



Cisco Network Plug and Play Connect Capability Overview

Customers

Overview

Cisco Plug and Play Connect (a component of the Cisco Network Plug and Play solution) is a cloud-based service that provides a discovery mechanism for a network device to discover its on premise Cisco DNA-Center or APIC-EM controller.

This presentation talks about the Redirection Capabilities.



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I. Accessing Smart Account

New Smart Account Signup

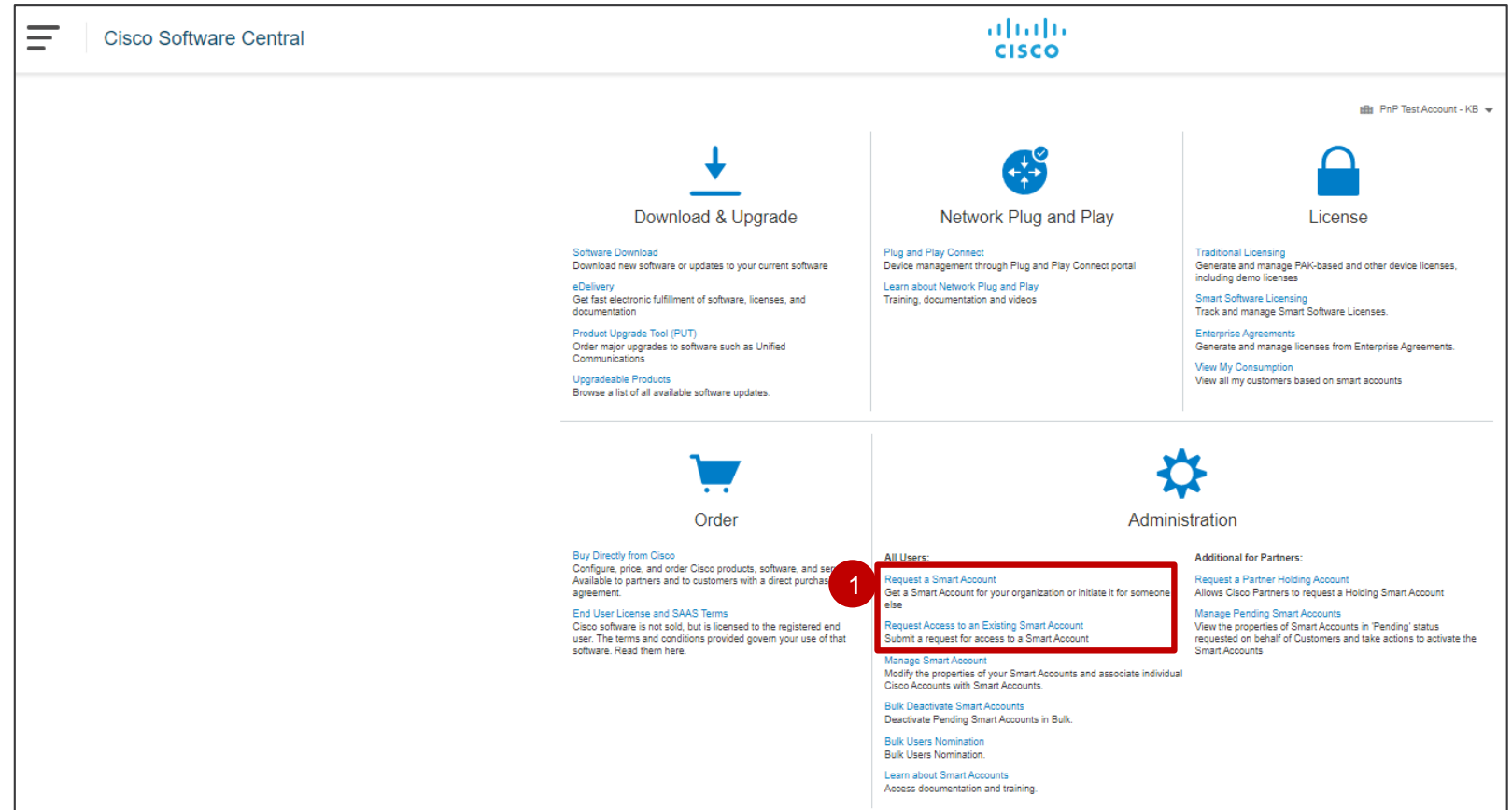
Step by Step Instructions:

- 1 Go to Cisco Software Central (<https://software.cisco.com>).

The following Smart Account administration functions can be accessed from Cisco Software Central (software.cisco.com):

- Request a new Smart Account
- Request access to an existing Smart Account

Note: SA Admins, VA Admins and VA Users will be allowed to access the PnP Connect portal. Previously, only SA admins could access the tool.



Request a New Smart Account

2

Cisco Software Central > Create Smart Accounts

Create Smart Accounts

You can create a new Smart Account for your company or organization, or request an account on behalf of someone else.

Account Creator

Are you authorized to create the Smart Account?

☒ I have the authority to create the account on behalf of my company or organization

The account will be associated to your Cisco.com profile.
Please confirm that it is up to date. If necessary, [update your profile](#)

Full Name: Jayashree Narayanan

Email Address: jayanara@cisco.com

Cisco ID: jayanara

Phone: +1 408 527 5186

Company / Organization Name: Cisco Systems, Inc.

☐ Someone else will authorize the creation of the account

Account Settings

Please provide the name and the domain identifier for the Smart Account.

* Account Name:

Cisco Systems, Inc.

* Account Domain Identifier:

cisco.com [Edit](#)

The Account Domain Identifier will be used to uniquely identify the account. The default Account Domain Identifier is based on the email address of the person specified to authorize activation of the account.
[Learn More](#)


Continue

Cancel


Request Access to an Existing Smart Account

3

Secure | https://software.cisco.com/smartaccounts/setup#accountaccess-userAccessRequest

Products & ServicesSupportHow to BuyTraining & EventsPartners

Worldwide [change]Logged InAccountLog OutMy Cisco



Cisco Software Central > Request Access to a Smart Account

Hello, Vinita Karbhari

Request Access to an Existing Smart Account

Use this page to request access to a Smart Account or Holding Account that has already been established by your company or associates. You will need to know the specific Domain Identifier that represents the Smart Account to request access.

Your Profile

Your Cisco.com profile will be included with the access request to the Account Administrators. It is very important that it is accurate before proceeding. If you need to [update your profile](#), do it now.

Company / Organization Name:

Cisco Systems, Inc.

Full Name:

Vinita Karbhari

Email Address:

vkarbhar@cisco.com

Cisco ID:

vkarbhar

Phone:

+1 408 527 9898

Smart Account Domain Identifier

Confirm the Smart or Holding Account Domain Identifier you are requesting access to, by entering it below:

* Account Domain Identifier:

Submit



II. CCW Integration

CCW Ordering of PNP Device

The Plug and Play (PNP) Connect web portal is linked to Cisco Commerce Workspace (CCW), facilitating automatic registration of the serial numbers and PIDs of purchased devices in Plug and Play Connect. The following are steps on how to enable the automated registration.

Step by Step Instructions:

- 1 Order the major line PnP enabled device.
- 2 Click the **Select Options** link to order the optional license (PNP license).

Note: The selection of the PnP license option will trigger a requirement to assign a Smart Account.

Back to Internal Order Portal

Global Price List US Availability (USD)

ORDER NAME PnP Test Order (trweber)

PURCHASE ORDER # * Created in Procurement System

WEB ORDER ID 80248765

STATUS UNSUBMITTED

SMART ACCOUNT Assign Smart Account

Items Discounts Shipping and Install Billing Review and Submit

Set preferences for this order

Check Local Validations Save Save and Continue

Items added successfully to your order

Search by Sku , Description and Product Family Qty Add Find Products and Solutions More Actions

Remove Selected Lines Validate Assign Smart Account Filter By Show All Items

	Hardware, Software and Services	P.O. Line Reference	Lead Time	Unit List Price (USD)	Qty	Ext. List Price (USD)
1	C891F-K9 Cisco 890 Series Integrated Services Routers more ECCN 5A992.C		14 days	1,395.00	1	1,395.00

2 Invalid as of 10-Feb-2017 10:26 PST
Select Options Select Service Validate Add Note More Actions

Showing 1 - 1 of 1 Line Items Previous 1 Next

Check Local Validations Save Save and Continue

* Some of the newer devices like Catalyst 9000 series switches have the PNP license selected by default in CCW configurations.

CCW Ordering of PNP Device (NETWORK-PNP-LIC)

Step by Step Instructions:

- 1 In the **Option Selection** tab, any applicable items appear below the **Configuration Summary**. Click the **Network PnP License** option class to access the PnP license option.
- 2 A PNP option item will appear to the right of the **Configuration Summary**. PNP option items require a Smart Account, which is noted in the warning message above the option item and next to the SKU as **SA**.
- 3 Select the option item to configure. In case of device configurations where this item is selected by default there is a “NETWORK-PNP-NONE” option to undo this selection if the user wants to opt out.
- 4 Upon completing the configuration, you will receive applicable warning/error notifications based on configuration selections.

Note: There is also a minimum iOS requirement for each device type. These can be found here in Tables 1,3, and 4: (<http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Plug-and-Play/release/notes/pnp-release-notes14.html>).

OPTION SELECTION C891F-K9 Global Price List - US (USD)

Configuration Summary [View Full Summary](#)

Country Specification ⓘ
Select Country (Not Required)

Category ⓘ	Qty	Unit List Price (USD)
IOS Feature License		
Network PnP License		
NETWORK-PNP-LIC	1	0.00
CISCO ONE		
Cisco ONE		
MEMORY		
Memory Upgrade		
C800 POE OPTION		
PoE Module		
Subtotal		1,395.00
Estimated Lead Time		14 days

[Reset Configuration](#) [Cancel](#) [Done](#)

Please note that Network Plug-n-Play (PnP) enables automated controller discovery and day0 provisioning of cisco devices. Please enter Smart Account details to enable PnP features. This is only available for Smart Account and If you do not have a Smart Account, you can request a new Smart Account for your organization using <https://software.cisco.com/software/company/smartaccounts/home#accountcreation-account> (CE200928)

Option Search ⓘ [Multiple Options Search](#)

C891F-K9 > Network PnP License [Key](#)

PnP License

SKU	Smart Account Required	Qty	Lead Time ⓘ	Unit List Price (USD)
<input checked="" type="checkbox"/> NETWORK-PNP-LIC CP SA		1	3 days	0.00
Network Plug-n-Play License for zero-touch device deployment				
Show Incompatible SKUs				
<input type="radio"/> NETWORK-PNP-NONE		Qty	28 days	0.00
Network Plug-n-Play Opt Out SKU				

Done Messages

Your product configuration has some errors and warnings.

Product Configuration Issues

[Return to configuration](#) to correct these errors.

Warning (1):

- Please note that Network Plug-n-Play (PnP) enables automated controller discovery and day0 provisioning of cisco devices. Please enter Smart Account details to enable PnP features. This is only available for Smart Account and If you do not have a Smart Account, you can request a new Smart Account for your organization using <https://software.cisco.com/software/company/smartaccounts/home#accountcreation-account> (CE200928)

[Return to configuration](#) [I will address these issues later](#) [Done](#)

CCW Ordering of PNP Device (Smart Account Assignment)

Step by Step Instructions:

The screenshot shows the two ways of assigning Smart Accounts:

- 1a Assign the Smart Account at the order level by clicking the **Assign Smart Account** link.
- 1b Assign the Smart Account at the line level by clicking the **Assign Now** link below the line item name.

- 2 After clicking one of the options to assign a Smart Account, a screen will appear with two options:
 - If you already have a smart account, type the name of the Customer Smart Account to assign the device to.
 - You can also request Smart Accounts from the order directly.

- 3 Click **Assign** to assign the Smart Account.

The screenshot displays the 'PnP Test Order (lrweber)' interface. At the top, the 'SMART ACCOUNT' section shows 'Assign Smart Account' with a red box and callout '1a'. Below this, the 'Items' tab is active, showing a table with one item: 'Cisco 891F-K9'. Below the item name, 'Smart Account Required Assign Now' is highlighted with a red box and callout '1b'. At the bottom of the main interface, the 'Assign Customer Smart Account' modal is open. It contains a warning: 'Smart Account will only be assigned to Smart Account enabled items.' Below this, there is a search bar with 'pnp.test.com PnP Test Account DEFAULT' and a red box with callout '2'. To the right of the search bar is a link 'Request New Customer Smart Account'. At the bottom of the modal, there is a button 'Assign' with a red box and callout '3' and a 'Cancel' button.

ORDER NAME PnP Test Order (lrweber) Global Price List US Availability (USD)

PURCHASE ORDER # * WEB ORDER ID STATUS SMART ACCOUNT
Created in Procurement System 80248765 UNSUBMITTED Assign Smart Account

Items Discounts Shipping and Install Billing Review and Submit

Set preferences for this order Check Local Validations Save Save and Continue

Search by Sku, Description and Product Family Qty Add Find Products and Solutions More Actions

Remove Selected Lines Validate Assign Smart Account Filter By Show All Items

	Hardware, Software and Services	P.O. Line Reference	Lead Time	Unit List Price (USD)	Qty	Ext. List Price (USD)
	1.0 C891F-K9 SA Cisco 890 Series Integrated Services Routers more ECCN 9A992.C		14 days	1,395.00	1	1,395.00

Valid as of 10-Feb-2017 10:42 PST
Edit options Select Service Validate Add Note More Actions

Smart Account Required Assign Now

Assign Customer Smart Account

Smart Account will only be assigned to Smart Account enabled items.

2 Search for a Customer Smart Account
pnp.test.com PnP Test Account DEFAULT OR Request New Customer Smart Account

Set the Smart Account at Order Level 3 Assign Cancel

CCW Ordering of PNP Device (Order Summary)

Step by Step Instructions:

- 1 The screenshot shows the **Order Summary** screen. It explains the following information:
 - 1a Smart Account has been assigned to the major line PNP device.
 - 1b The selection of the PnP license option also requires Smart Account assignment at the PnP device level.

ORDER NAME PnP Test Order (trweber) [Global Price List US Availability \(USD\)](#)

PURCHASE ORDER # *
Created in Procurement System

WEB ORDER ID
80248765

STATUS
UNSUBMITTED

SMART ACCOUNT
[Assign Smart Account](#)

Items Discounts Shipping and Install Billing Review and Submit

Set preferences for this order [Check Local Validations](#) [Save](#) [Save and Continue >](#)

Search by Sku , Description and Product Family Qty Add

[Find Products and Solutions](#) [More Actions >](#)

Remove Selected Lines Validate Assign Smart Account

Filter By Show All Items

	Hardware, Software and Services	P.O. Line Reference	Lead Time	Unit List Price (USD)	Qty	Ext. List Price (USD)
<input type="checkbox"/>	<div>1.0 C891F-K9 Cisco 890 Series Integrated Services Routers more SMART ACCOUNT pnp.test.com DEFAULT[Customer Account] ECCN 5A992.C Valid as of 10-Feb-2017 10:42 PST Edit options Select Service Validate Add Note More Actions ></div>		14 days	1,395.00	1	1,395.00
	<div>1.1 CAB-ETH-S-RJ45 IC Yellow Cable for Ethernet, Straight-through, RJ-45, 6 feet ECCN EAR99</div>		14 days	0.0	1	0.00
	<div>1.2 SL-890-AIS IC CP Cisco 890 Advanced IP Services License Single License Key ECCN 5D992.C</div>		14 days	0.0	1	0.00
	<div>1.3 PWR-66W-AC-V2 IC Power Supply 66 Watt AC version 2 for C890 platforms ECCN EAR99</div>		14 days	0.0	1	0.00
	<div>1.4 PACK-800 IC Packaging PIDs for 800 with no 3G and POE ECCN 5A991</div>		14 days	0.0	1	0.00
	<div>1.5 CAB-ACS AC Power Cord (Switzerland), C13, IEC 60884-1, 2.5m ECCN EAR99</div>		14 days	0.0	1	0.00
	<div>1.6 S89UK9-15503M CP Cisco 890 Series IOS UNIVERSAL ECCN 5D992.C</div>		14 days	0.0	1	0.00
	<div>1.7 NETWORK-PNP-LIC CP SA Network Plug-n-Play License for zero-touch device deployment Multiple License Keys ECCN 5D002.C.1</div>		3 days	0.0	1	0.00

Showing 1 - 1 of 1 Line Items [Previous](#) 1 [Next >](#)

[Check Local Validations](#) [Save](#) [Save and Continue >](#)



Devices Shown in PNP Connect Portal

- 1 The screenshot shows the **Show Log** screen displaying the user information for a device.
- 2 The entire **Message** displays above when user hovers over the line if it is wrapped.

