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Task 2: Create Physical Domain

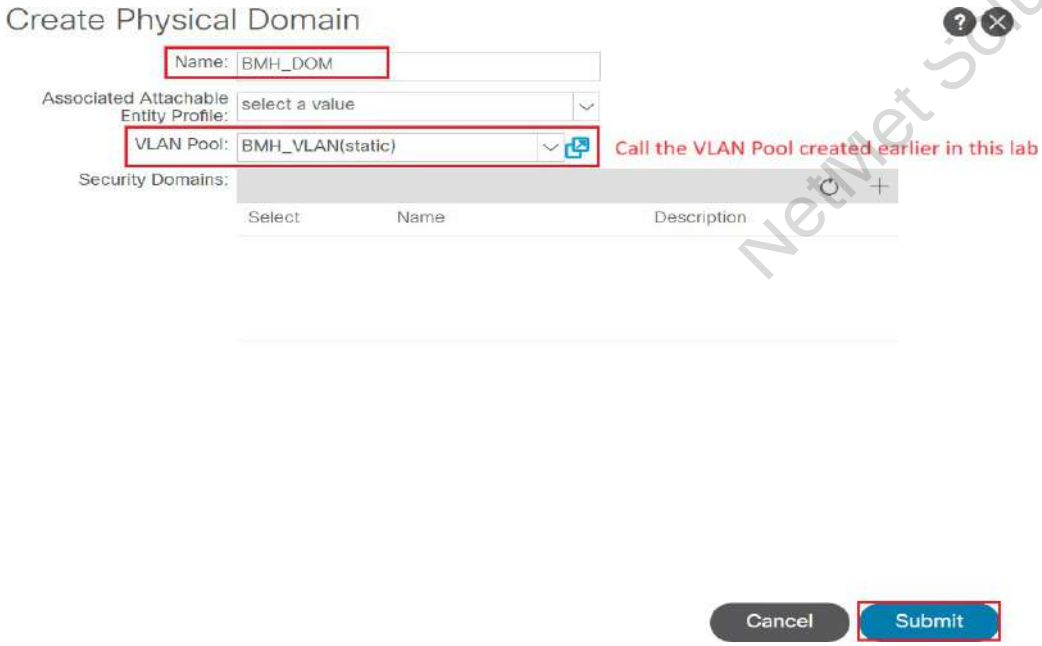
Activity Procedure

Complete the following steps:

Step 1 Navigate to **Fabric** > **Access Policies** > **Physical and External Domains**, right-click **Physical Domains**, and choose **Create Physical Domain**.



Step 2 Configure a physical domain **POD##-BMH .** Select the VLAN pool **POD##-Static**



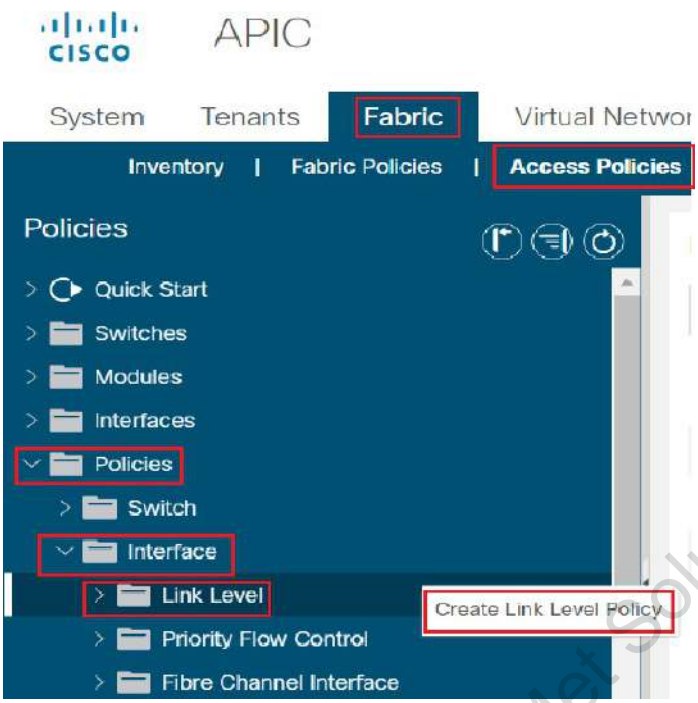
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Task 3: Create Interface Policies.

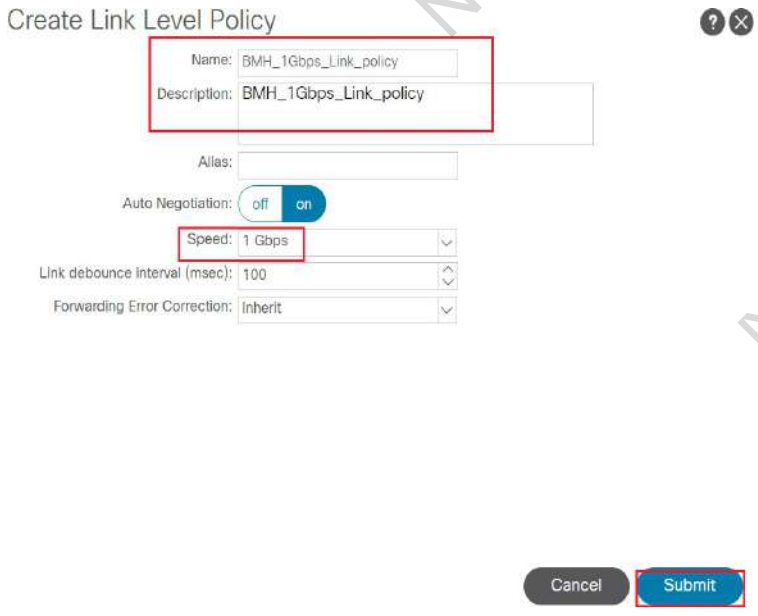
Activity Procedure

Complete the following steps:

Step 1 Navigate to **Fabric** > **Access Policies** > **Policies > Interface > Link Level**, right-click **Link Level**, and choose **Create Link Level Policy**.

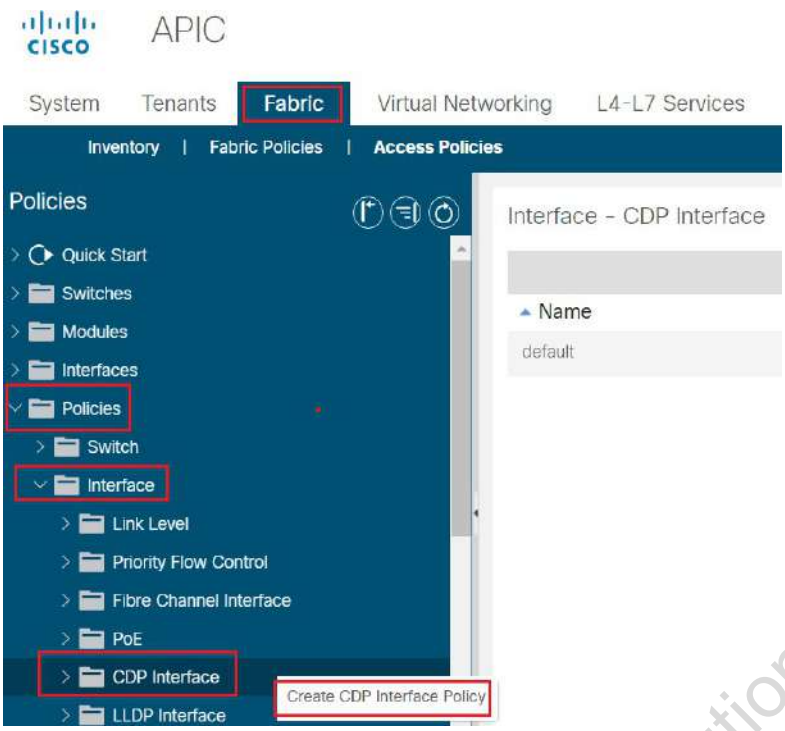


Step 2 Configure the name as **POD##-LL-Policy .** Configure speed as 1Gbps. Click submit.

