

Add Network Access Device (NAD) Entry in ISE by Catalyst Center

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Introduction

This document describes the procedure to reconfigure the Network Access Device (NAD) entry in ISE which is either modified or removed from ISE.

Background Information

There could be multiple scenarios where the NAD entry for a Network Device (which is managed by Catalyst Center) is removed/deleted from ISE (due to manual error some other cause) and now all the device authentication fails as there is no NAD entry in ISE.

Problem

The problem in the aforementioned scenarios is that there is no pre-defined option in Catalyst Center to create the NAD entry directly once the Network Device is assigned the site and NAD entry is created first time, resulting in users having to configure/modify the NAD entry in ISE manually which can be time consuming and prone to error.

This document describes the procedure/steps to reconfigure the NAD (Network Access Device) entry for any Network Device in ISE which is either modified or removed from ISE NAD. This procedure is applicable for any Network Device which is managed by Catalyst Center.

Solution

To have Catalyst Center configure the NAD entry in ISE, we basically need to change the management IP address of the device (to any dummy IP) which is backend triggers the NAD entry creation workflow. (make sure that there is no existing NAD entry present in ISE for the same device name).

This procedure is applicable for any Network Device which is managed by Catalyst Center. The NAD entry is created with original IP (as the workflow triggers before the change in management IP address).

in this example device with name : pod7-9400 . dr . com is used.

However, there is no NAD entry in ISE for the same device :

							Selected 0 Total 0		
	Quick Filter								
Name	IP/Mask	Profile Name	Location	Type	Description				
9400	X								
No data available									

Change the management IP address in Catalyst Center to **dummy IP** which triggers the workflow to create the NAD entry in ISE. When you change the Management IP address it moves the device Manageability to **Syncing** state and ISE NAD entry must be created.

Changing the Management IP address for the Network Device in Catalyst Center to Dummy IP

Device goes in **Syncing** State, as the dummy IP would be unreachable, eventually the device goes into unreachable state.

Devices (1) Focus: Inventory

deviceName: (*9400*)

0 Selected Add Device Tag Actions

	Device Name	IP Address	Device Family	Reachability	EoX Status	Manageability
<input type="checkbox"/>	pod7-9400.dr.com	172.19.100.100	Switches and Hubs (WLC Capable)	Reachable	Not Scanned	Managed Syncing...

Network Device goes into Syncing State

Devices (1) Focus: Inventory

deviceName: (*9400*)

0 Selected Add Device Tag Actions

As of: Jul 7, 2024 7:13 PM

	Device Name	IP Address	Device Family	Reachability	EoX Status	Manageability	Compliance	Health Score	Site
<input type="checkbox"/>	pod7-9400.dr.com	172.19.100.100	Switches and Hubs (WLC Capable)	Unreachable	Not Scanned	Managed Inventory Sync...	Non-Compliant	No Health	...

Network Device becomes Unreachable and UnManaged as Management Ip address is dummy IP and not reachable from Catalyst Center

NAD Entry got created:

Network Devices

Selected 0 Total 1

Edit Add Duplicate Import Export Generate PAC Delete

Quick Filter

	Name	IP/Mask	Profile Name	Location	Type	Description
<input type="checkbox"/>	9400					
<input type="checkbox"/>	pod7-9400...	172.19.100.15/32	Cisco	All Locations	All Device Types	

NAD Entry ISE for a Network Device

After this is created, we can change the management Ip address back to its original IP.

Provision / Inventory

Search ? Refresh Bell

✓ All Routers Switch

Devices (1) Focus: Inventory

deviceName: (*9400*)

1 Selected Add Device Tag Actions

	Device Name	IP Address
	pod7-9400.dr.com	172.19.100.15

1 Records

Edit Device

Credentials Management IP Resync Interval Device Role

Device IP / DNS Name*
172.19.100.15

- Please ensure that the new IP address is reachable from Cisco DNA Center and device credentials are correct, otherwise the device may go to an unmanaged state.
- Please ensure that the device is re-provisioned if the management interface has changed and IP address of the same has been updated. Failure to do so will cause reachability issues from the device to the network servers.

Device Controllability is Enabled. Config changes will be made on network devices during discovery/inventory or when device is associated to a site. [Learn More](#)

Cancel Update

Changing the Management Ip address back to its Original IP

After updating the management IP address to its original IP address, the device goes into "syncing" state and becomes "Managed".