Note: Once the order is placed with the ship option as PNP, the serial numbers of the devices in the order automatically populate in the customer's Smart Account.

1

Plug and Play Connect

Feedback

Support

Help

Devices

Controller Profiles

Network

Certificates

Manage External Virtual Account

Event Log

Device Log

Serial Number: 193A1243180183

Base PID: VEDGE-5000-AC-K9

Sev

Message

More

Logged By

Logged At

--

Device Provision has changed from "Pe

Cisco

2019-Sep-06, 18:04:33

--

Device added from SO# 109015913 to Virtual Account "DEFAULT" and associated with Controller Profile "VIPTOLA-CLOUD-HOSTED-PROFILE".

Cisco

2019-Sep-06, 18:04:17

Showing All 2 Records



III. APIC-EM Integration

APIC-EM Integration Steps

- PnP Connect Redirection Workflow with APIC-EM.
- Configuring Smart Account Settings in APIC-EM.
- Auto-registration of APIC-EM in PnP Connect as the default controller.
- Sync devices serial numbers from PnP Connect to APIC-EM.
- Device Onboarding workflow in APIC-EM.

Cisco Application Policy Infrastructure Controller – Enterprise Module (APIC-EM)

Defining APIC-EM

- APIC-EM is a Cisco software that delivers software-defined networking to the enterprise branch, campus, wireless, and Wide Area Network (WAN).
- It allows automation of policy-based application profiles. With this module, IT can respond rapidly to new business opportunities.
- The PNP application is pre-installed within APIC-EM:
 - APIC-EM receives PNP requests from Cisco devices and provisions devices based on the predefined configuration and image.
 - By adding the device serial numbers to APIC-EM, a network admin can predefine the configuration and image that needs to be pushed to the device when it sends a request to the APIC-EM.
 - In the APIC-EM as well as PNP Connect service, a device is identified by its serial number.

Note: *The minimum version of APIC-EM release that supports PNP app is 1.0.0.*

PNP Connect Redirection Workflow

Feature: Auto-register APIC-EM IP to PNP Connect

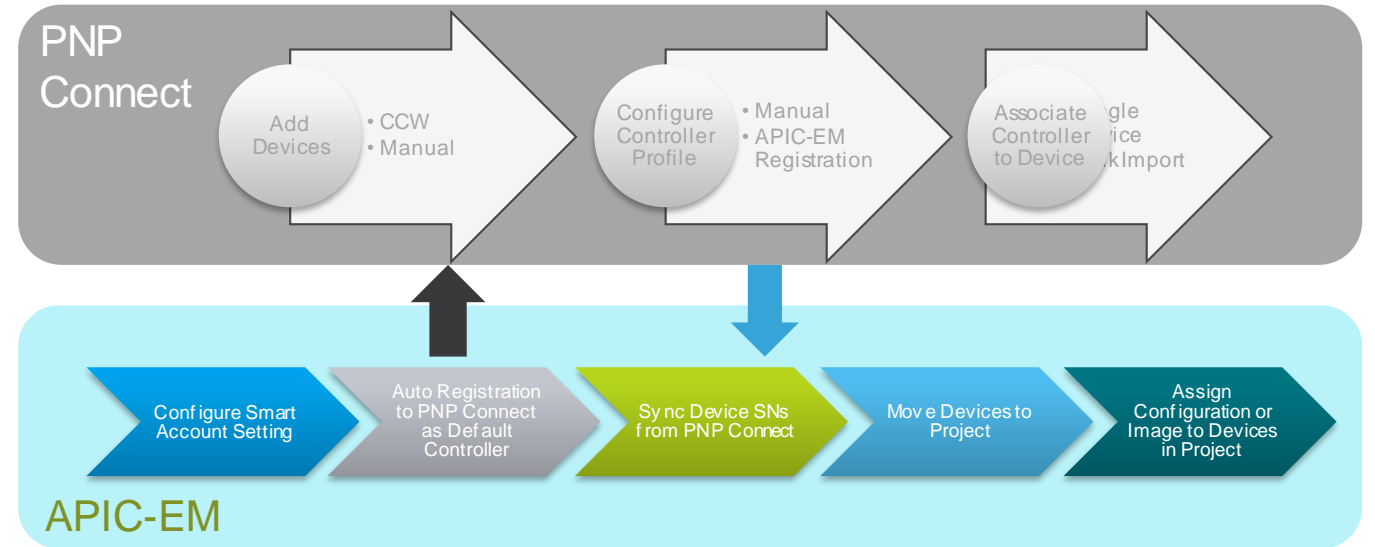
Benefits:

- Previously, an admin needed to manually define the default APIC-EM IP Address for all devices in the PNP Connect redirection service.
- Auto registration eliminates the manual task of mapping devices to the controller.

Feature: Cloud Inventory Sync – PNP Connect & APIC-EM

Benefits:

- Visibility into devices populated from sale orders (SO#) placed via Cisco Commerce Workspace (CCW).
- Simplifies serial# tracking for device provisioning.



APIC-EM Integration: Configure Smart Account Setting (continued)

Step by Step Instructions for APIC-EM:

- 1 In order to sync the APIC-EM Controller as the “default controller” for the PNP Connect Redirection Service, log into the system using existing Smart Account credentials.
- 2 Click the **Authenticate** button to sync.

APIC-EM

ConfigurationsTemplatesBulk ImportSettings

Cisco Smart Account

This feature provides integration between on-prem PNP Server in APIC-EM controller and Smart Account enabled PNP Cloud redirection service for automating Plug and Play provisioning of Cisco Smart Account enabled Cisco Enterprise devices(Routers/Switches/Access Points) . Customers can register this instance of APIC-EM Controller as a “default controller” in PNP Cloud Redirection Server for all redirection purposes and also be able to synchronize device inventory from PNP Cloud redirection portal to this on-prem Controller for quick and automated deployment. If your organization does not have a Smart Account, you can [request a new Smart Account](#).

1

Username


Username

2

Password

Password

Authenticate



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APIC-EM Integration: Configure Smart Account Setting(continued)

Step by Step Instructions for APIC-EM:

- 3 In the Cisco Smart Account screen, enter the Smart Account and APIC-EM Controller Profile settings. Check the “Register this controller under default profile” option if you want to make this the default controller for your devices in PNP Connect.
- 4 Click the **Save** button.
- 5 The **Current Settings** are displayed.

APIC-EM

tiburon-test
[Logout](#)

Cisco Smart Account

This feature provides integration between on-prem PNP Server in APIC-EM controller and Smart Account enabled PNP Cloud redirection service for automating Plug and Play provisioning of Cisco Smart Account enabled Cisco Enterprise devices(Routers/Switches/Access Points) . Customers can register this instance of APIC-EM Controller as a “default controller” in PNP Cloud Redirection Server for all redirection purposes and also be able to synchronize device inventory from PNP Cloud redirection portal to this on-prem Controller for quick and automated deployment. If your organization does not have a Smart Account, you can [request a new Smart Account](#).

3

Smart Account Settings

Smart Account	<input type="text" value="pnp.test.com"/>
Virtual Account	<input type="text" value="PNP TEST VA1"/>

APIC-EM Controller Profile Settings

Register this controller under default profile	<input checked="" type="checkbox"/>
Profile Name	<input type="text" value="PNP-DEFAULT-APICEM"/>
Controller IP Address	<input type="text" value="10.16.80.88"/>

4

tiburon-test
[Logout](#)

Cisco Smart Account

This feature provides integration between on-prem PNP Server in APIC-EM controller and Smart Account enabled PNP Cloud redirection service for automating Plug and Play provisioning of Cisco Smart Account enabled Cisco Enterprise devices(Routers/Switches/Access Points) . Customers can register this instance of APIC-EM Controller as a “default controller” in PNP Cloud Redirection Server for all redirection purposes and also be able to synchronize device inventory from PNP Cloud redirection portal to this on-prem Controller for quick and automated deployment. If your organization does not have a Smart Account, you can [request a new Smart Account](#).

5

Current Settings

[Change settings](#)

Smart account: **pnp.test.com**
Virtual account: **PNP TEST VA1**

Profile name: **PNP-DEFAULT-APICEM-10_16_80_88**
Controller IP address: **10.16.80.88**

Ready to sync devices? Go to **Cloud Synced** Tab under [Devices](#)

APIC-EM Integration: Auto Registration to PNP Connect as Default Controller

Step by Step Instructions:

- 1 Once the sync from APIC-EM settings tab is completed, the APIC-EM controller profile associated with the corresponding Smart Account displays in the PNP Connect portal.
- 2 To edit a controller profile, select the profile and click the **Edit** button.
- 3 The **Edit Controller Profile** dialog box appears. Update and save the settings here.

1

Cisco Software Central > Plug and Play Connect

PNP Connect

Feedback Support Help

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

+ Add Profile...

2 Edit Selected...

Delete Selected...

Make Default...

Show Log...

<input type="checkbox"/>	Profile Name	Controller Type	Default	Description	Used By	Download
<input checked="" type="checkbox"/>	PNP-DEFAULT-APICEM-10_16_80_88	PNP SERVER	✓		1	--
<input type="checkbox"/>	MMCLOUDTESTPROFILE	PNP SERVER		test description	0	--

3

Edit Controller Profile

X

STEP 1

STEP 2

STEP 3

Profile Settings

Review

Confirmation

Profile Settings:

• Profile Name:

PNP-DEFAULT-APICEM-10_16_80_88

Description:

Description of this profile (optional)

Default Profile:

Yes

• Primary Controller:

IPv4

HTTPS://

10.16.80.88

443

• SSL Certificate:

-----BEGIN CERTIFICATE-----

MIIDYjCCAqagAwIBAgIUUUJMJc4dhMVMUMBY3EGcGYFEQMwDQYJKo

-----END CERTIFICATE-----

Browse

Cancel

Next

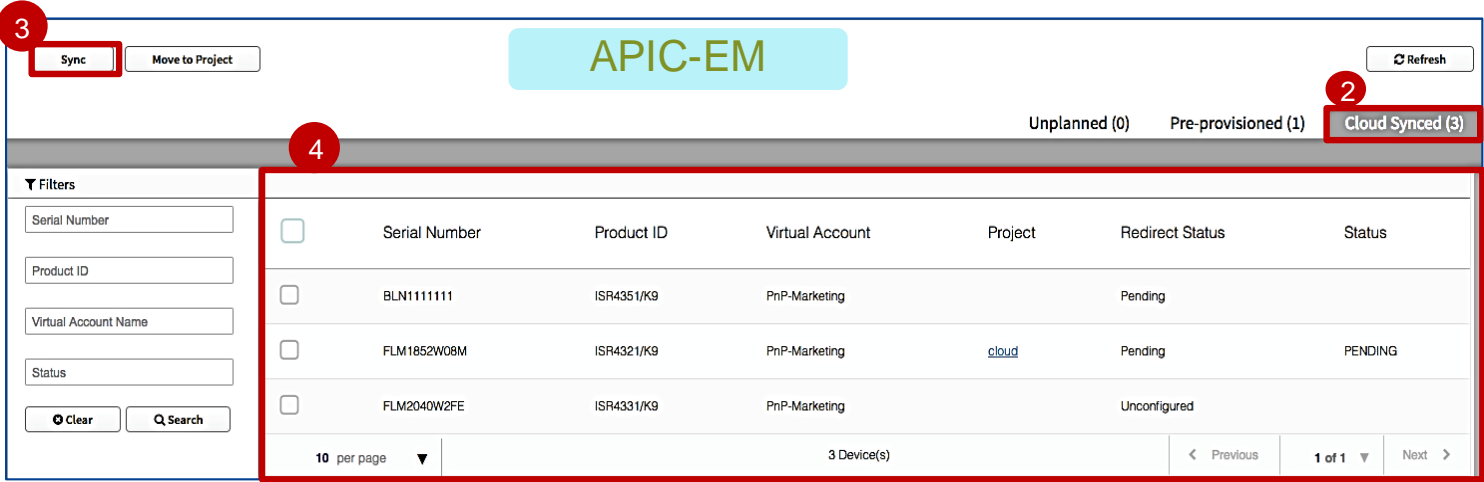
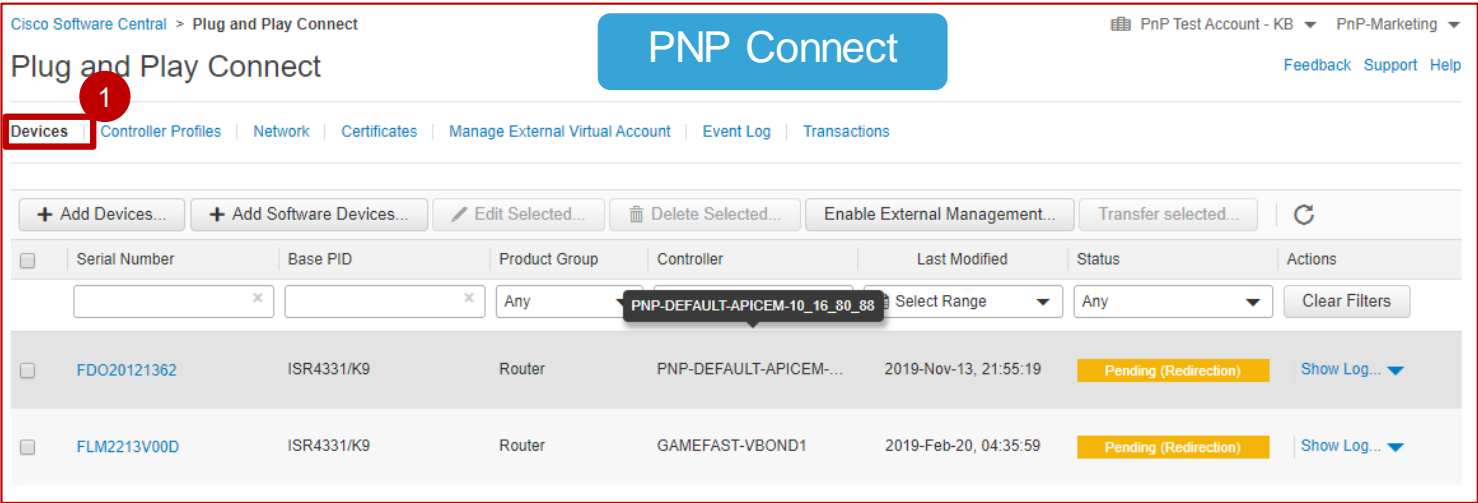
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APIC-EM Integration: Sync Device SNs from PNP Connect(contd..)

Step by Step Instructions for APIC-EM:

- 1. Navigate to the **Devices** tab in the PNP application in APIC-EM.
- 2. In the **Devices** tab, navigate to the **Cloud Synced** tab.
- 3. Click the **Sync** button to sync all the devices from the PNP Connect portal.
- 4. The devices will now show up in the **Cloud Synced** tab in APIC-EM. . Now your devices are ready to be pre-provisioned(moved to a project, associate with an image and/or configuration file).



Device Onboarding Workflow in APIC-EM : Move Devices to Project

Step by Step Instructions:

- 1 In the **Cloud Synced** tab, select the devices that you want to assign to a project.
- 2 Click the **Move to Project** button.
- 3 The **Move to Project** window appears. You can define a name for the project to which you want to assign the device.

Sync

Move to Project

Refresh

Unplanned (0)

Pre-provisioned (1)

Cloud Synced (3)

Filters

Serial Number

Product ID

Virtual Account Name

Status

Clear

Search

☐

Serial Number

Product ID

Virtual Account

Project

Redirect Status

Status

☐

BLN1111111

ISR4351/K9

PnP-Marketing

Pending

☐

FLM1852W08M

ISR4321/K9

PnP-Marketing

cloud

Pending

PENDING

☐

FLM2040W2FE

ISR4331/K9

PnP-Marketing

Unconfigured

10 per page

3 Device(s)

Previous

1 of 1

Next

Devices

Images

Configurations

Templates

Bulk Import

Settings

Refresh

Pre-provisioned (1)

Cloud Synced (3)

Project Configurations

Project Name *

cloud

Select project name from drop down or enter new project name (project will be created).