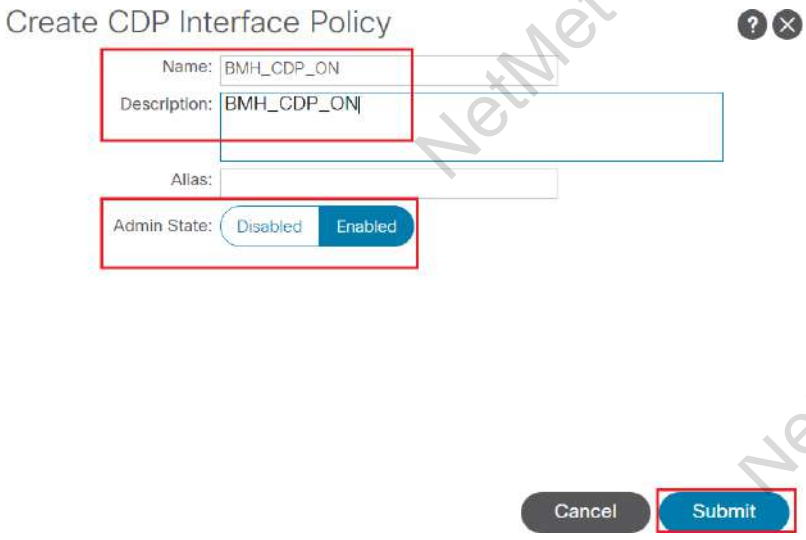


Step 3 Navigate to **Fabric** > **Access Policies** > **Policies > Interface > CDP Interface**, right-click **Link Level**, and choose **Create CDP Interface Policy**.

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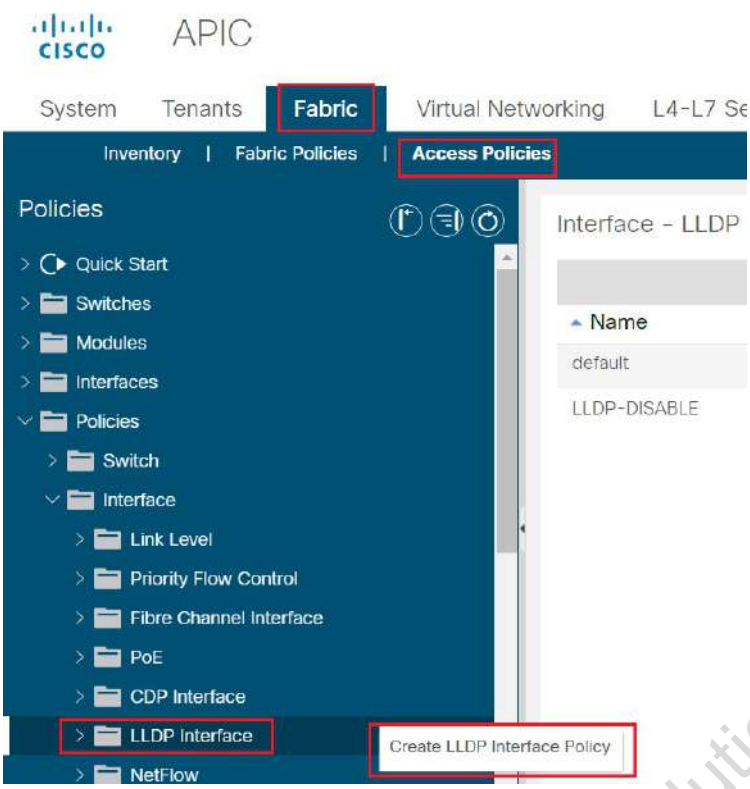


Step 4 Configure the name as **POD##-CDP-Policy .** Configure state as enabled. Click submit.



Step 5 Navigate to **Fabric** > **Access Policies** > **Policies > Interface > LLDP Interface**, right-click **Link Level**, and choose **Create LLDP Interface Policy**.

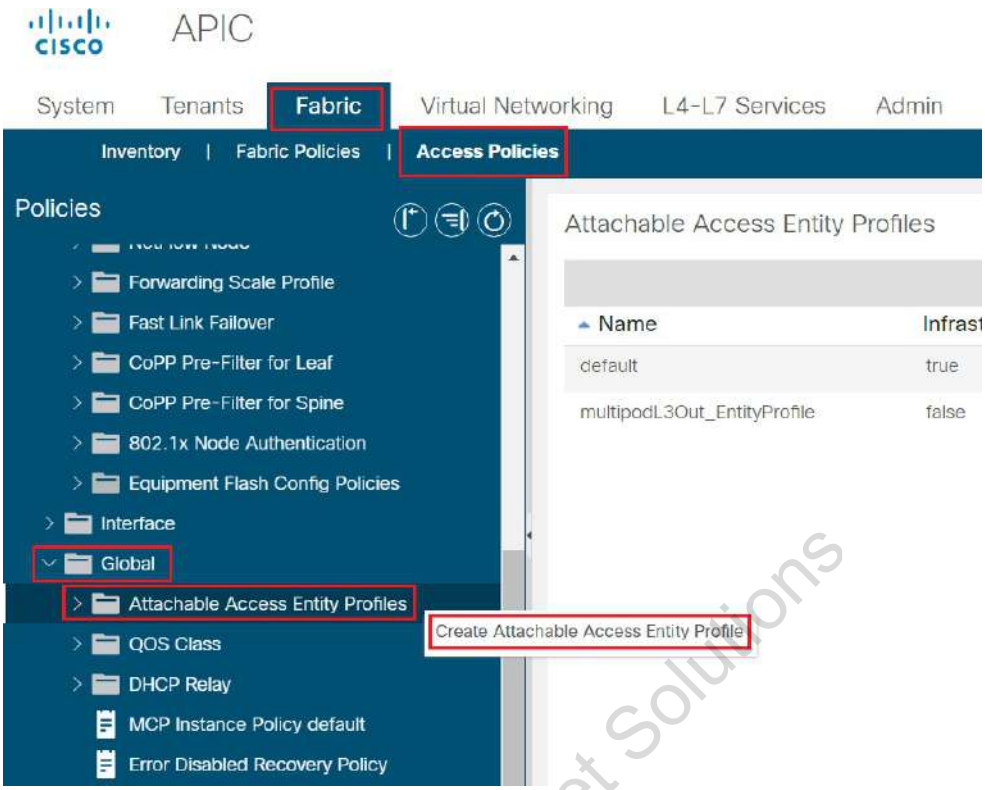
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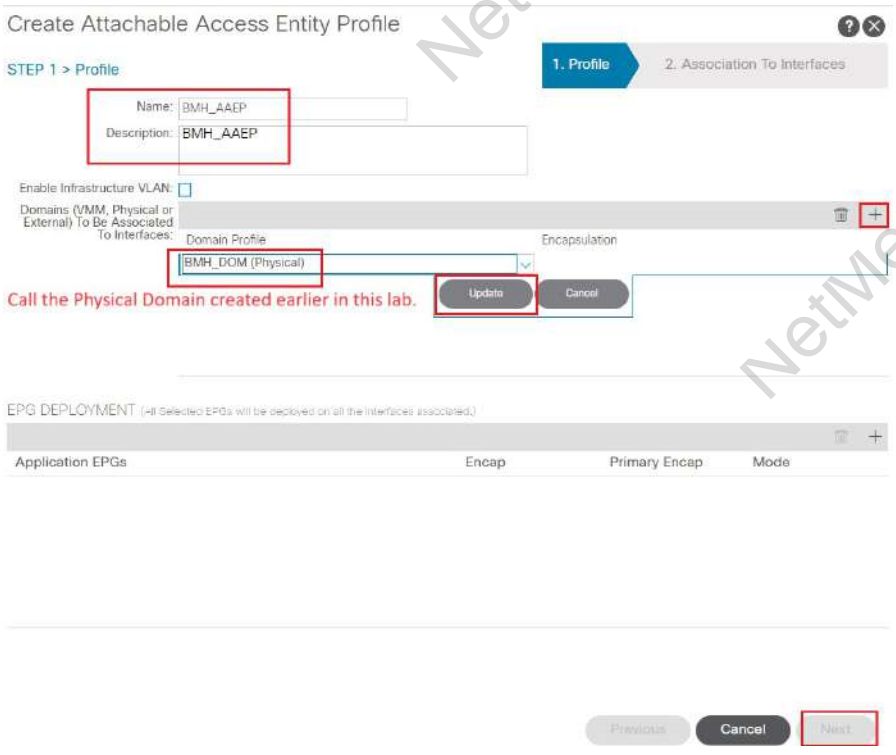
Step 6 Configure the name as **POD##-LLDP-Policy** . Configure state as enabled. Click submit.