Move

☐

Serial Number

Product ID

Virtual Account

Project

Redirect Status

Status

☐

BLN1111111

ISR4351/K9

PnP-Marketing

Pending

☒

FLM1852W08M

ISR4321/K9

PnP-Marketing

cloud

Pending

PENDING

☐

FLM2040W2FE

ISR4331/K9

PnP-Marketing

Unconfigured

10 per page

3 Device(s)

Previous

1 of 1

Next

Device Onboarding Workflow in APIC-EM: Move Devices to Project (Continued)

Step by Step Instructions:

- 4 The device appears in the **Pre-provisioned** tab with the project that it was assigned to.

APIC - Enterprise Module / Network Plug and Play

API 1 admin

DashboardProjectsDevicesImagesConfigurationsTemplatesBulk ImportSettings

Refresh

Unplanned (0)Pre-provisioned (1)Cloud Synced (3)

Filters

Serial Number

Product ID

Status

Device Name	Serial Number/MAC Address	Device IP	Status	Product ID	Last Contact	Project
DEVICE_flm1852w08m	FLM1852W08M		PENDING	ISR4321/K9		cloud

10 per page

1 Device(s)

Previous1 of 1Next

Device Onboarding Workflow in APIC-EM: Assign Configuration or Image to Devices in Project

Step by Step Instructions:

- 1 Click the **Projects** tab.
- 2 Select the device to which you want to assign a configuration and/or image.
- 3 Click the **Edit** button.

The screenshot shows the APIC-EM Network Plug and Play interface. The top navigation bar includes tabs for Dashboard, Projects, Devices, Images, Configurations, Templates, Bulk Import, and Settings. The 'Projects' tab is selected, and a red circle with the number '1' highlights it. Below the navigation bar, there is a section for 'CiscoLive-Berlin' with buttons for Add, Edit, Clone, and Delete. A red circle with the number '3' highlights the 'Edit' button. Below this, there is a section for 'CiscoLive-Berlin Devices' with buttons for Add, Edit, Reset, and Delete. A red circle with the number '2' highlights the 'Edit' button. Below the buttons, there is a table of devices. The table has columns for Name, Device Certificate, Serial / MAC, Product ID, Config, Bootstrap, Image, Last Contact, and Status. The first row is highlighted with a red box, and a red circle with the number '2' highlights the checkbox in the first column of this row. The table shows two devices: 'DEVICE_flm2040w2fe' and 'DEVICE_bln11111113'. The first device has a status of 'Pending' and a last contact time of '2017-03-23 09:05:30 (PDT)'. The second device has a status of 'Pending' and a last contact time of '2017-03-23 09:05:30 (PDT)'. The table also includes a 'Filters' section on the left and a 'SUDI Authentication' section at the bottom.

Name	Device Certificate	Serial / MAC	Product ID	Config	Bootstrap	Image	Last Contact	Status
<input type="checkbox"/>	NAME							
<input type="checkbox"/>	DEVICE_flm2040w2fe	FLM2040W2FE	ISR4331/K9	Berlin-PnP-4G-Spoke.vm			2017-03-23 09:05:30 (PDT)	Pending
<input type="checkbox"/>	DEVICE_bln11111113	BLN11111113	ISR4321/K9	Berlin-PnP-4GDemo.txt				Pending



IV. Redirect Capabilities

Logging into Cisco Software Central (CSC)

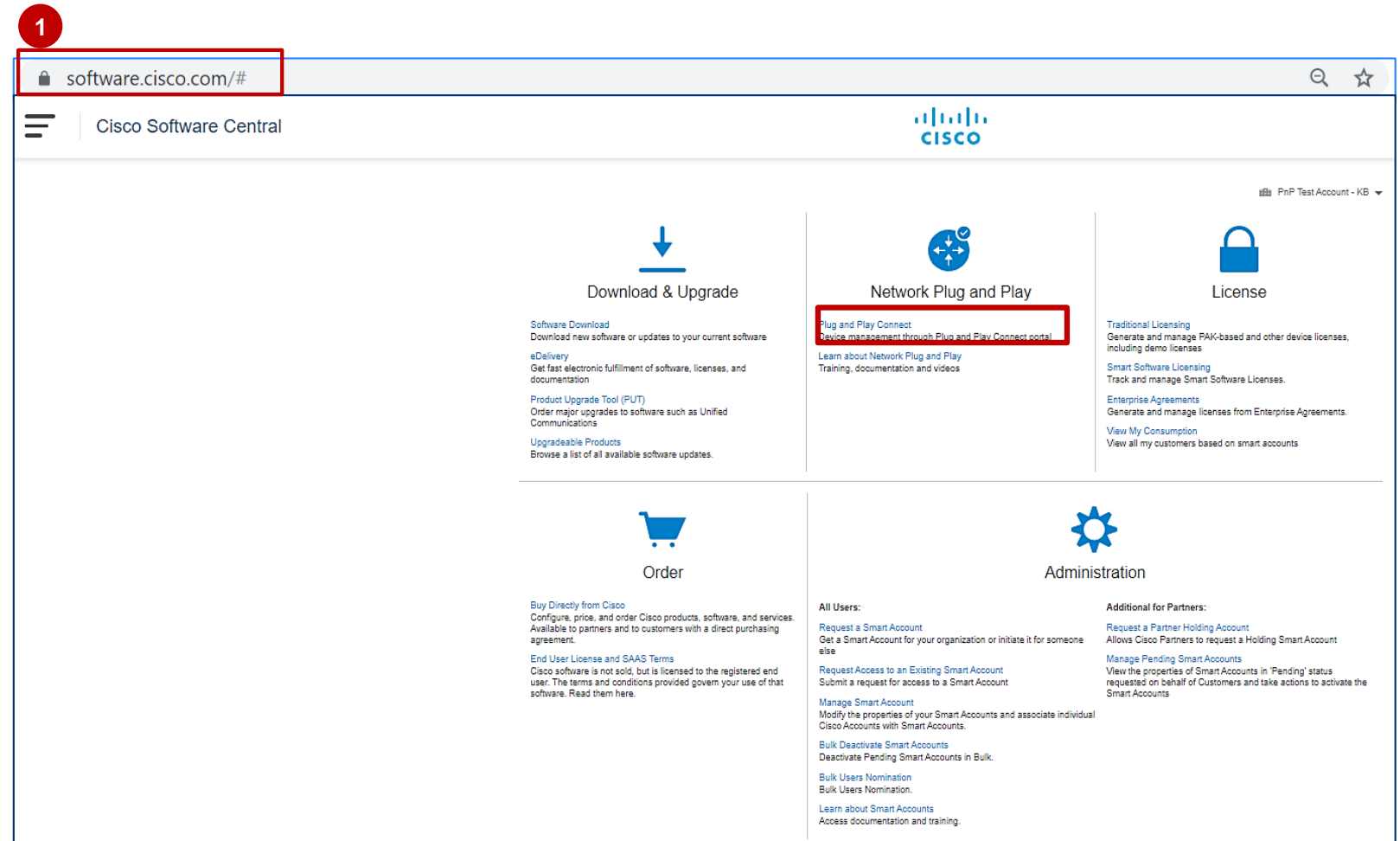
Step by Step Instructions:

1 Log into the **Cisco Software Central** (software.cisco.com) page.

2 Click the **Plug and Play Connect** link.

We will now look into the following redirect capabilities:

- Add/Edit Devices
- Add/Edit profile
- Delete Device
- Delete Profile



Plug and Play Connect: Devices Tab

Step by Step Instructions:

3 The **Plug and Play Connect** page appears.

If a customer has multiple Virtual Accounts, they can select a Virtual Account from the **Virtual Account** dropdown. Default Virtual Account can be set up in Manage Smart Account -> Virtual Accounts.

In this example, we have selected **Default VA**.

The screenshot shows the Cisco Software Central interface for the Plug and Play Connect section. The 'Devices' tab is active. A dropdown menu for 'PnP Test Account' is open, showing a list of virtual accounts. The 'DEFAULT' account is highlighted. The main table lists various network devices with columns for Serial Number, Base PID, Product Group, Controller, Last Modified, and Status.

Serial Number	Base PID	Product Group	Controller	Last Modified	Status
JAE224804CQ Marc's 9200 Stack	C9200L-24T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 23:24:51	
FLM2117W0P3	ISR4321/K9	Router	PNP_FOR_TABEL_LTE	2019-May-21, 22:07:35	
JAE22490RP2 Marc's 9200 stack-2	C9200L-48T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 21:11:20	
PSZ20301DSN	RV340W-A-K9-NA	Router	PNP_3RD_BB2	2019-May-21, 02:25:07	Redirect Successful
JAE22490RP0 Marc's 9200	C9200L-48T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 00:07:05	Redirect Successful
1234566	WAP150-A-K9-NA	Access Point	SQA2_W_FQDN_PNPSE...	2019-May-17, 07:16:51	Redirect Successful
JAE23010A8X	C9200L-48T-4G	Switch	MM-CLOUD-150	2019-May-15, 16:41:05	Redirect Successful
DNI2040000J	WAP581-A-K9	Access Point	PNP_TEST_SW	2019-May-10, 08:13:21	Redirect Successful
FDO1920E48U Do not change this. This is b...	WS-C3850-24TS	Switch	APIC-160	2019-May-08, 11:43:51	Redirect Successful
FTX2039200L	IR829GW-LTE-NA-AK9	Router	NIKMATHU_FND_AWS	2019-May-08, 01:43:46	Redirect Successful

Plug and Play Connect: Devices Tab (continued)

Step by Step Instructions:

4 All the devices associated with that Virtual Account will be displayed with the following values:

- Serial Number
- Product ID
- Product Group
- Controller (if associated)
- Last Modified
- Status
- Actions

4

Cisco Software Central > Plug and Play Connect

Plug and Play Connect

Feedback Support Help

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected...

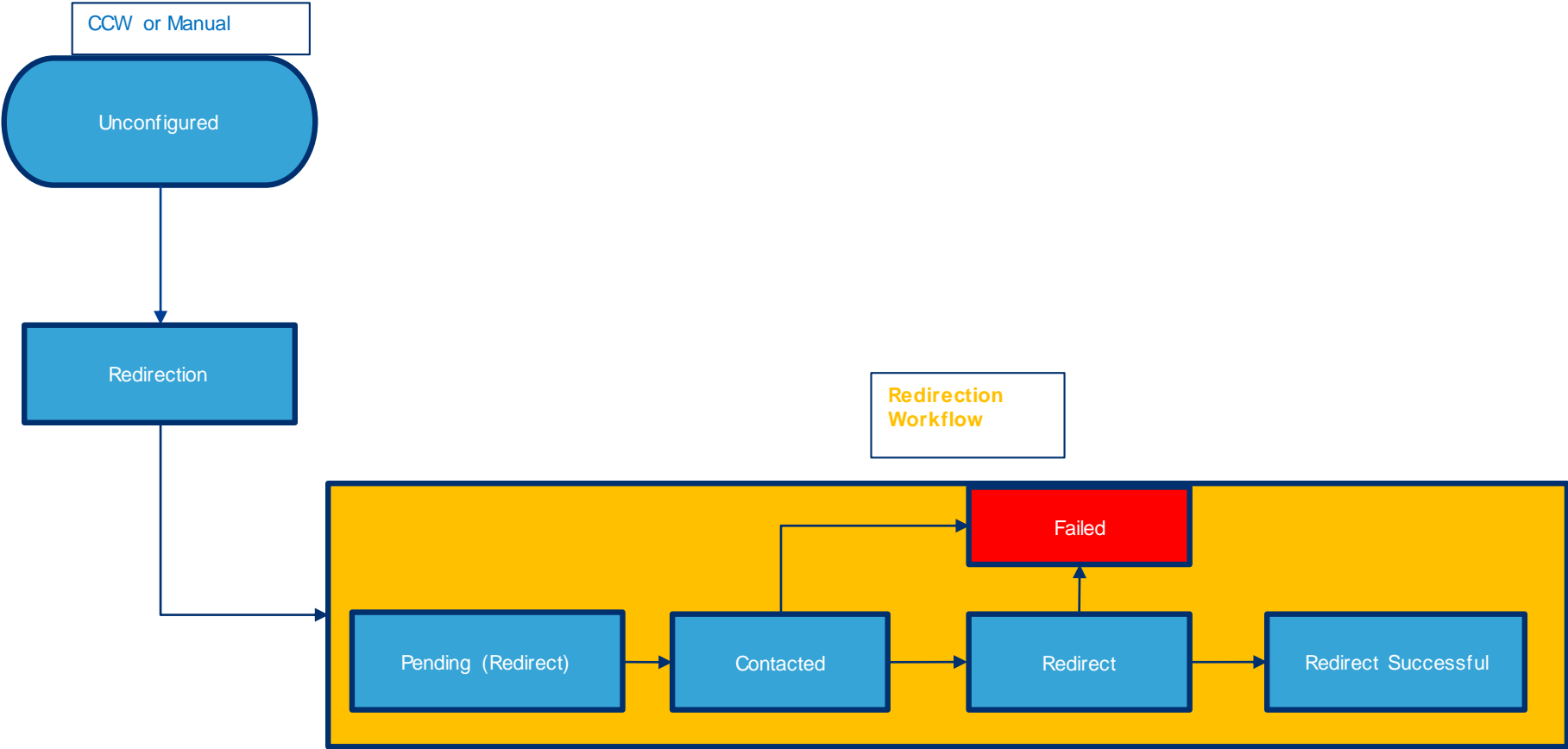
Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
JAE224804CQ Marc's 9200 Stack	C9200L-24T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 23:24:51	Redirect Successful	Show Log...
FLM2117WOP3	ISR4321/K9	Router	PNP_FOR_TABEL_LTE	2019-May-21, 22:07:35	Redirect Successful	Show Log...
JAE22490RP2 Marc's 9200 stack-2	C9200L-48T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 21:11:20	Redirect Successful	Show Log...
PSZ20301DSN	RV340W-A-K9-NA	Router	PNP_3RD_BB2	2019-May-21, 02:25:07	Redirect Successful	Show Log...
JAE22490RP0 Marc's 9200	C9200L-48T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 00:07:05	Redirect Successful	Show Log...
1234566	WAP150-A-K9-NA	Access Point	SQA2_W_FQDN_PNPSE...	2019-May-17, 07:16:51	Redirect Successful	Show Log...
JAE23010A8X	C9200L-48T-4G	Switch	MM-CLOUD-150	2019-May-15, 16:41:05	Redirect Successful	Show Log...
DNI2040000J	WAP581-A-K9	Access Point	PNP_TEST_SW	2019-May-10, 08:13:21	Redirect Successful	Show Log...
FDO1920E48U Do not change this. This is b...	WS-C3850-24TS	Switch	APIC-160	2019-May-08, 11:43:51	Redirect Successful	Show Log...
FTX2039Z00L	IR829GW-LTE-NA-AK9	Router	NIKATHU_FND_AWS	2019-May-08, 01:43:46	Redirect Successful	Show Log...

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Showing Page 2 of 35 (343 Records)

Device Status Transition in PNP Connect

The following diagram explains the workflow and the different statuses that the device goes through for each workflow.



Device Status Transition in PnP Connect (continued)

Device Status Types

1. **Unconfigured**: Device has been added to the list on Customer account but does not have assigned Controller Profile.
2. **Pending (Redirection)**: Device has called PnP Connect and is associated with a Profile.
3. **Contacted**: While waiting for **Redirection**, device is in the **Contacted** status where the Device is locked so no Edit functionalities can be performed.
4. **Redirected**: This means that the Controller Profile Information is sent from PnP Connect to APIC/DNA-C Server and is waiting for confirmation response.
5. **Redirect Successful**: Device was successfully Redirected to the server after validations of Information.
6. **Redirect Failed**: Device has failed Redirection due to some reason.
7. **Delete in Progress**
8. **Error**

Device Log

Step by Step Instructions:

- 1 To view the log information for any product, click the **Show Log** button for any device under the **Actions** tab.
- 2 The **Device Log** page appears for the product selected.

Cisco Software Central > Plug and Play Connect

PnP Test Account - KB DEFAULT

Feedback Support Help

Plug and Play Connect

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected... Refresh

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
JAE224804CQ Marc's 9200 Stack	C9200L-24T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 23:24:51	Redirect Successful	Show Log... 1
FLM2117W0P3	ISR4321/K9	Router	PNP_FOR_TABEL_LTE	2019-May-21, 22:07:35	Redirect Successful	Show Log... 2
JAE22490RP2 Marc's 9200 stack-2	C9200L-48T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 21:11:20	Redirect Successful	Show Log...
PSZ20301DSN	RV340W-A-K9-NA	Router	PNP_3RD_BB2	2019-May-21, 02:25:07	Redirect Successful	Show Log...
JAE22490RP0 Marc's 9200	C9200L-48T-4G-A	Switch	XUEJUN-IPV4-HTTP	2019-May-21, 00:07:05	Redirect Successful	Show Log...
1234566	WAP150-A-K9-NA	Access Point	SQA2_W_FQDN_PNPSE...	2019-May-17, 07:16:51	Redirect Successful	Show Log...
				2019-May-15, 16:41:05	Redirect Successful	Show Log...
				2019-May-10, 08:13:21	Redirect Successful	Show Log...
				2019-May-08, 11:43:51	Redirect Successful	Show Log...
				2019-May-08, 01:43:46	Redirect Successful	Show Log...

Device Log Refresh

Serial Number: FLM2117W0P3 Base PID: ISR4321/K9

<< Back to Summary

Sev	Message	More	Logged By	Logged At
--	Device added to Virtual Account "DEFAULT" and associated with Controller Profile "PNP_FOR_TABEL_LTE".		Cisco	2019-May-21, 21:54:37

Showing 1 Record

Troubleshooting Issues for the PNP Cloud Portal

Common Issues

- Devices can not sync with NTP servers (time-pnp.cisco.com or pool.ntp.org)
 - Possible Cause: Customer firewall may block NTP traffic inbound from Internet
 - Solution: Unblock NTP on firewall or use internal NTP servers
- Device contact PNP Connect but redirection fails.
 - Check on the log for device on PNP Connect portal.
 - Use “show run | s pnp profile” to check on device if there is a pnp profile named “pnp_redirection_profile”.
 - Get “show pnp tech” from device.

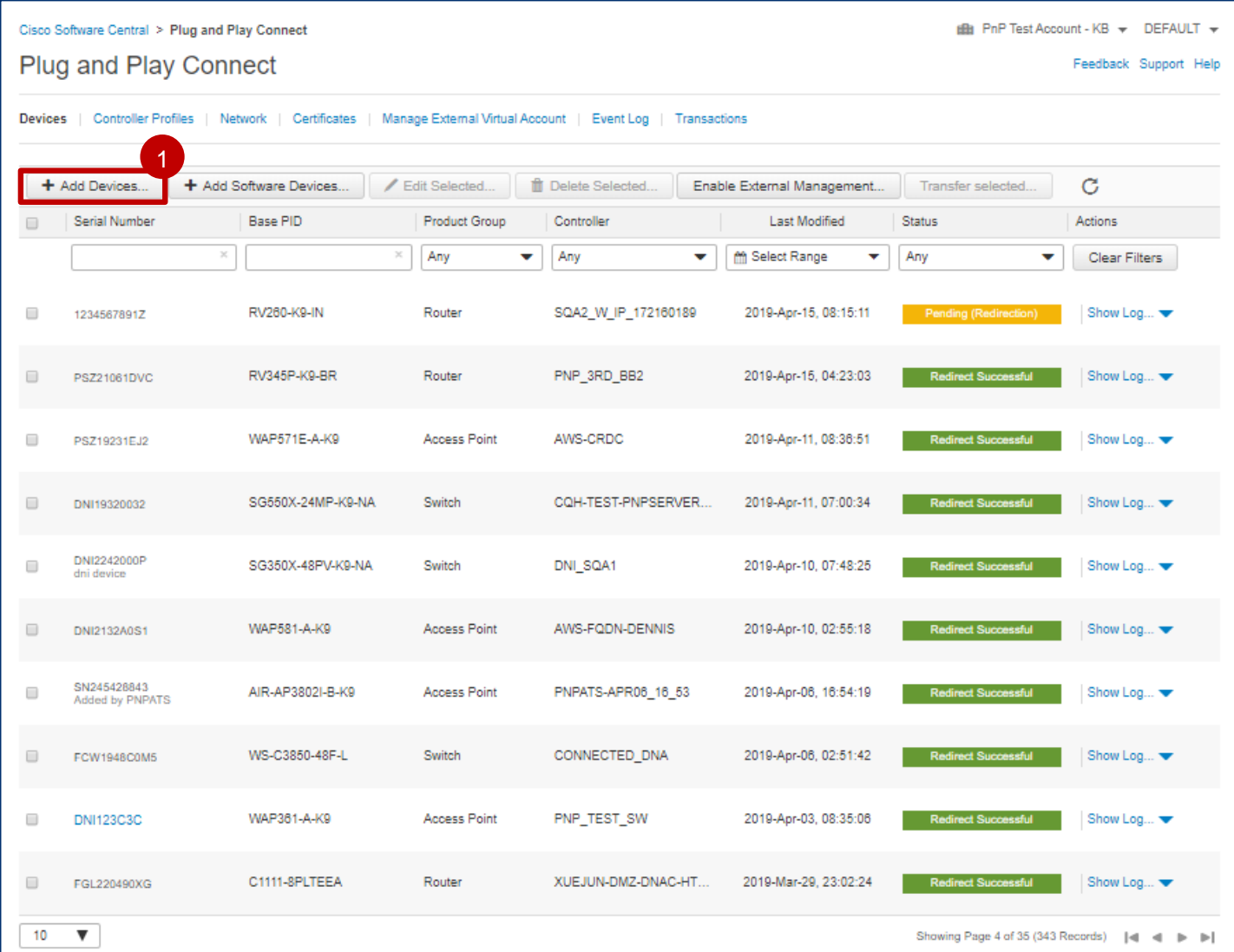
Add Devices

Step by Step Instructions:

- 1 To manually add devices, click the **Add Devices** button.

Users will be able to add devices even if they didn't order the NETWORK-PNP-LIC/ NETWORK-PNP-LIC-O.

Note: There is no step required at Customer's end in order to be able to add a device once the Cloud Agreement has been signed by the SA Admin



Cisco Software Central > Plug and Play Connect

PnP Test Account - KB DEFAULT

Plug and Play Connect

Feedback Support Help

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected...

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
1234567891Z	RV280-K9-IN	Router	SQA2_W_IP_172180189	2019-Apr-15, 08:15:11	Pending (Redirection)	Show Log...
PSZ21061DVC	RV345P-K9-BR	Router	PNP_3RD_BB2	2019-Apr-15, 04:23:03	Redirect Successful	Show Log...
PSZ19231EJ2	WAP571E-A-K9	Access Point	AWS-CRDC	2019-Apr-11, 08:36:51	Redirect Successful	Show Log...
DNI19320032	SG550X-24MP-K9-NA	Switch	CQH-TEST-PNPSEVER...	2019-Apr-11, 07:00:34	Redirect Successful	Show Log...
DNI2242000P dni device	SG350X-48PV-K9-NA	Switch	DNI_SQA1	2019-Apr-10, 07:48:25	Redirect Successful	Show Log...
DNI2132A0S1	WAP581-A-K9	Access Point	AWS-FQDN-DENNIS	2019-Apr-10, 02:55:18	Redirect Successful	Show Log...
SN245428843 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	PNPATS-APR08_16_53	2019-Apr-08, 16:54:19	Redirect Successful	Show Log...
FCW1948C0M5	WS-C3850-48F-L	Switch	CONNECTED_DNA	2019-Apr-06, 02:51:42	Redirect Successful	Show Log...
DNI123C3C	WAP361-A-K9	Access Point	PNP_TEST_SW	2019-Apr-03, 08:35:06	Redirect Successful	Show Log...
FGL220490XG	C1111-8PLTEEA	Router	XUEJUN-DMZ-DNAC-HT...	2019-Mar-29, 23:02:24	Redirect Successful	Show Log...

10 Showing Page 4 of 35 (343 Records)

Add Devices (continued)

Step by Step Instructions:

- 2 The **Step 1: Identify Source** page of the **Add Device(s)** wizard appears.

The users can import a device from a CSV file or enter the devices information manually. Use the Sample CSV file to upload the device details with the instructions provided in the file.

- 3 Or click on Enter Device info manually and click the **Next** button.

Cisco Software Central > Plug and Play Connect

PnP Test Account - KB DEFAULT

Plug and Play Connect

Feedback Support Help

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log

Add Device(s)

STEP 1 Identify Source | STEP 2 Identify Device(s) | STEP 3 Review & Submit | STEP 4 Results

Identify Source

Download Sample CSV

Select one of the following two options to add devices:

☐ Import using a CSV file

☒ Enter Device info manually

Cancel

3 Next

Add Devices (continued)

Step by Step Instructions:

- 4 The **Step 2: Identify Device(s)** page appears. Click on “+Identify Device..” button. Here, the users can add the identified devices.
- 5 Enter the following values:
 - Serial Number
 - Base PID
 - Certificate Serial Number (optional)
 - Controller Profile (Optional)
 - Description (optional)
- 6 Add Additional SUDI (Optional)
 - This field appears only if Base PID has been set as SUDI Supported in Manufacturing.
- 7 Note that Certificate Serial Number field is available at Device(Chassis) level and at SUDI level. Both should have different values as applicable to Device or SUDI.

Click the **Save and Next** button after all required devices have been added.

The top screenshot shows the 'Identify Device' dialog box with the following fields:

- Serial Number: FTX234231
- Base PID: ISR4221-AX/K9
- Controller Profile: Choose Controller Profile
- Description: Enter short optional description for this device.

The bottom screenshot shows the 'Identify Device' dialog box with the following fields:

- Serial Number: EX. FTX1433AH95
- Base PID: ISR4451-X-SEC/K9
- Certificate Serial Number: ex. 01E9478D
- Controller Profile: Choose Controller Profile
- Description: Enter short optional description for this device.
- Add Additional SUDI: SUDI SERIAL NUMBER
- Certificate Serial Number: Certificate Serial Number

Add Devices (continued)

Step by Step Instructions:

- 7 The **Step 3: Review & Submit** page appears.

Review the details entered and click the **Submit** button.
- 8 The **Step 4: Results** page appears. The device has been added successfully. Click the **Done** button.

Cisco Software Central > Plug and Play Connect

PnP Test Account - KB | DEFAULT

Feedback | Support | Help

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

Add Device(s)

STEP 1 ✓
Identify Source

STEP 2 ✓
Identify Device(s)

STEP 3
Review & Submit

STEP 4
Results

7

Review & Submit

Submit action will submit following 1 newly identified device(s).

Row	Serial Number	Base PID	Certificate Serial Number	SDWAN Type	Controller	Description
1	FOX32123T	ISR4331-DNA	80EM45	--	APIC-EM-AWS	Test Add

Showing 1 Record

Cancel | Back | Submit

Add Device(s)

8

STEP 1 ✓
Identify Source

STEP 2 ✓
Identify Device(s)

STEP 3 ✓
Review & Submit

STEP 4
Results

Attempted to add 1 device(s)

✓

Successfully added 1 device(s) !
It may take a few minutes for the new devices to show up in the Devices table. Please wait a minute or two and refresh the page as needed.

Done

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Add Devices (continued)

Step by Step Instructions:

- 9 Device(s) added appears on the Devices tab at the top. If SUDI details are available for a device, it appears blue and underlined on hover over.
- 10 Click on the Serial Number to view the SUDI details.

If the Customer does not input the additional information, it is fetched from autotest.

- 11 For devices created without SUDI, there will be an alert shown along the device with a message 'Secure UDI not available',

Device Information

Serial Number: FOX32123T Certificate Serial Number: 80EM45

SUDI Serial Number	Base PID	Certificate Serial Number	MAC Address	UDI Version ID	Device IMEI
SUDITEST	ISR4331-DNA	SUDICSN	--	--	--

Showing 1 Record

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected...

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
FOX32123T Test Add	ISR4331-DNA	Router	APIC-EM-AWS	2019-Nov-14, 20:49:54	Pending (Redirection)	Show Log...

Showing 1 Record

Cisco Software Central > Plug and Play Connect

Plug and Play Connect

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected...

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
SN123456789	C9200-24P	Switch	MM-CLOUD-OFFER-PR...	2019-Jul-08, 16:57:03	Pending (Redirection)	Show Log...
KKH778LK981	WS-C3850-48F-L	Switch	DIV-PNP-TEST	2019-Jul-03, 22:10:02	Pending (Redirection)	Show Log...

Add Device – csv file upload

- 12 Another option to add device to the account is to upload CSV File.
- 13 Download the Sample CSV File to get the list of fields and instructions.
- 14 Follow the instructions given in the CSV File and note that the instructions row should be left intact for the upload and should not be deleted.
- 15 User will be able to upload SUDI Number and Certificate Serial Number. If there are multiple SUDI & Certificate Serial number for a given Device, follow instructions.

Add Device(s)

STEP 1
Identify Source

STEP 2
Identify Device(s)

STEP 3
Review & Submit

STEP 4
Results

Identify Source

13 [Download Sample CSV](#)

Select one of the following two options to add devices:

12 Import using a CSV file

Enter Device info manually

Cancel

Next

14	Instructions					15
	udiProductId	udiSerialNumber	controllerProfile	description	SUDI Number	Certificate SN
	IR809G-LTE-GA-K9	JMX2017X04S	CX-DCLOUD	Upload 1	FTX2111Z093	sudicert1
	VEDGE-110B-AC-K9	1920C403384	ANZ-1-VBOND	Upload2		
	VEDGE-110B-AC-K9	1920C403384	ANZ-1-VBOND	Upload2	10013DA9	10013DA9
	ISR4331/K9	FLM2219W0GD	PROFILE_172_TS	Upload3	FDO2217PH5	02BB7BB9
	ISR4331/K9	FLM2219W0GD	PROFILE_172_TS	Upload3	FDO2217PH6	02BB7BB2
	ISR4331/K9	FLM2219W0GD	PROFILE_172_TS	Upload3	FDO2217PH8	
	ASR1002-HX	FXS2148Q2MP	SDWAN-TEST	Upload4		
	ASR1002-HX	FXS2148Q2MP	SDWAN-TEST	Upload4	JAE15009FU	0220BEA3
	ASR1002-HX	FXS2148Q2MP	SDWAN-TEST	Upload4	JAE15009FX	
	ASR1002-HX	FXS2148Q2MP	SDWAN-TEST	Upload4		0220BEA5

Add Software Devices

Step by Step Instructions:

- 1 User can add Software only Devices on Plug and Play Portal by clicking on [Add Software Devices](#) button.
- 2 **Step1:** User is taken to [Add Software Devices](#) Page, click on [Add Software Device](#) button.

The screenshot shows the Cisco Software Central Plug and Play Connect interface. The top navigation bar includes 'Cisco Software Central > Plug and Play Connect' and user information 'PnP Test Account - KB' and 'PNP-LABFKF'. The main header is 'Plug and Play Connect' with links for 'Feedback', 'Support', and 'Help'. Below the header is a tabbed interface with 'Devices' selected. The 'Devices' tab shows a table with columns: Serial Number, Base PID, Product Group, Smart Account, Virtual Account, Controller, Last Modified, Status, and Actions. A red box highlights the '+ Add Software Devices...' button, and a red circle with the number 1 is placed above it.

The screenshot shows the 'Add Software Device(s)' page. The top navigation bar is the same as the previous screenshot. The main header is 'Add Software Device(s)'. Below the header is a progress bar with three steps: 'STEP 1 Identify Device(s)', 'STEP 2 Review & Submit', and 'STEP 3 Results'. The 'Identify Devices' section is active, showing a message: 'Enter device details by clicking Add Software Device button and click Next to proceed to the next step.' Below this message is a table with columns: Row, Base PID, Quantity, Controller, Description, and Actions. A red box highlights the '+ Add Software Device...' button, and a red circle with the number 2 is placed above it. At the bottom of the page are 'Cancel' and 'Next' buttons.