Step 7 Navigate to **Fabric** > **Access Policies** > **Policies > Global > AAEP** right-click **Link Level**, and choose **Create AAEP**.



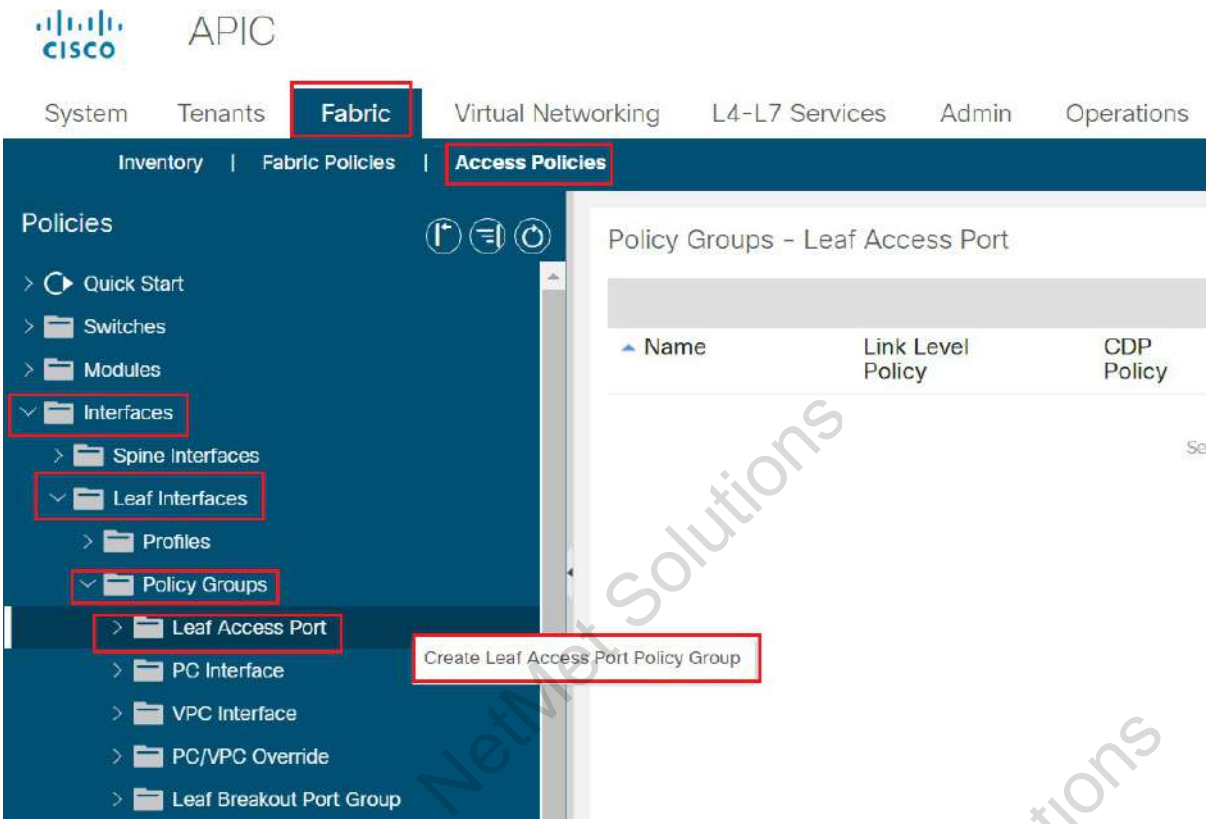
Step 8 Configure the name as **POD##-AAEP .** Under Domain select **POD##-Domain** and update. Click **Next & Finish**.



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Task 4: Create Interface Policy Group.