Add Software Devices

Step by Step Instructions:

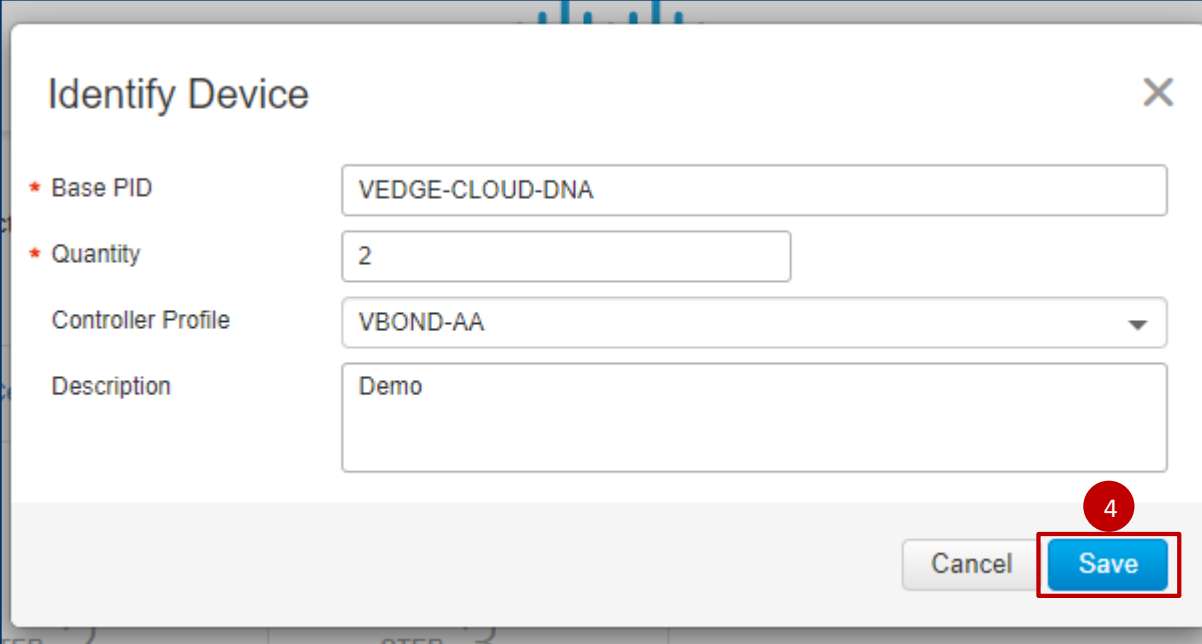
3 Identify Device pop-up is displayed. User can now enter values as shown in the screenshot. The user can add the device here.

4 Enter the Following values:

- Base PID (Mandatory)
- Quantity (Mandatory)
- Controller Profile (optional)
- Description (optional)

Click **Save**.

Step2: Devices added are displayed for Review & Submit. Click **Next**.



Identify Device

* Base PID VEDGE-CLOUD-DNA

* Quantity 2

Controller Profile VBOND-AA

Description Demo

Cancel Save

NOTE: PnP supports only 3 types of software Routers.

- vEdge Cloud (VEDGE-CLOUD-DNA)
- Virtual ISR (ISRv) and
- CSR (CSRv)

Adding Software Devices

Step by Step Instructions:

5 Click Submit will display **Step3 Results**.

6 Click Done. Serial Number will be generated and device is added to Devices tab in the Virtual Account.

5 Add Software Device(s)

STEP 1 ✓ Identify Device(s) STEP 2 ✓ Review & Submit STEP 3 Results

Attempted to add 1 device(s)

6 Add Devices request is recorded!
Your request will be processed in background and an email will be sent to javanara@cisco.com once process is completed.

Done

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected... Refresh

<input type="checkbox"/>	Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	Any	Any	Select Range	Any	Clear Filters
<input type="checkbox"/>	1815E8A5-42D3-B65E-E32... Demo	VEDGE-CLOUD-DNA	Router	VBOND-AA	2019-Nov-15, 00:53:36	Provisioned	Show Log... ▼
<input type="checkbox"/>	46CC6AEE-6A29-421C-465... Demo	VEDGE-CLOUD-DNA	Router	VBOND-AA	2019-Nov-15, 00:53:36	Provisioned	Show Log... ▼

NOTE:

User (SAAdmin, VA Admin and VA user) can add only 25 devices for one prefix pid in one VA. If the user tries to add more than 25 devices, it throws the following error and devices will not be created.

If the user wants to go beyond 25 devices, they need to ask their Cisco Sales Engineer or Account manager to drop an email to sdwan_approvals@cisco.com with the reason and count. Once BU approves, the approved counts will be added. Please note emails from domains other than Cisco.com does not get through.

Edit Devices

Step by Step Instructions:

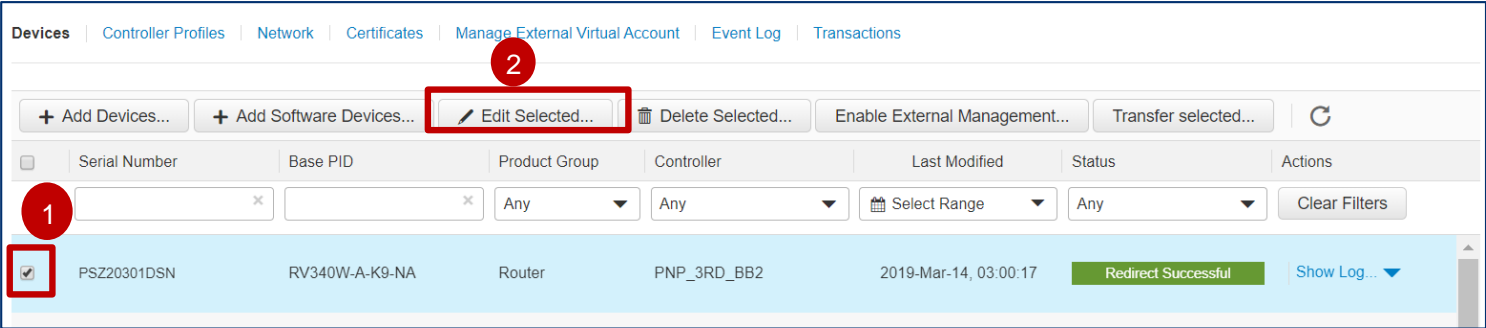
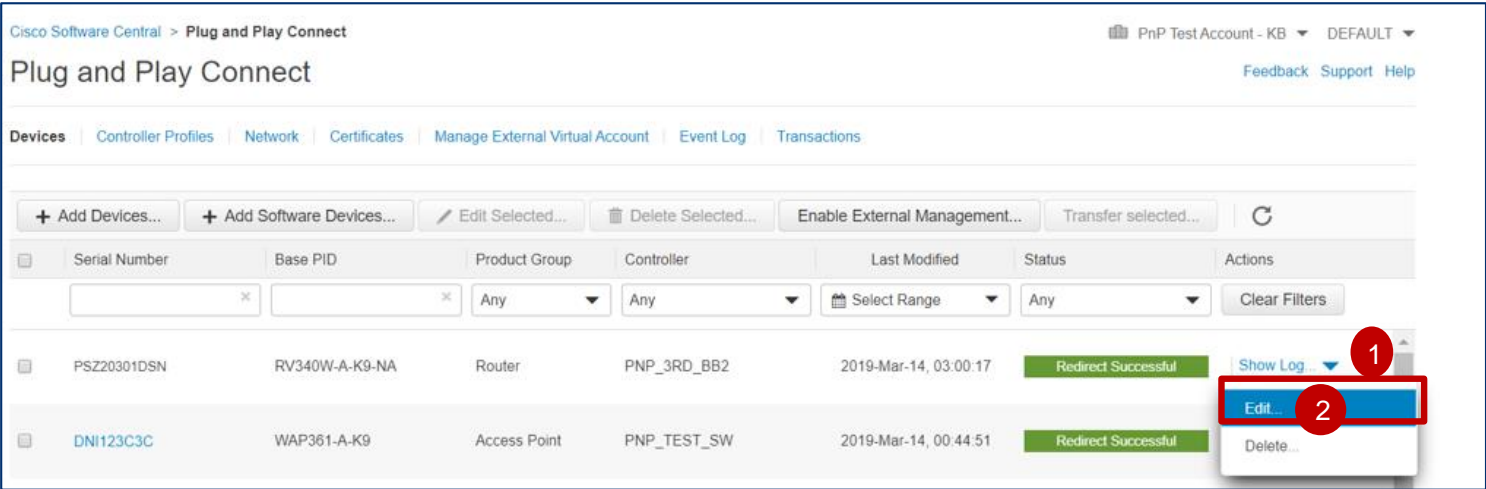
Edit can be done for a Single Device at a time or for Multiple Devices.

1 Select the checkbox corresponding to the device you want to edit or click on the drop down Menu under Actions column (Single only)

2 Click the **Edit Selected** button or Click **Edit** option from the Drop

Multiple Devices can be selected to enable Edit Selected Button as well. However, the Product Family should be the same for all devices in case of bulk edit.

Edit is applicable to both Hardware and Software Devices.



Edit Devices (continued)

Step by Step Instructions:

- 3

The **Edit Devices** page appears. From the **Select Device Property** drop down, select the property you want to edit.

Options available:

 - **Description**
 - **Controller Profile**
- 4

In the **Provide a value** text box, enter the new value for the selected property.
- 5

Click the **Apply** button.
- 6

The updated values appear in the table below.

In the given example, Description has been edited.

Cisco Software Central > Plug and Play Connect

PnP Test Account - KB | DEFAULT

Plug and Play Connect

Feedback | Support | Help

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

Edit Devices

Select the property of the device, provide the value and apply to all selected devices. Once done submit the changes.

Select Device Property

3

Description

Description

Controller Profile

Provide a value

4

Demo

5

Apply

Reset

Selected Devices

Product Group : Router

Serial Number	Base PID	Certificate Serial Number	Controller	Description	Actions
PSZ20301DSN	RV340W-A-K9-NA	--	PNP_3RD_BB2	New Demo Current --	<div><div>6</div><div><div></div><div></div></div></div>

double click to edit certificate serial number

Showing 1 Record

Cancel

Submit

Edit Devices (continued)

Step by Step Instructions:

- 7 Similarly, for this example, edit the **Controller Profile** property of the device.
- 8 Certificate can be edited by double clicking on the Certificate Serial Number column at the Device Level.
- 9 Click on Pencil Icon will enable user to add SUDI details.
- 10 Click the **Submit** button to complete the process of editing the device. Success Message Displayed.
- 11 The status has now changed to Pending (Redirection) for the device that was edited.

Edit Devices

Select the property of the device, provide the value and apply to all selected devices. Once done submit the changes.

Select Device Property

Controller Profile

Provide a value

APIC-EM-AWS

Apply

Reset

Selected Devices

Product Group : Router

Serial Number	Base PID	Certificate Serial Number	Controller	Description	Actions
PSZ20301DSN	RV340W-A-K9-NA	--	New: APIC-EM-AWS Current: PNP_3RD_BB2	New: Demo Current: --	<div>9</div> <div><div></div><div></div></div>

double click to edit certificate serial number

8

Identify Device

Serial Number: PSZ20301DSN Base PID: RV340W-A-K9-NA

Add Additional SUDI

SUDI SERIAL NUMBER

Certificate Serial Number

Add

SUDI Serial Number	Certificate Serial Number	Actions
FTX98909	13X0ED	<div><div></div></div>

double click to edit certificate serial number

Cancel

Save

10

Edit Selected Devices !

Selected devices edited successfully.

View Policy | Trademarks

11

+ Add Devices...

+ Add Software Devices...

Edit Selected...

Delete Selected...

Enable External Management...

Transfer selected...

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
PSZ20301DSN Demo	RV340W-A-K9-NA	Router	APIC-EM-AWS	2019-Nov-15, 22:16:35	Pending (Redirection)	Show Log...

Note : SUDI number cannot be edited. The user can delete the SUDI and add new SUDI.
Only certificate serial Number can be edited by double clicking inside the column.

Delete Devices

Step by Step Instructions:

1 Under **Devices** tab, select one or more Devices you want to delete.

2 Click **Delete Selected...** Button.

For a single delete of device user can also click on the drop down under Actions Column. Choose **Delete**.

3 Delete Success message is displayed.

The screenshot displays the Cisco Software Central 'Plug and Play Connect' interface. The 'Devices' tab is active, showing a table of devices. Two devices are selected: 'PSZ20301DSN Demo' and 'TEST24OCT'. A red circle '1' highlights the selection checkboxes. A red circle '2' highlights the 'Delete Selected...' button in the top toolbar. A second screenshot below shows the 'Delete' option selected from the 'Actions' dropdown for the 'TEST24OCT' device, with a red circle '2' highlighting the 'Delete...' option. A third screenshot at the bottom shows a success message: 'Delete Selected Devices ! Selected devices deleted successfully.' with a green checkmark icon and a red circle '3' highlighting the message.

Cisco Software Central > Plug and Play Connect

PnP Test Account - KB ▾ DEFAULT ▾

Plug and Play Connect

Feedback Support Help

Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected... ↻

<input type="checkbox"/>	Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
<input checked="" type="checkbox"/>	PSZ20301DSN Demo	RV340W-A-K9-NA	Router	APIC-EM-AWS	2019-Nov-15, 22:16:35	Pending (Redirection)	Show Log... ▾
<input checked="" type="checkbox"/>	TEST24OCT	ISR4331-AX/K9	Router	APIC-160	2019-Oct-23, 21:36:05	Pending (Redirection)	Show Log... ▾

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected... Enable External Management... Transfer selected... ↻

<input type="checkbox"/>	Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
<input type="checkbox"/>	PSZ20301DSN Demo	RV340W-A-K9-NA	Router	APIC-EM-AWS	2019-Nov-15, 22:16:35	Pending (Redirection)	Show Log... ▾
<input type="checkbox"/>	TEST24OCT	ISR4331-AX/K9	Router	APIC-160	2019-Oct-23, 21:36:05	Pending (Redirection)	Edit... Delete...

3 Delete Selected Devices !
Selected devices deleted successfully.

Note : User cannot delete a software only device. If the user tries to delete a SW only device, the attempt will fail and the user will receive a message that 'Delete Software vEdge device is not allowed'.

Add a Controller Profile

Step by Step Instructions:

- 1 In the **Controller Profiles** tab, the list of PNP servers is displayed with the following fields:
- Profile name
 - Controller Type – (PNP SERVER, VBOND or WLC)
 - Default – *devices that come in will be attached to the Default controller.*
 - Description
 - Used By - *Number of devices tied to each particular PNP Service*
 - Download – *Provisioning file*

- 2 To add a Controller Profile, click **Add Profile**.

The screenshot shows the Cisco Software Central interface for Plug and Play Connect. The 'Controller Profiles' tab is selected. A red box labeled '2' highlights the '+ Add Profile...' button. Another red box labeled '1' highlights the table of controller profiles.

Profile Name	Controller Type	Default	Description	Used By	Download
WAP-PNP-AWS-DENNIS	PNP SERVER		https://manager.finditnm.com test edit	2	--
P_1567059492008	PNP SERVER		dESC1	0	--
P_1567059457400	PNP SERVER		dESC1	0	--
P_1567046558511	PNP SERVER		dESC1	0	--
P_1567046509975	PNP SERVER		dESC1	0	--
P_1567039043921	PNP SERVER		dESC1	0	--
P_1567038927188	PNP SERVER		dESC1	0	--
P_1566973772917	PNP SERVER		dESC1	0	--
P_1566973734137	PNP SERVER		dESC1	0	--
P_156696909685	PNP SERVER		dESC1	0	--

Note: In a given VA you can only have one cloud-hosted and one OnPrem VBOND Controller

Add a PNP Controller Profile

Step by Step Instructions:

3 The **Step 1: Profile Type** page of the **Add Controller Profile** wizard appears.
From the **Controller Type** drop down, select **PNP SERVER**.

4 Click the **Next** button.

5 The **Step 2: Profile Settings** page appears.
Enter the required details in the page.

6 The user can choose Host Name, IPv4 or IPv6 from the Primary Controller dropdown list.

The user can also choose a HTTP or HTTPS for primary controller. If the user chooses HTTPS then another field for SSL opens up where the user needs to add SSL certificate to proceed further.

7 Click the **Next** button.



The screenshot shows the 'Add Controller Profile' wizard at Step 1: Profile Type. The 'Controller Type' dropdown is set to 'PNP SERVER'. The 'Next' button is highlighted.

The screenshot shows the 'Add Controller Profile' wizard at Step 2: Profile Settings. The 'Primary Controller' dropdown is open, showing 'Host Name', 'IPv4', and 'IPv6' options. The 'Next' button is highlighted.

Note: User can add a trailing dot to the Host name

Add a Controller Profile (continued)

Step by Step Instructions:

- 8 The **Step 3: Review** page appears. Review the details entered on the page.
- 9 Click the **Submit** button.

Add Controller Profile

STEP 1 ✓
Profile Type

STEP 2 ✓
Profile Settings

8STEP 3
Review

STEP 4
Confirmation

Review the following options to make sure they are correct before you Submit the changes.

Profile Type:

Controller Type: PNP SERVER

Profile Settings:

Profile Name: TESTING

Description: This is a testing profile

Primary IPv4 Address: 121.1.1.1

Primary Protocol: http

Primary Port: 80

Cancel

Back

9Submit

Add a Controller Profile (continued)

Step by Step Instructions:

- 10 The **Step 4: Confirmation** page appears. The controller profile has been created successfully.
- 11 Click the **Done** button.
- 12 The profile added appears on the Controller Profiles page.

10

Add Controller Profile

STEP 1 ✓
Profile Type

STEP 2 ✓
Profile Settings

STEP 3 ✓
Review

STEP 4
Confirmation

✓

The controller profile "TESTING" was successfully created.

11

Done

Cisco Software Central > Plug and Play Connect

PnP Test Account - KB DEFAULT

Plug and Play Connect

Feedback Support Help

Devices Controller Profiles Network Certificates Manage External Virtual Account Event Log Transactions

+ Add Profile... Edit Selected... Delete Selected... ✓ Make Default... Show Log... ↺

<input type="checkbox"/>	Profile Name	Controller Type	Default	Description	Used By	Download
<input type="checkbox"/>	TESTING	PNP SERVER		This is a testing profile	1	--
<input type="checkbox"/>	TEST234	PNP SERVER			0	--
<input type="checkbox"/>	WAP-PNP-AWS-DENNIS	PNP SERVER		https://manager.finditnm.com test edit	2	--

Add a Controller Profile – SD WAN

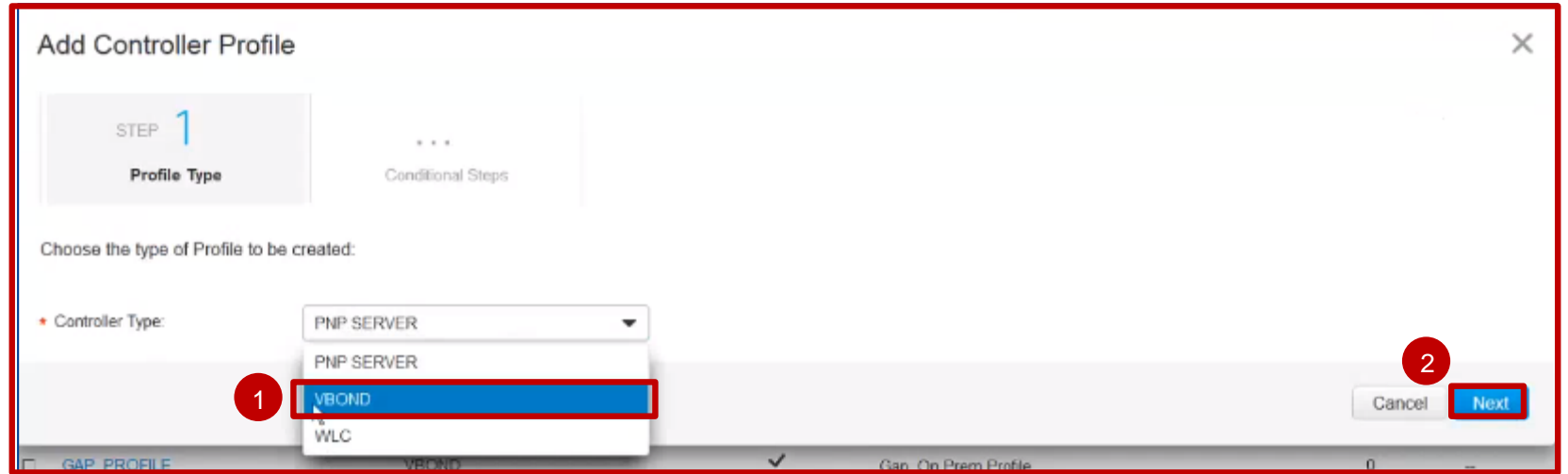
Step by Step Instructions:

If you're adding a Controller Profile for a SD WAN product, you follow the same steps as you would with a PNP Server Product except you select a different controller type.

- 1 The **Step 1: Profile Type** page of the **Add Controller Profile** wizard appears.

From the **Controller Type** drop down, select **VBOND**.

- 2 Click the **Next** button.



The screenshot shows the 'Add Controller Profile' wizard interface. At the top, it says 'Add Controller Profile' with a close button. Below that, a progress bar shows 'STEP 1' and 'Profile Type'. The main instruction is 'Choose the type of Profile to be created:'. Under 'Controller Type:', a dropdown menu is open, displaying 'PNP SERVER', 'PNP SERVER', 'VBOND' (which is highlighted with a red box and a red circle labeled '1'), and 'WLC'. In the bottom right corner, there are 'Cancel' and 'Next' buttons, with the 'Next' button highlighted by a red box and a red circle labeled '2'. At the bottom of the wizard, there is a breadcrumb trail: 'GAP PROFILE' > 'VBOND' > 'Gap On Prem Profile'.

Add a Controller Profile – SD WAN

1 In case of Cisco Routers ordered via CCW with a SDWAN Configuration (ie PNP-CAP-VBOND in the config), then the devices will be automatically associated with a default VBOND profile if existing in the account.

Note: Customer can manually associate the devices with Controller Profile at any point of time.

Cisco Software Central > Plug and Play Connect PnP Test Account - KB DEFAULT

Plug and Play Connect

[Feedback](#) [Support](#) [Help](#)

[Devices](#) | **Controller Profiles** | [Network](#) | [Certificates](#) | [Manage External Virtual Account](#) | [Event Log](#) | [Transactions](#)

[+ Add Profile...](#) [✎ Edit Selected...](#) [🗑 Delete Selected...](#) [✓ Make Default...](#) [📄 Show Log...](#) [🔄](#)

<input type="checkbox"/>	Profile Name	Controller Type	Default	Description	Used By	Download
<input type="checkbox"/>	<input type="text"/>	<input type="text" value="Any"/>				
<input type="checkbox"/>	PNPATS-NOV17_22_53	PNP SERVER			0	--
<input type="checkbox"/>	PNPATS-NOV17_19_53	PNP SERVER			1	--
<input type="checkbox"/>	PNPATS-NOV17_17_53	PNP SERVER			1	--
<input type="checkbox"/>	PNPATS-NOV17_13_53	PNP SERVER			0	--
<input type="checkbox"/>	CA_OLEGP	PNP SERVER	✓	For testing CA certificate	1	--
<input type="checkbox"/>	PNPATS-NOV17_02_53	PNP SERVER			1	--
<input type="checkbox"/>	PNPATS-NOV17_01_53	PNP SERVER			1	--
<input type="checkbox"/>	PNPATS-NOV16_20_53	PNP SERVER			0	--
<input type="checkbox"/>	PROFILE_172_23_165_104_1	PNP SERVER			0	--
<input type="checkbox"/>	VBOND-AA	VBOND	✓		3	Provisioning File

10

Showing Page 1 of 51 (509 Records) [⏪](#) [⏩](#) [⏴](#) [⏵](#)

Add a Controller Profile – SD WAN (continued)

Step by Step Instructions:

- 3 The **Step 2: Profile Settings** page appears. Enter the required details in the page. Note that the details required for VBOND differ from the previous details required for PNP Server.
- 4 The user can choose 'Multitenancy' as 'Yes' and it shows another field for 'SP Organization Name', as shown in the screenshot.
- 5 Click the **Next** button and then follow the normal process noted in the slides above for PNP Server.

3

Add Controller Profile

STEP 1 ✓
Profile Type

STEP 2
Profile Settings

STEP 3
Review

STEP 4
Confirmation

Profile Settings:

* Profile Name:

TESTING

Description:

Description of this profile (optional)

Default Profile:

No

Multi-Tenancy

Yes

4

* SP Organization Name:

50 characters, Non Trailing Space, Alpha, Numeric and _ / ? * . : @ + = % - only

* Organization Name:

INFYTEST

* Primary Controller:

Host Name

DTLS://

e.g. myhost.mydomain.com

12346

Server Root CA:

Max file size up to 1 MB or max characters not to exceed 1048576

Browse

Cancel

Back

5Next

Downloading Provisioning file - SD WAN

Step by Step Instructions:

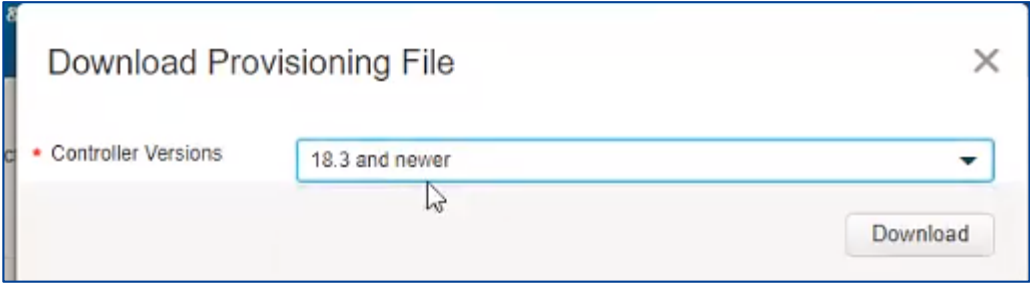
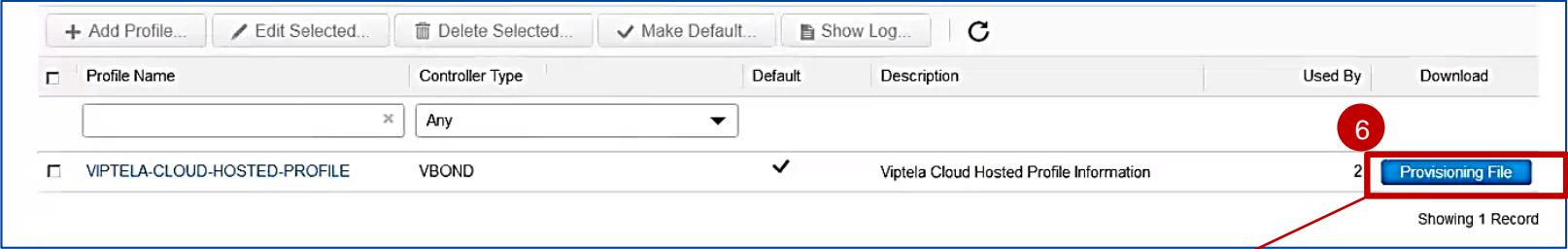
6 SD WAN users will need to download a provisioning file, which can be found under **Controller Profiles** tab, **Provisioning File**. It is available or needed only for **VBOND** profile.

The download includes the devices associated to Vbond profile.

Before the user can download, they will have to choose which Controller Version they are using.

Customer can choose to download either 17.x or 18.x version of the vManage.

18.X supports both vEdge routers and ISRs and CSRs, whereas 17.x supports only vEdge H/w and vedge S/W.



Add a Controller Profile - WLC

Step by Step Instructions:

If you're adding a Controller Profile for a WLC product, you follow the same steps as you would with a PNP Server Product except you select a different controller type.

- 1 The **Step 1: Profile Type** page of the **Add Controller Profile** wizard appears.

From the **Controller Type** drop down, select **WLC**.

- 2 Click the **Next** button.

The screenshot shows the 'Add Controller Profile' wizard. At the top, it says 'Add Controller Profile'. Below that, there's a progress bar with 'STEP 1 Profile Type' selected. To the right of the progress bar, it says 'Conditional Steps'. Below the progress bar, it says 'Choose the type of Profile to be created:'. Under 'Controller Type:', there is a dropdown menu with 'WLC' selected. The 'Next' button is highlighted with a red circle and the number 2.

Add a Controller Profile - WLC

Step by Step Instructions:

3 The **Step 2: Profile Settings** page appears. Enter the required details in the page. Note that the details required for WLC differ from the previous details required for PNP Server. Only WLC Servers have Secondary Controller details.

4 Click the **Next** button and then follow the normal process noted in the slides above for PNP Server.

3

Add Controller Profile

STEP 1 ✓
Profile Type

STEP 2
Profile Settings

STEP 3
Review

STEP 4
Confirmation

Profile Settings:

* Profile Name:

50 CHARACTERS, NO SPACES, ALPHA, NUMERIC, HYPHEN (-), UNDERSCORE(_), PLUS (+) ONLY

Description:

Description of this profile (optional)

Default Profile:

No ▼

* Primary Controller:

Host Name ▼

e.g. myhost.mydomain.com

Secondary Controller:

Cancel

Back

4
Next

Edit a Controller Profile

Step by Step Instructions:

- 1 Select the profile you wish to edit and click the **Edit Selected** button.
- 2 The **Step 1: Profile Settings** page appears of the **Edit Controller Profile** wizard. Here you can edit the following values:
 - Controller Profile Name
 - Description
 - Default Profile
 - Multi-Tenancy – VBOND only
 - Organization Name – VBOND only
 - SP Organization Name – VBOND only
 - Primary Controller
 - SSL Certificate
 - Secondary Controller – WLC
- 3 click the **Next** button.

The screenshot displays the Cisco Software Central 'Plug and Play Connect' interface. The 'Controller Profiles' tab is active, showing a table of profiles. The 'TESTING' profile is selected, and the 'Edit Selected...' button is highlighted with a red box and a red circle labeled '1'. Below the table, a red box labeled '2' highlights the 'Edit Controller Profile' wizard. The wizard is in 'STEP 1: Profile Settings' and contains the following fields:

- Profile Name: TESTING
- Description: This is a testing profile
- Default Profile: No
- Primary Controller: IPv4, HTTP://, 121.1.1.1, 80

A red circle labeled '3' highlights the 'Next' button at the bottom right of the wizard.

Profile Name	Controller Type	Default	Description	Used By	Download
<input checked="" type="checkbox"/> TESTING	PNP SERVER		This is a testing profile	1	--
<input type="checkbox"/> TEST234	PNP SERVER			0	--
<input type="checkbox"/> WAP-PNP-AWS-DENNIS	PNP SERVER		https://manager.finditnm.com test edit	2	--
<input type="checkbox"/> P_1567059492008	PNP SERVER		dESC1	0	--
<input type="checkbox"/> P_1567059457400	PNP SERVER		dESC1	0	--
<input type="checkbox"/> P_1567046558511	PNP SERVER		dESC1	0	--
<input type="checkbox"/> P_1567046509975	PNP SERVER		dESC1	0	--
<input type="checkbox"/> P_1567039043921	PNP SERVER		dESC1	0	--
<input type="checkbox"/> P_1567038927188	PNP SERVER		dESC1	0	--
<input type="checkbox"/> P_1566973772917	PNP SERVER		dESC1	0	--

Edit a Controller Profile (continued)

Step by Step Instructions:

- 4 The **Step 2: Review** page appears. If you see any inaccuracies on this page, click the **Back** button and make the required corrections.
- 5 Click the **Submit** button.
- 6 Once you click the **Submit** button, the **Step 3: Confirmation** page appears showing that your profile has been updated successfully.
- 7 Click the **Done** button.

Edit Controller Profile

STEP 1 ✓ Profile Settings

STEP 2 Review

STEP 3 Confirmation

Review the following options to make sure they are correct before you Submit the changes.

Profile Settings:

Profile Name:	TESTING
Description:	This is a testing profile
Primary IPv4 Address:	121.1.1.1
Primary Protocol:	http
Primary Port:	80
Controller Type:	PNP SERVER

Cancel Back **Submit**

Edit Controller Profile

STEP 1 ✓ Profile Settings

STEP 2 ✓ Review

STEP 3 Confirmation

✓ The controller profile "TESTING" was successfully edited.

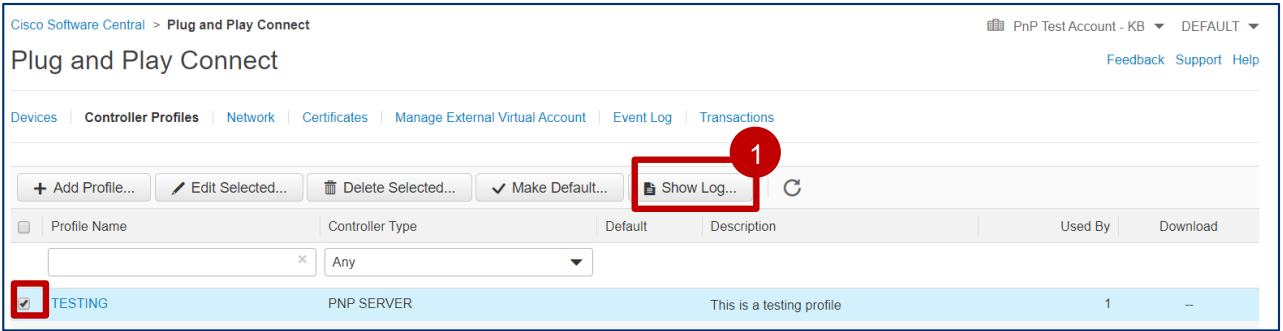
Done

Controller Profile – Show Log

Step by Step Instructions:

- 1 Select a Profile and click on **Show Log** Button
- 2 Controller Profile Log is displayed in a new pop-up window. The log captures all the changes that were done on the given Profile.