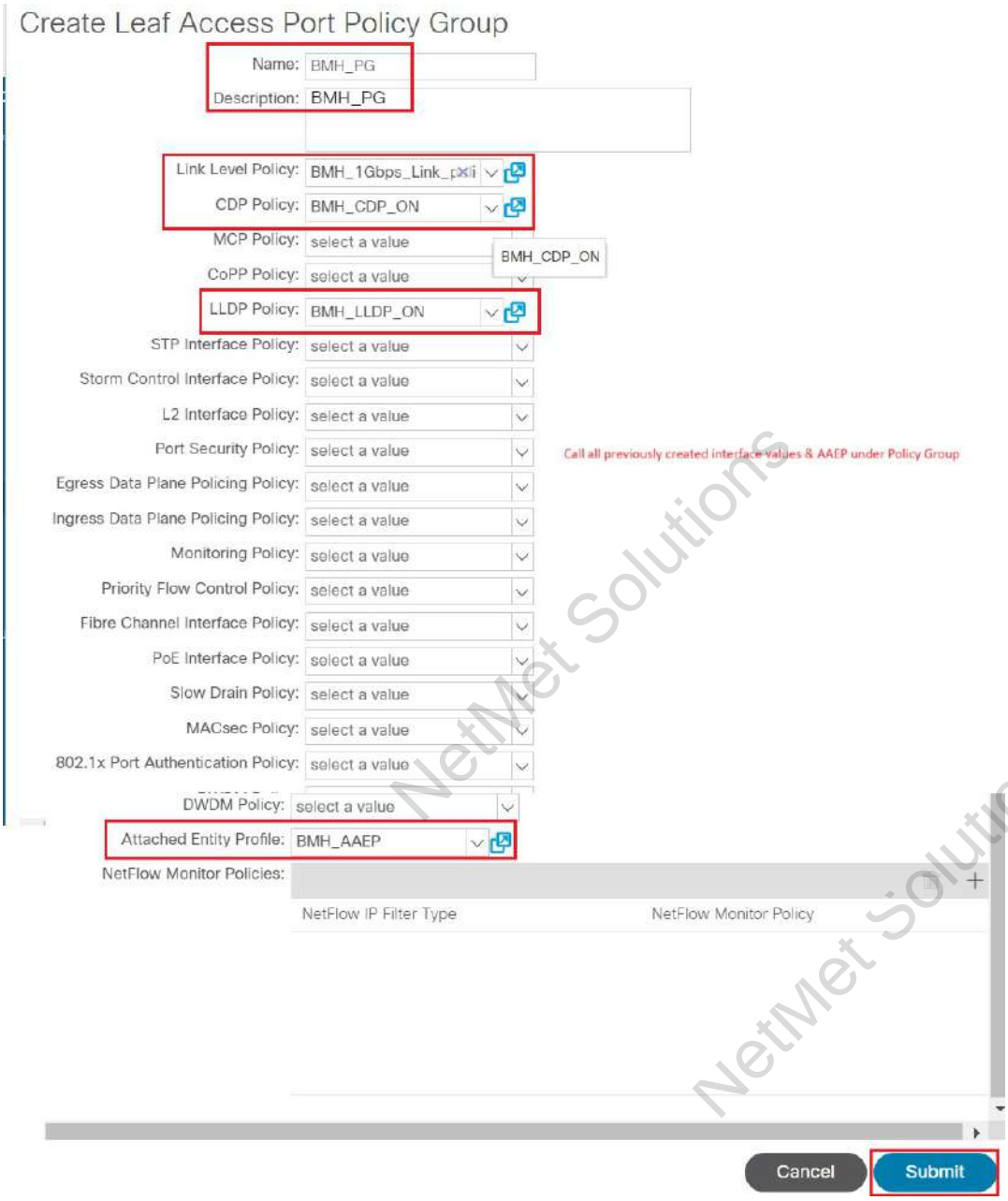
Step 1 Navigate to **Fabric** > **Access Policies** > **Interfaces** > **Leaf Interfaces** > **Policy Groups** > **Leaf Access Port**, Create your interface policy group **POD##_BMH_IPG.**



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Step 2 Configure Name POD##_BHM_IPG. Select **POD##_LL, POD##_CDP** , **POD##_LLDP** & **POD##_AAEP** from the drop-down menu. Click **Submit Changes.**

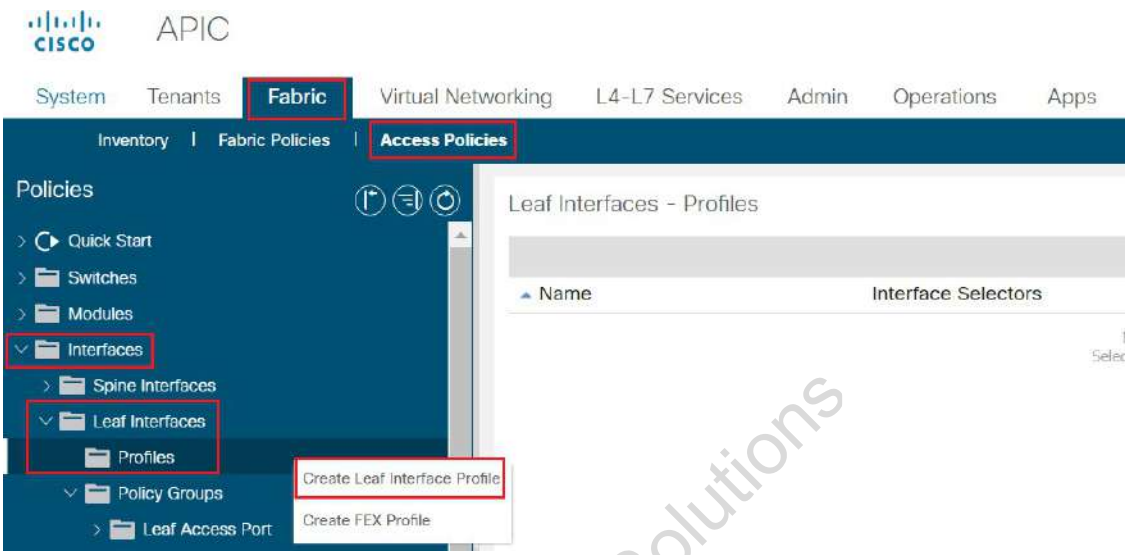
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Task 5: Create Interface Profile for Leaf-101

Step 1 Navigate to **Fabric** > **Access Policies** > **Interfaces** > **Leaf Interfaces** > **Profiles** > **Create Leaf Interface Profile**.

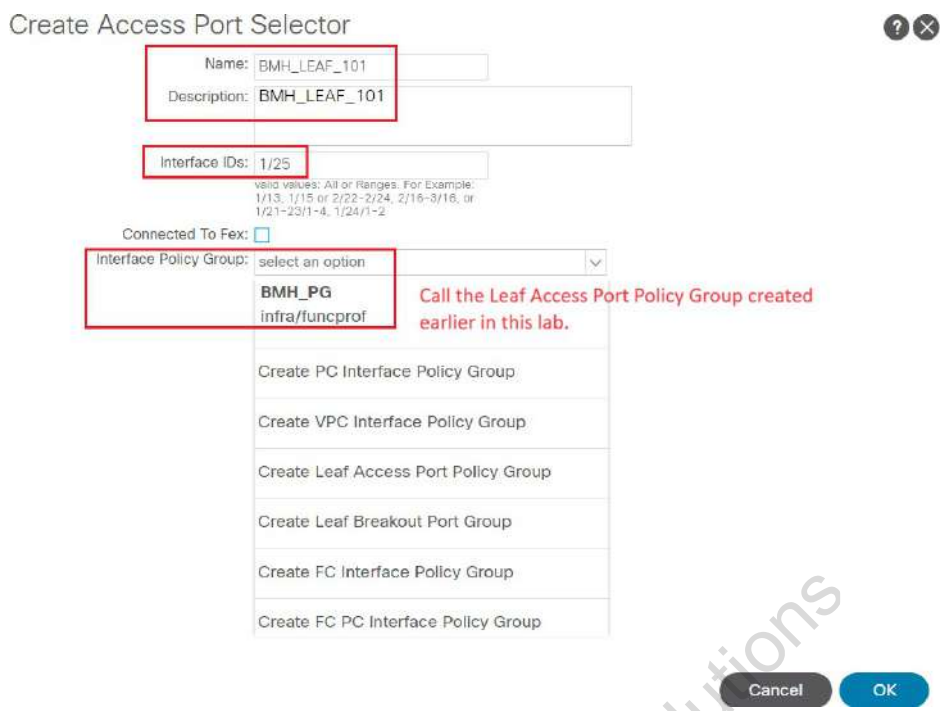


Step 2 Configure name as **POD##_Leaf101_BMH_IP.** Click on **+** icon to create interface selector.

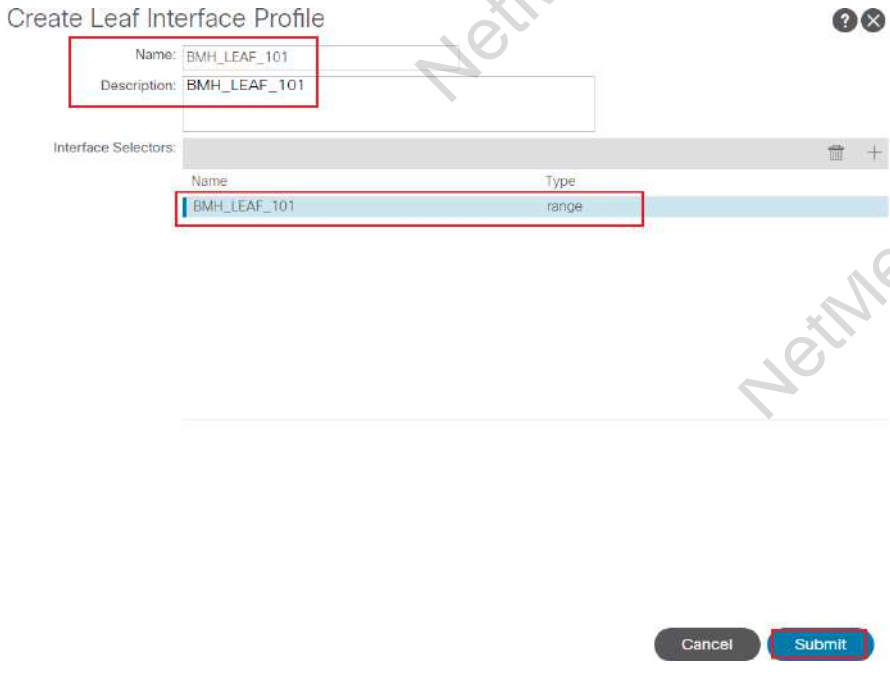


Step 3 Configure name as **POD##_Leaf101_BMH_IP.** Interface ID would be 1/1# where # is *your assigned POD number.* Select the previous created Interface Policy group from drop down. Click ok.

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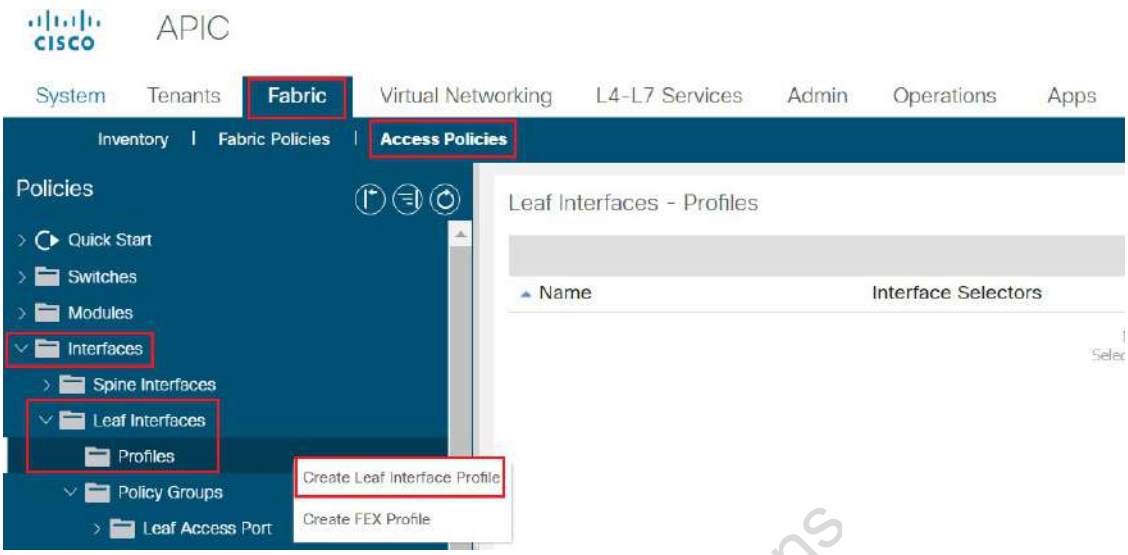
Step 4 Click Submit.



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Task 6: Create Interface Profile for Leaf-102

Step 1 Navigate to **Fabric** > **Access Policies** > **Interfaces** > **Leaf Interfaces** > **Profiles** > **Create Leaf Interface Profile**.

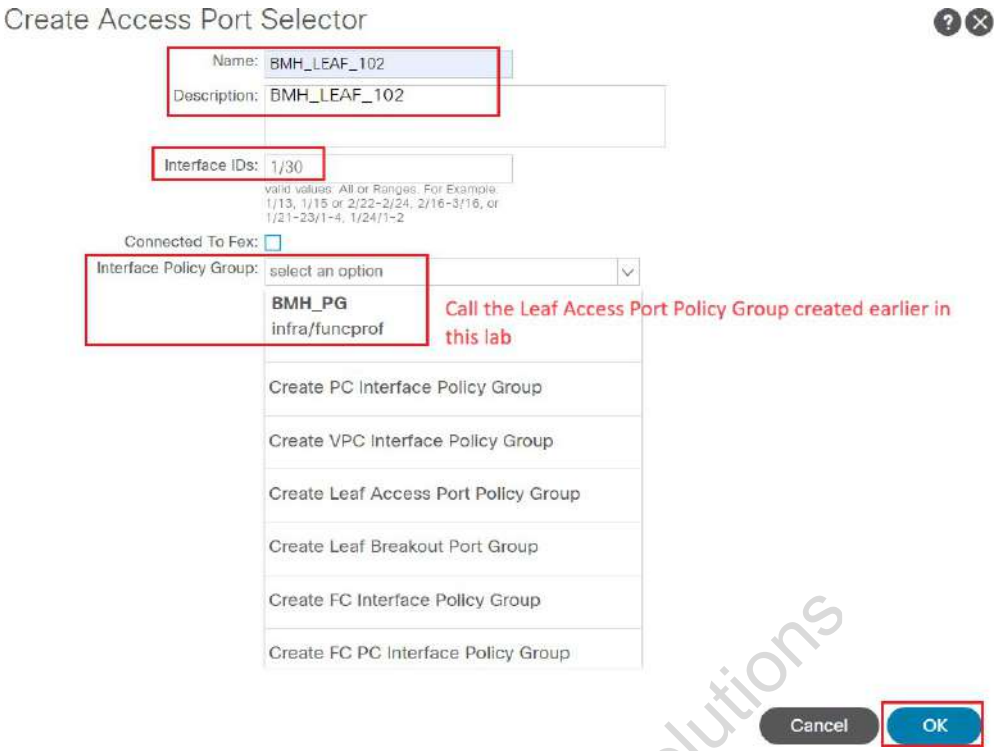


Step 2 Configure name as **POD##_Leaf102_BMH_IP.** Click on **+** icon to create interface selector.