Click the **X** button to close the window.

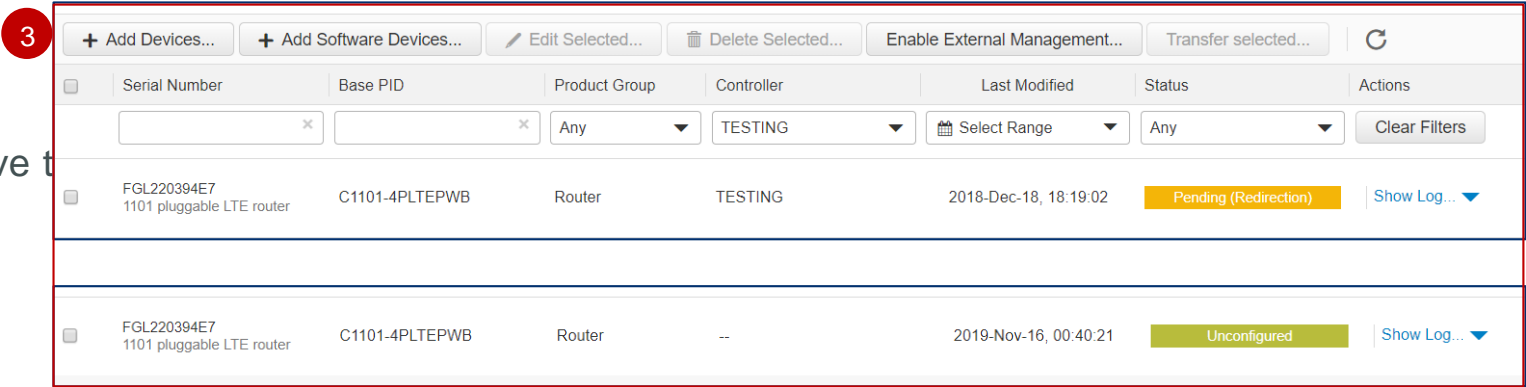
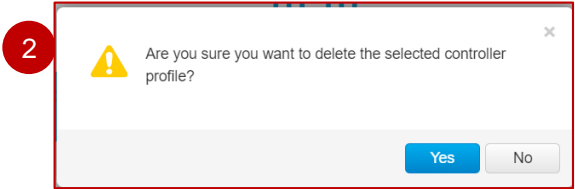
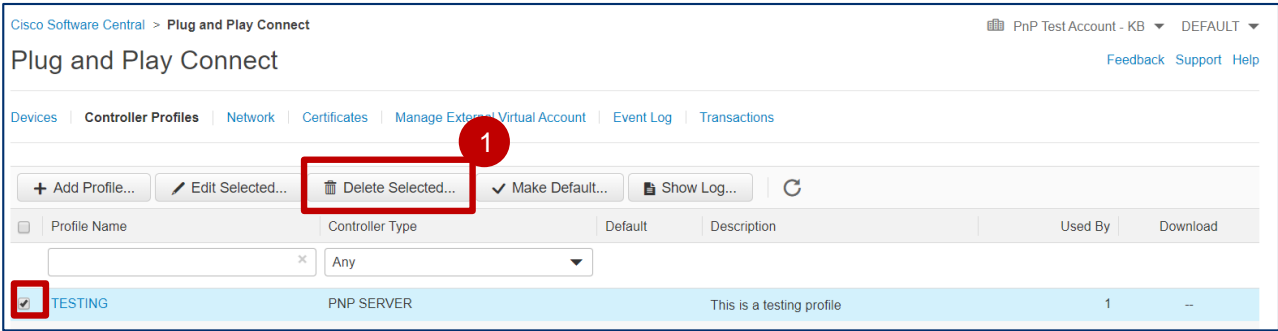


Delete Controller Profile

Step by Step Instructions:

- 1 Select one or more Profiles and click on **Delete Selected** Button
- 2 Confirmation is required from User to delete the Controller Profile(s). Click **Yes** to Proceed.
- 3 If Devices were associated to the Controller Profile, the device will go to unconfigured Status.

Note that in case of VBOND Profile, devices associated to the profile will have to be unconfigured first before deleting the profile.





VI. Network Tab

Network Tab

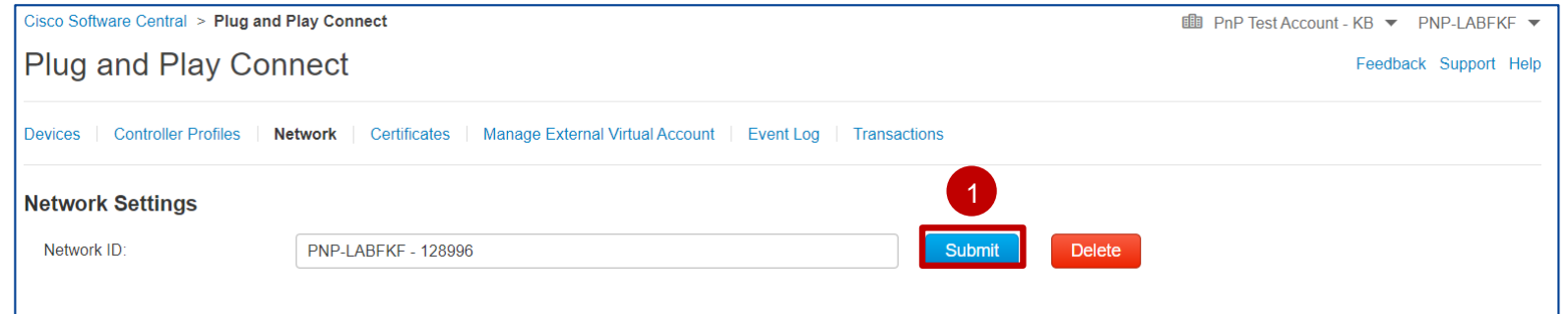
Step by Step Instructions:

- 1 In the **Network** tab, you should have a Network ID set. Click **Submit** to send data to ZProv. The information is used for provisioning of the devices for SD WAN.

In a Cloud-hosted scenario, the components are sent to ZProv.

For OnPrem installations it needs to be manually defined by customers.

Note: *It will work only if there are devices under the Virtual Account and there is a Controller Profile in place*



Cisco Software Central > Plug and Play Connect

PnP Test Account - KB PNP-LABFKF

Plug and Play Connect

[Devices](#) | [Controller Profiles](#) | **Network** | [Certificates](#) | [Manage External Virtual Account](#) | [Event Log](#) | [Transactions](#)

Network Settings

Network ID: **Submit** **Delete**



IX. RMA

RMAs in PnP

Process Flow:



Customer Actions



- Log into the product in vManage, and manually click on Sync in order to sync their products
- For On-Prem (Self-hosted) vManage, the Customer or Partner needs to login to PnP, download the new SN file and add it to the On-Prem vManage.
- For a partner led 3-way swap, the replacement shipped device is not automatically provisioned.



SD WAN Specific

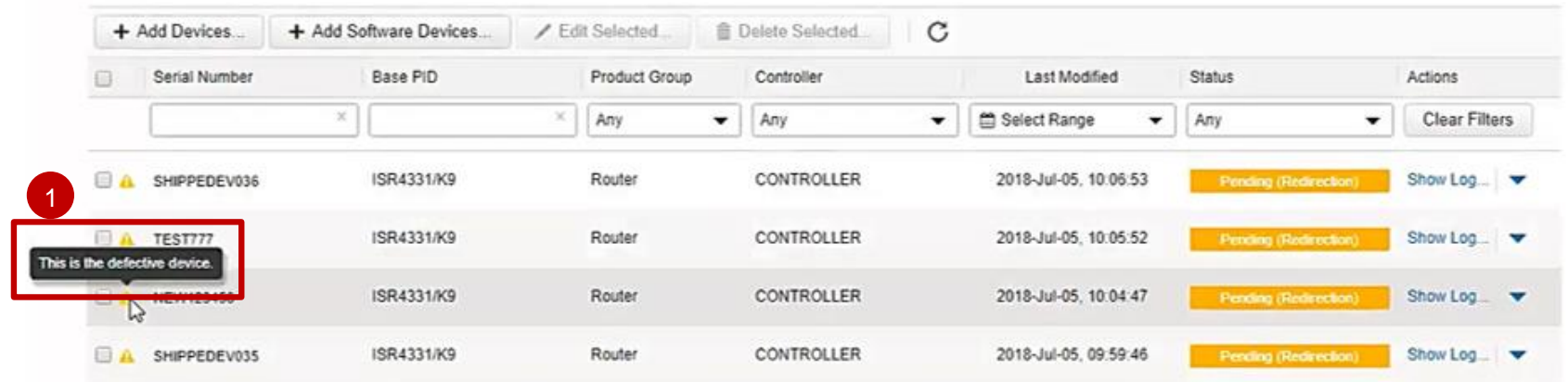
Note: Once the replacement is shipped, the data is captured in C3 and updated. It gets passed to supply chain.

Return Material Authorization (RMA) user experience changes

1 When customer initiates a Return Material Authorization (RMA), an alert will appear on the device as shown in the following screenshot:

A defective device is the device for which the claim is raised by the customer for exchange.

A replacement device is the device that the customer gets as replacement of the defective device.



	Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
<input type="checkbox"/>	SHIPPEDEV036	ISR4331/K9	Router	CONTROLLER	2018-Jul-05, 10:06:53	Pending (Redirection)	Show Log...
1 <input type="checkbox"/>	TEST777	ISR4331/K9	Router	CONTROLLER	2018-Jul-05, 10:05:52	Pending (Redirection)	Show Log...
<input type="checkbox"/>	SHIPPEDEV035	ISR4331/K9	Router	CONTROLLER	2018-Jul-05, 10:04:47	Pending (Redirection)	Show Log...
<input type="checkbox"/>	SHIPPEDEV035	ISR4331/K9	Router	CONTROLLER	2018-Jul-05, 09:59:46	Pending (Redirection)	Show Log...

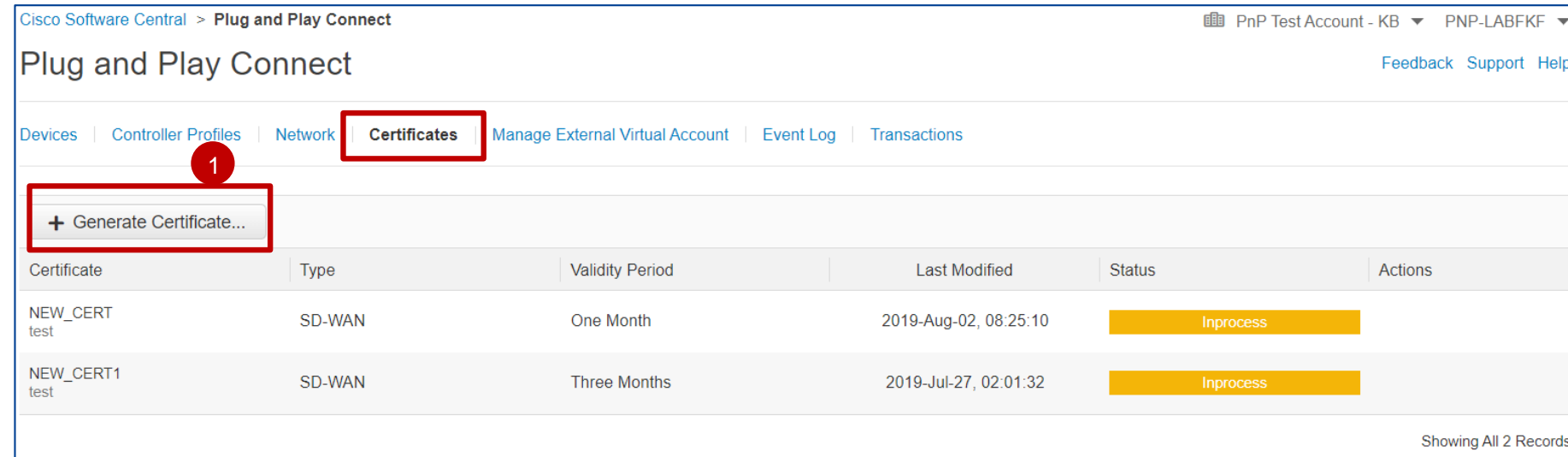


X. Certificates

Certificates

Crypto PKI is the capability for PnP connect UI portal for user to configure Certificate Signing Request (CSR). Certificates allows customers to authenticate devices and profiles in PNP for provisioning process.

- 1 User can generate new certificate using the Generate Certificate button



Cisco Software Central > Plug and Play Connect

PnP Test Account - KB PNP-LABFKF

Feedback Support Help

Devices | Controller Profiles | Network | **Certificates** | Manage External Virtual Account | Event Log | Transactions

+ Generate Certificate...

Certificate	Type	Validity Period	Last Modified	Status	Actions
NEW_CERT test	SD-WAN	One Month	2019-Aug-02, 08:25:10	Inprocess	
NEW_CERT1 test	SD-WAN	Three Months	2019-Jul-27, 02:01:32	Inprocess	

Showing All 2 Records

Certificates (continued)

Step by Step Instructions:

2 User is taken to **Step1** in Generate Certificate Page. Enter the following:

- Certificate Name - Mandatory
- Certificate Signing Request - Mandatory
- Validity Period - Mandatory
- Type – Cannot be changed
- Description

3 When Mandatory fields are entered, Next button is enabled. Click **Next**.

Generate Certificate

STEP 1
Identify Certificate

STEP 2
Review & Submit

STEP 3
Results

Identify Certificate

Enter Certificate details and click Next to proceed to the next step

* Certificate Name

TESTCERT

* Certificate Signing Request

TEST CERTIFICATE

* Validity Period

One Month

Type

SD-WAN

Description

Max characters not to exceed 255

Cancel

3Next



Certificates (continued)

4 **Step2 Review & Submit** page is displayed. To correct the data use the Back Button. If data is correct, click **Submit** button.

5 After clicking on Submit button, the Certificate is shown in the Certificates tab.

A user can add upto 100 certificates per Virtual Account.

Generate Certificate

STEP 1  Identify Certificate STEP 2  Review & Submit STEP 3 Results

Review & Submit

Certificate Name	Type	Description
TESTCERT	SD-WAN	--

Showing 1 Record

Cancel Back **Submit**

Cisco Software Central > Plug and Play Connect

English [Change] Hello, Aditi Srivastava EC_PNP_BAT TESTING123 [Feedback](#) [Support](#) [Help](#)

[Devices](#) | [Controller Profiles](#) | [Network](#) | **Certificates** | [Manage External Virtual Account](#)


[+ Generate Certificate...](#)

Certificate	Type	Validity Period	Last Modified	Status	Actions
TEST	SD-WAN	Three Months	2019-Mar-14, 11:30:51	Inprocess	

Showing 1 Record

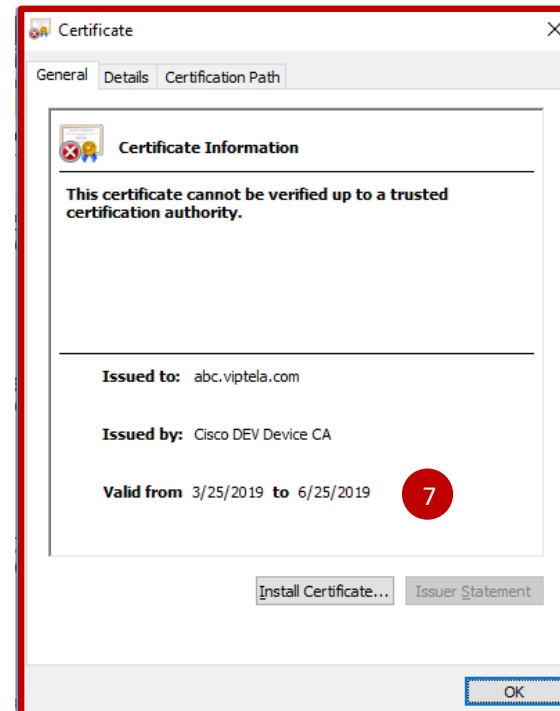
Certificates (continued)

6 Once the certificate gets successfully created, and status is **Completed**, the user can download the certificate from 'Actions' menu.