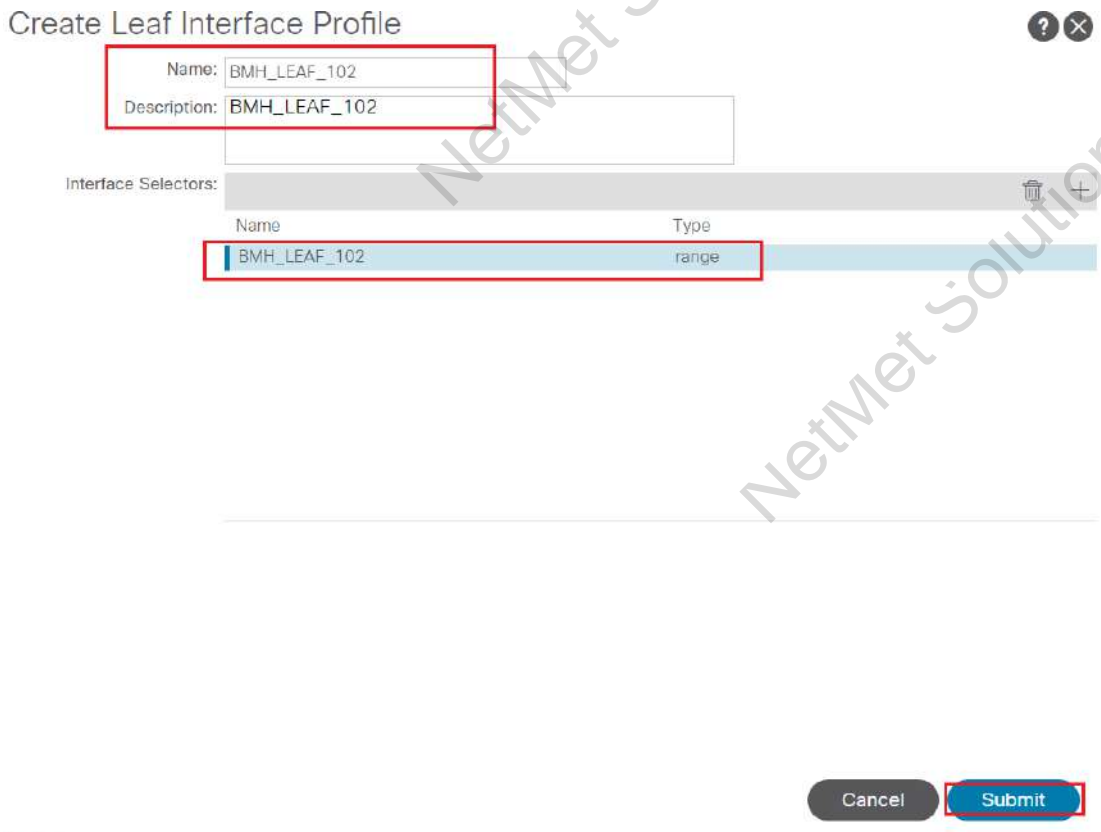


Step 3 Configure name as **POD##_Leaf102_BMH_IP.** Interface ID would be 1/1# where # is *your assigned POD number.* Select the previous created Interface Policy group from drop down. Click ok.

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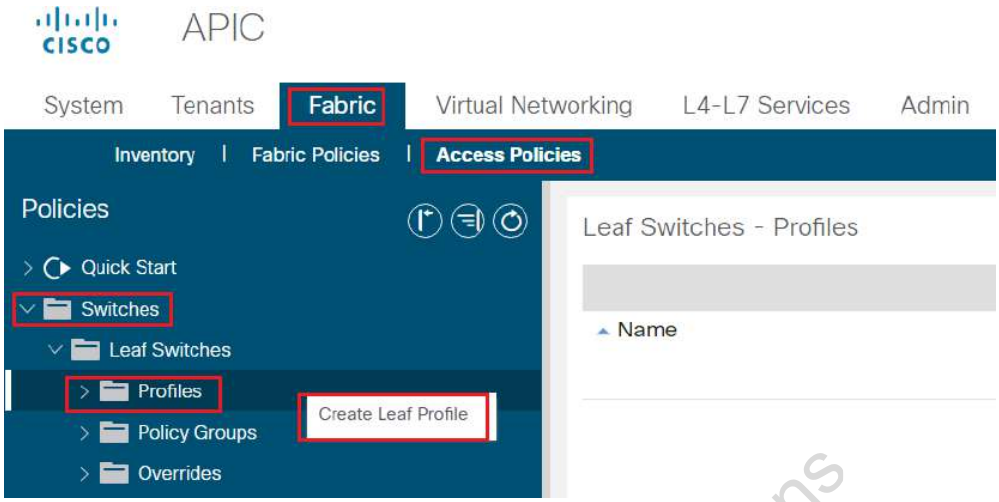
Step 4 Click Submit.



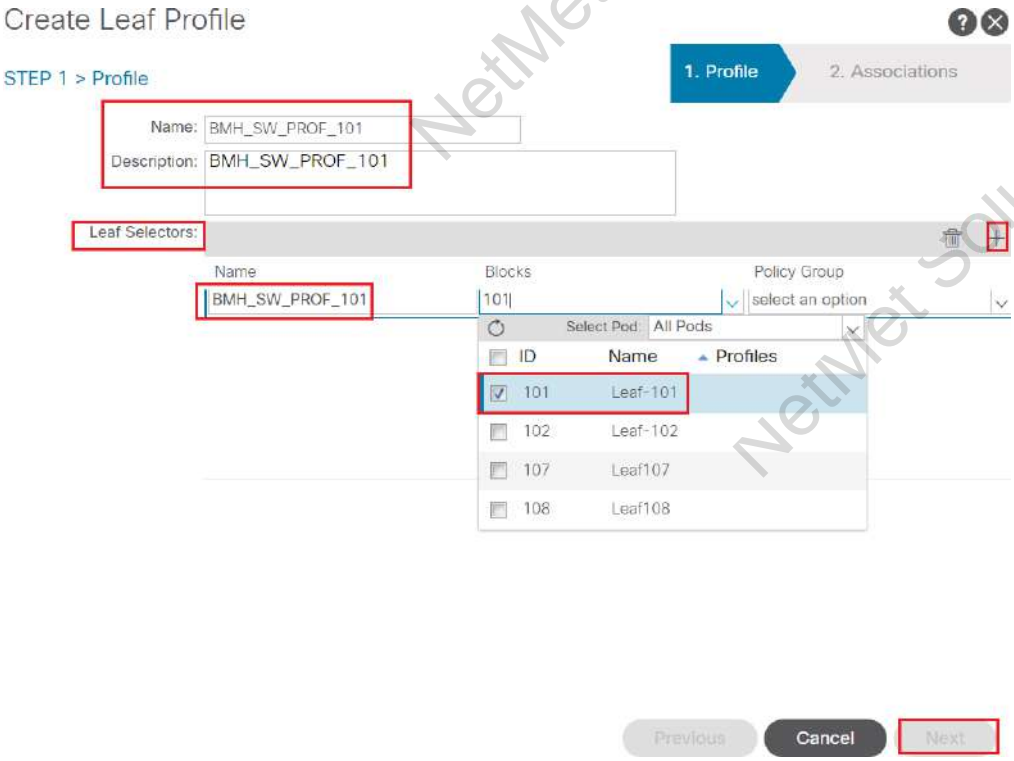
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Task 7: Create Leaf Profile for Leaf-101

Step 1 Navigate to **Fabric** > **Access Policies** > **Switches** > **Leaf Switches** > **Profiles** > **Create Leaf Profile**.



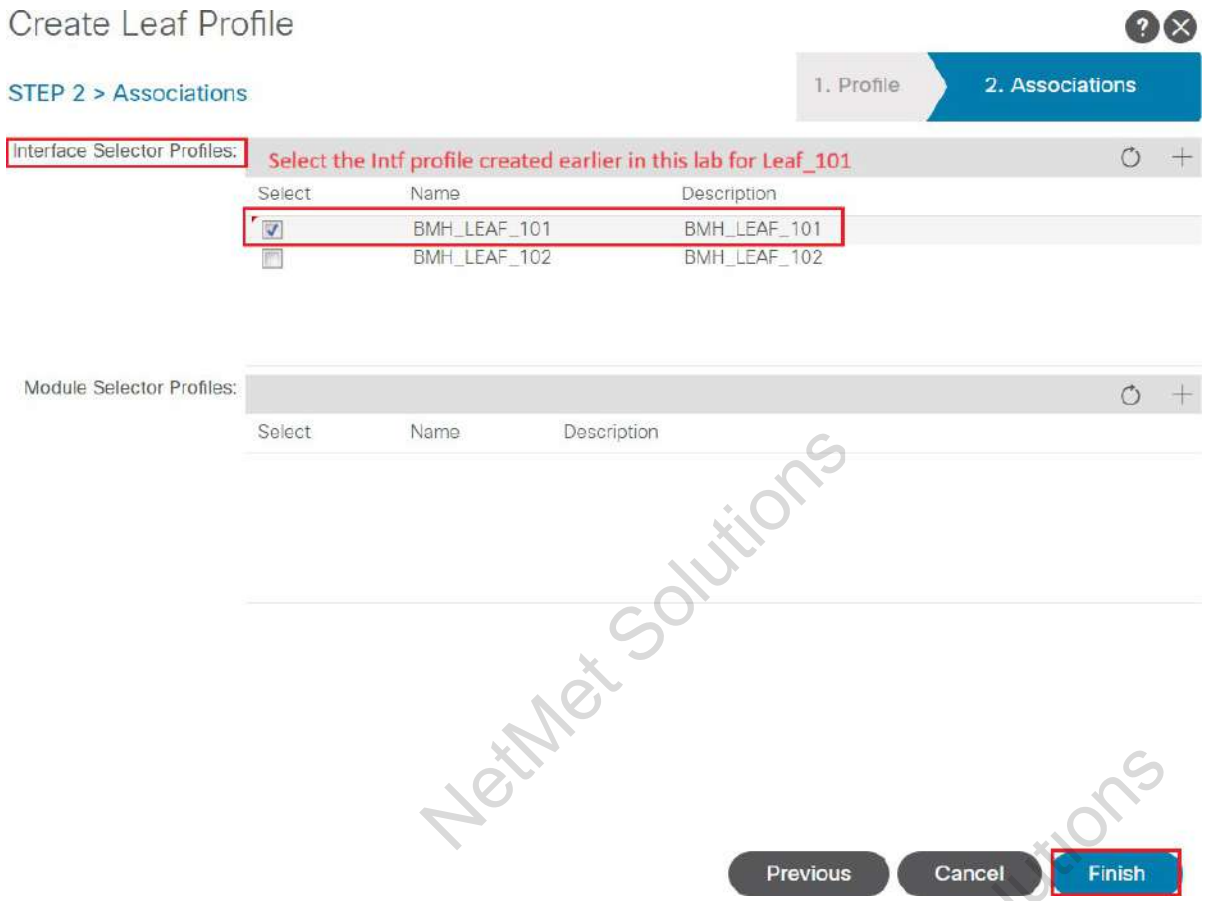
Step 2 Configure name as **POD##_Leaf101.** From the drop down select node id **101.** Click next.



Step 3 Select the Interface profile of **POD##_Leaf101_BMH_IP** created in the previous task according to your POD## ID. Click Finish.

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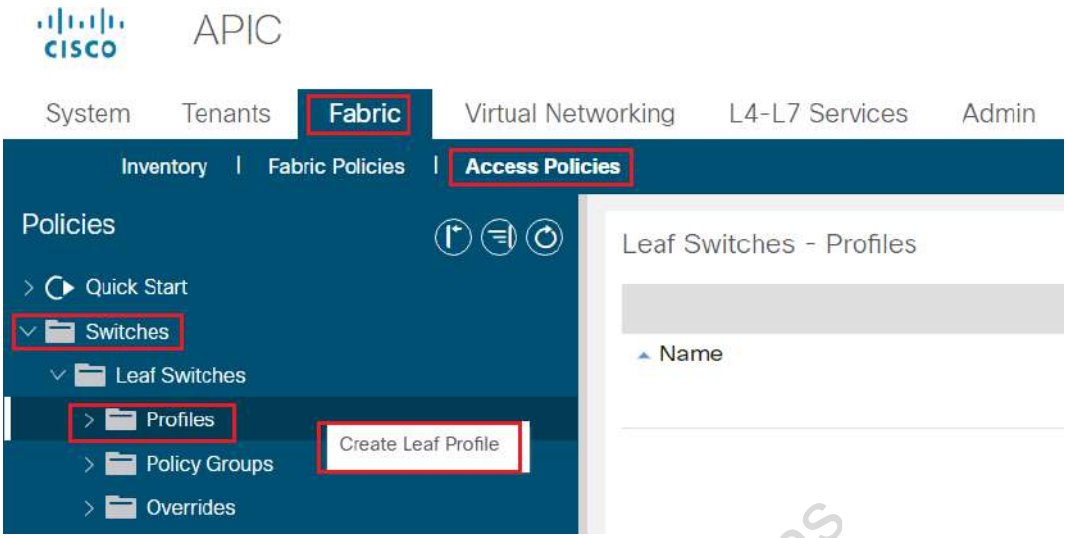
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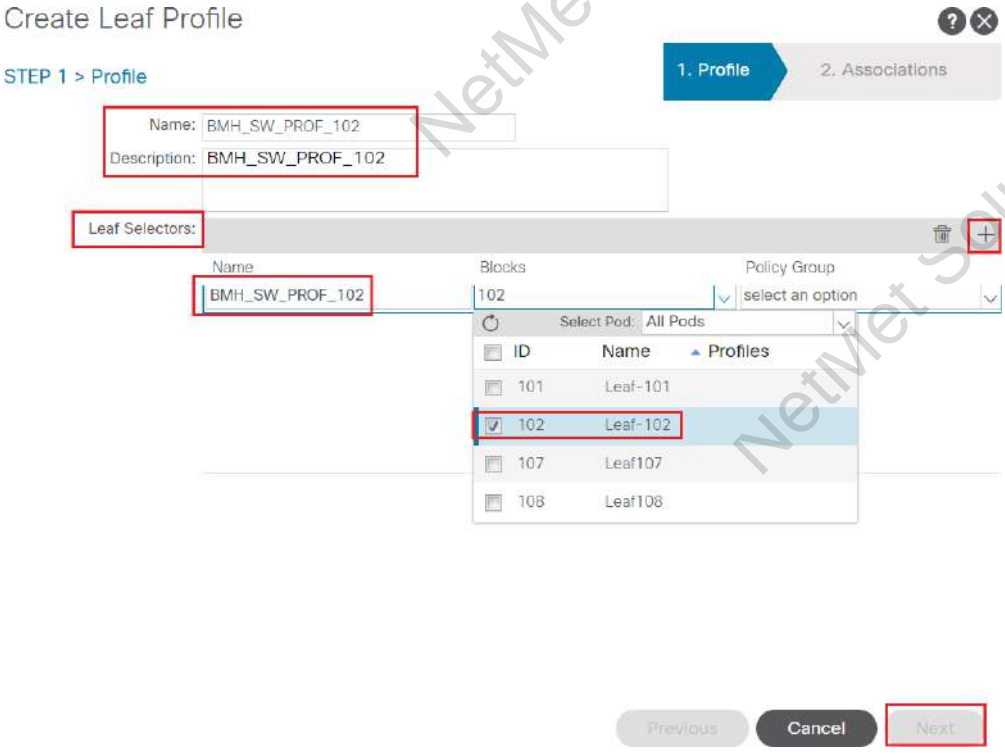
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Task 8: Create Leaf Profile for Leaf-102

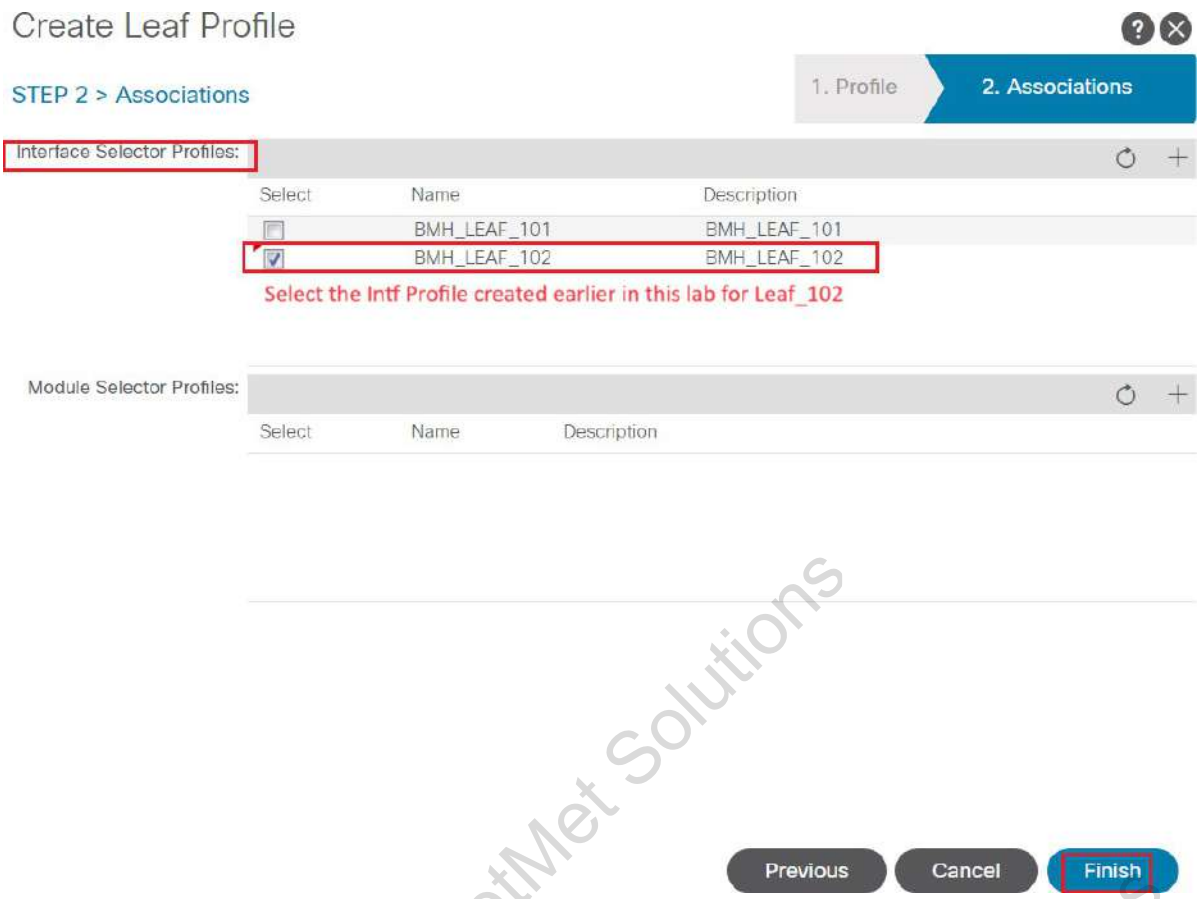
Step 1 Navigate to **Fabric** > **Access Policies** > **Switches** > **Leaf Switches** > **Profiles** > **Create Leaf Profile**.



Step 2 Configure name as **POD##_Leaf102.** From the drop down select node id **102.** Click next.

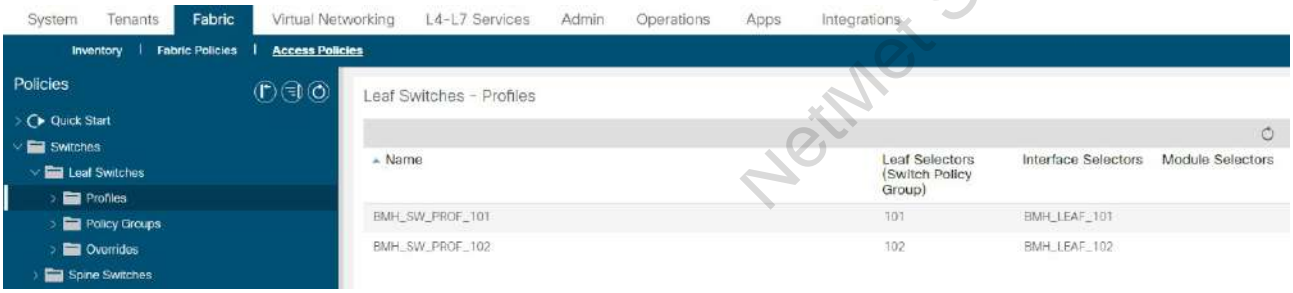


Step 3 Select the Interface profile of **POD##_Leaf102_BMH_IP** created in the previous task according to your POD## ID. Click Finish.



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Step 4 Verify both Switch Profile and the associated Interface profile against it.



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