+ Generate Certificate...					
Certificate	Type	Validity Period	Last Modified	Status	Actions
TEST	SD-WAN	Three Months	2019-Mar-25, 11:57:11	Completed	 6

Showing 1 Record

7 The downloaded file is .cer file which has validity details of the certificate. This validity matches the validity period entered while creating the certificate.





XI. SDWAN NETWORK HUB

Cat9k - SDWAN Network Hub

Cat9K cannot be associated with vBond, hence a Tag for Cat9k Clouddock capable devices is created which has business rules set to automatically include any device that is tagged as Clouddock to sync back with vManage.

The user clicks on [Add Devices](#) button, and in the [Identify Device](#) page, after entering the [Serial Number](#) and [Base PID](#), the [SDWAN Type](#) Field and dropdown appears for the related PID. The user can choose [Cloud Dock](#) from the drop down and click on [save](#).

Once the details are saved without any errors, the Device can be seen in the [Devices](#) listing page with the tag.

Identify Device

* Serial Number: EX. FTX1433AH95

* Base PID: ISR4331/K9

Certificate Serial Number: ex. 01E9478D

SDWAN Type: Choose SDWAN Type

Controller Profile: Cloud Dock

Description: Clear Selection

Add Additional SUDI

SUDI Serial Number	Certificate Serial Number	Actions
No Devices to display.		

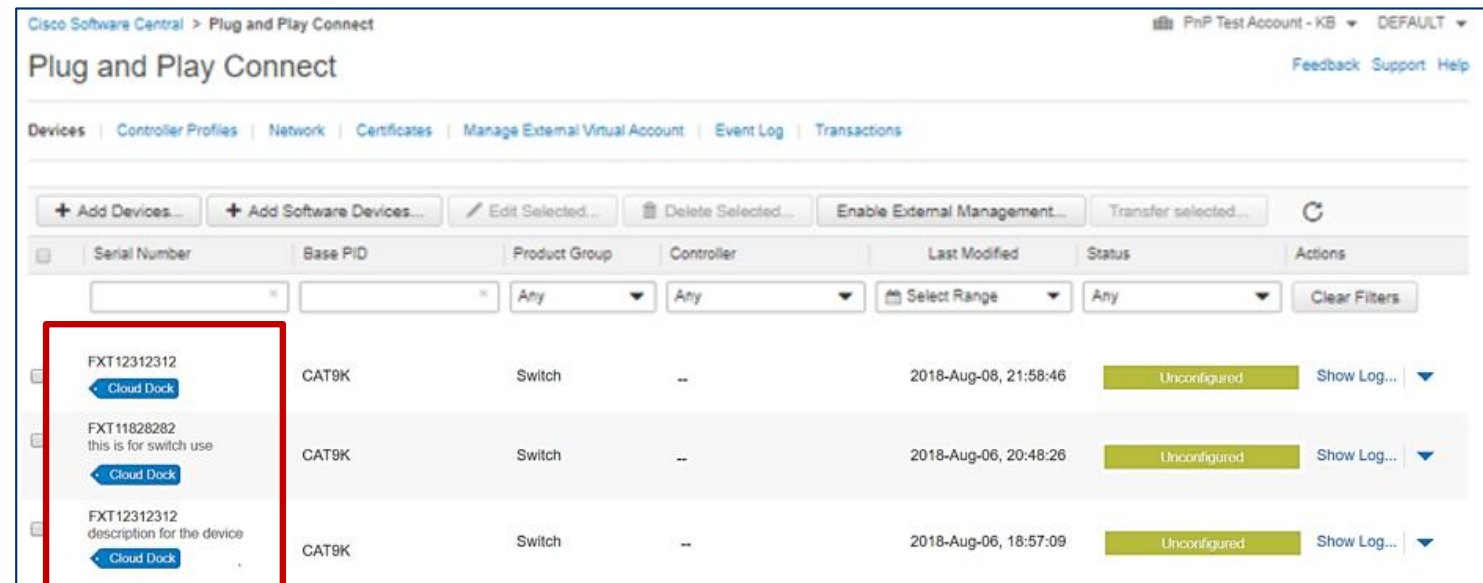
double click to edit certificate serial number

No Records to Display

Cancel Save

Cat9k - SDWAN Network Hub

Devices tab shown where the SDWAN supported device is added with cloud dock tag.



The screenshot displays the 'Cisco Software Central > Plug and Play Connect' interface. The 'Devices' tab is selected, showing a table of devices. A red box highlights the 'Cloud Dock' tag in the first column of the table for three entries.

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
FXT12312312 Cloud Dock	CAT9K	Switch	--	2018-Aug-08, 21:58:46	Unconfigured	Show Log...
FXT11828282 this is for switch use Cloud Dock	CAT9K	Switch	--	2018-Aug-06, 20:48:26	Unconfigured	Show Log...
FXT12312312 description for the device Cloud Dock	CAT9K	Switch	--	2018-Aug-06, 18:57:09	Unconfigured	Show Log...



XII. Transfer of Devices

Transfer Devices from one Virtual Account to another

The user can transfer devices from one instance of his SA/VA to the same or different SA/VA based on the access for the given user.

1 Click and select one or more devices to transfer.

2 Transfer selected button is enabled.

Click on Transfer selected button

The screenshot shows the Cisco Software Central Plug and Play Connect interface. At the top, there's a navigation bar with 'Cisco Software Central > Plug and Play Connect' and a user profile 'PnP Test Account - KB'. Below this is a breadcrumb trail: 'Devices | Controller Profiles | Network | Certificates | Manage External Virtual Account | Event Log | Transactions'. The main area has a toolbar with buttons: '+ Add Devices...', '+ Add Software Devices...', 'Edit Selected...', 'Delete Selected...', 'Enable External Management...', and 'Transfer selected...' (highlighted with a red box and a '2' callout). Below the toolbar is a table of devices with columns: Serial Number, Base PID, Product Group, Controller, Last Modified, Status, and Actions. The first two rows are highlighted in blue, and the first row has a checkbox checked (indicated by a '1' callout). The table lists various devices, including switches and access points, with their respective statuses like 'Redirect Successful', 'Unconfigured', and 'Pending (Redirection)'. At the bottom, there's a pagination bar showing '10' records per page and 'Showing Page 1 of 47 (462 Records)'.

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
DN121050025 OlegP device	SF350-24P-K9-EU	Switch	CA_OLEGP	2019-Nov-18, 15:24:11	Redirect Successful	Show Log...
<input checked="" type="checkbox"/> SN907049427 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-18, 07:58:03	Unconfigured	Show Log...
<input checked="" type="checkbox"/> SN921419201 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-18, 04:58:32	Unconfigured	Show Log...
<input type="checkbox"/> SN561075327 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-18, 01:03:17	Unconfigured	Show Log...
<input type="checkbox"/> SN966656342 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	PNPATS-NOV17_19_53	2019-Nov-17, 19:56:50	Pending (Redirection)	Show Log...
<input type="checkbox"/> SN871321550 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	PNPATS-NOV17_17_53	2019-Nov-17, 17:55:49	Redirect Successful	Show Log...
<input type="checkbox"/> SN146958559 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-17, 15:58:53	Unconfigured	Show Log...
<input type="checkbox"/> SN158294091 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-17, 15:00:51	Unconfigured	Show Log...
<input type="checkbox"/> SN446684894 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-17, 11:00:41	Unconfigured	Show Log...
<input type="checkbox"/> SN773536566 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	PNPATS-NOV17_02_53	2019-Nov-17, 03:01:29	Pending (Redirection)	Show Log...

Transfer Devices from one Virtual Account to another (contd)

Transfer Device screen is displayed.

- 3 Select mandatory fields from drop down.
List is displayed based on user access.

Destination Smart Account
Destination Virtual Account

- 4 User can delete any device from the
current transfer only by clicking on the
icon. Note this will not delete the device.

- 5 Note that show Log messages and SUDI
Missing/RMAAlerts from the source
account will not be transferred to
destination account

- 6 Click on 'Transfer' Button to Initiate
transfer of devices. Message displayed
that Transfer request has been submitted.

Cisco Software Central > Plug and Play Connect PnP Test Account - KB DEFAULT

Plug and Play Connect

[Devices](#) | [Controller Profiles](#) | [Network](#) | [Certificates](#) | [Manage External Virtual Account](#) | [Event Log](#) | [Transactions](#)

Transfer Devices



Select the smart account and virtual account that the devices should be moved to.


Smart Account

PnP Test Account - KB(pnp.test.com)

Virtual Account

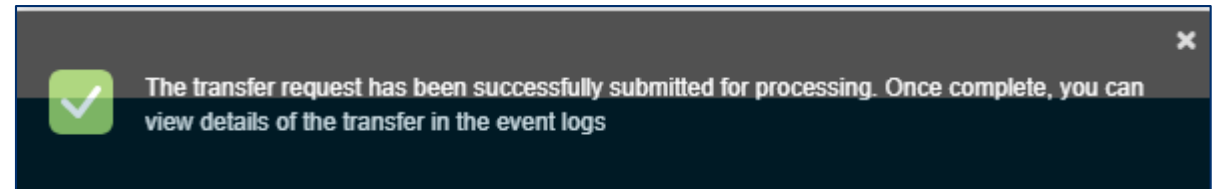
Test_Anirudh

Serial Number	Base PID	Description	Actions
SN921419201	AIR-AP3802I-B-K9	Added by PNPATS	
SN907049427	AIR-AP3802I-B-K9	Added by PNPATS	

 Show Log messages and SUDI Missing/RMAAlerts on the Plug-N-Play portal will not be transferred to destination account.

Cancel

Transfer



Transfer Devices from one Virtual Account to another (contd)

- 7 When Transfer is in progress, Device is locked from any transaction. If Device was associated to any profile it will be automatically disassociated. Click refresh button.

The screenshot shows the 'Plug and Play Connect' interface. At the top right, a red box highlights the account 'PnP Test Account - KB' and the role 'DEFAULT'. Below the navigation tabs, a row of buttons includes '+ Add Devices...', '+ Add Software Devices...', 'Edit Selected...', 'Delete Selected...', 'Enable External Management...', and 'Transfer selected...'. A table lists devices with columns for Serial Number, Base PID, Product Group, Controller, Last Modified, Status, and Actions. A red box highlights a device with a lock icon and a tooltip that reads 'Device is Locked and cannot be accessed at this time.' The device is SN907049427, an Access Point, with status 'Unconfigured'.

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
DNI21050025 Cisco device	SF350-24P-K9-EU	Switch	CA_OLEGP	2019-Nov-18, 15:24:11	Redirect Successful	Show Log...
SN907049427 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-18, 07:58:03	Unconfigured	Show Log...
SN921419201 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-18, 04:58:32	Unconfigured	Show Log...

- 8 Go to the destination smart account/virtual account. New devices are listed in the devices tab.

The screenshot shows the 'Plug and Play Connect' interface for a different account. At the top right, a red box highlights the account 'PnP Test Account - KB' and the role 'Test_Anirudh'. The interface is similar to the previous one, but the table now shows two devices, both with status 'Unconfigured'. A red box highlights these two devices.

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
SN907049427 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-19, 18:55:23	Unconfigured	Show Log...
SN921419201 Added by PNPATS	AIR-AP3802I-B-K9	Access Point	--	2019-Nov-19, 18:55:23	Unconfigured	Show Log...

Transfer Devices from one Virtual Account to another (contd)

9 Check the Event Log in both source and destination accounts which captures the device details that were transferred

10 Click on **More** displays the list of devices that were transferred in a separate pop up window.

11 For successful transfer the icon displays green with tick and if there is a failure in transfer for any reason, cross mark in Red is displayed before the device in Source Account Event log (more section).

12 User can click on icons in the dashboard to filter device display based on success only or failure only or all

The screenshot displays the Cisco Software Central interface for Plug and Play Connect. It shows two event log views: 'Source SA/VA' and 'Destination SA/VA'. Both views have a red box labeled '9' around the 'Event Log' tab. The 'Source SA/VA' view shows a message about a successful transfer of 2 devices. A red box labeled '10' highlights the 'More' link in the 'Message' column. The 'Destination SA/VA' view shows a message about the transfer of 2 devices from a smart account. A red box labeled '10' highlights the 'More' link in the 'Message' column. A red box labeled '11' highlights the 'Log Details' pop-up window, which shows a table of device transfer details. A red box labeled '12' highlights the filter buttons in the pop-up window: 'All', 'Valid', and 'Errors'.

Source SA/VA Event Log

Message	More	Logged By	Logged At
Transfer Complete: "0" devices failed to transfer and "2" devices successfully transferred to "PnP Test Account - KB", "Test_Anirudh".	More	jayanara	2019-Nov-19, 10:44:10
"2" devices were initiated for transfer from "PnP Test Account - KB", "DEFAULT" to "PnP Test Account - KB", "Test_Anirudh"	--	jayanara	2019-Nov-19, 10:44:08

Showing All 2 Records

Destination SA/VA Event Log

Message	More	Logged By	Logged At
"2" devices were transferred from smart account "PnP Test Account - KB" virtual account "DEFAULT" to smart account "PnP Test Account - KB", "Test_Anirudh".	More	jayanara	2019-Nov-19, 10:44:10
"1" devices were transferred from smart account "PnP Test Account - KB" virtual account "PNP-LABFKF" to smart account "PnP Test Account - KB", "Test_Anirudh".	More	jayanara	2019-Sep-06, 11:44:20

Log Details Pop-up

2 All | 2 Valid | 0 Errors

Icon	Number	Reason
✓	N921419201	--
✓	N907049427	--

Close



XIII. Transaction Log

Transaction Log

- The Transaction tab captures all transactions related to Device Provisioning for a given order (Hardware with no subscription order, Hardware + Subscription order, Change Subscription, Subscription order with Customer Devices, Disti Hardware Order with Subscription)

1 The transaction log captures the transaction date the order was provisioned in PnP. Last updated transaction will be displayed on top.

2 Click on icon in Quantity column will show all Device information that came as part of the order.

3 Hover over on Status displays all the sub-status applicable for that transaction.

The screenshot displays the Cisco Software Central Plug and Play Connect interface. The top navigation bar includes 'Cisco Software Central > Plug and Play Connect' and user information 'PNP_QA_AUG1' and 'NEWSUB001'. The main header is 'Plug and Play Connect' with links for 'Feedback', 'Support', and 'Help'. Below the header is a navigation bar with tabs: 'Devices', 'Controller Profiles', 'Network', 'Certificates', 'Manage External Virtual Account', 'Event Log', and 'Transactions'. The 'Transactions' tab is selected. The main content area shows a table of transactions. The table has columns: 'Transaction Date', 'Type', 'SKU', 'Quantity', 'Order', 'Status', and 'Actions'. A red box highlights the first transaction row. A red circle with the number 1 points to the transaction date '2019-Oct-11, 11:35:30'. A red circle with the number 2 points to the quantity icon '1'. A red circle with the number 3 points to the status dropdown menu 'Pending'. A tooltip for the quantity icon shows 'Device Information' with 'Serial Number' 13032398701 and 'Base PID' ISR4351K9. A tooltip for the status dropdown shows a list of sub-statuses: 'Account Assignment' (Assigned), 'Subscription Acknowledgement' (Pending), 'Controller Notification' (Completed), and 'Controller Acknowledgement' (Pending). The bottom of the page shows 'Showing Page 1 of 2 (18 Records)' and navigation controls.

Transaction Date	Type	SKU	Quantity	Order	Status	Actions
2019-Oct-11, 11:35:30	ORDER	L-LIC-DNA-ADD	1	Order : 88266480 line# : 1.0	Pending	
2019-Sep-25, 03:32:18	ORDER	L-LIC-DNA			Pending	
2019-Sep-25, 03:30:56	ORDER	L-LIC-DNA			Pending	
2019-Sep-25, 03:20:23	ORDER	L-LIC-DNA			Pending	
2019-Oct-11, 11:07:03	ORDER	L-LIC-DNA-ADD	1	Order : 108578974	Completed	
2019-Oct-11, 11:07:03	ORDER	L-LIC-DNA-ADD	1		Completed	
2019-Oct-10, 23:53:39	ORDER	ISR4321-DNA			Completed	
2019-Oct-09, 16:48:02	ORDER	ISR4351-DNA	1		Completed	
2019-Oct-09, 09:52:02	ORDER	VEDGE-1000-AC-K9	1		Completed	
2019-Oct-03, 00:00:30	ORDER	ISR4321-DNA	1	Order : 108578974 line# : 1.0	Pending	

Transaction Log

Transaction Details:

- 4 Click on Transaction Date displays the Transaction Details tab.

This tab captures the details related to the transaction in sections

- “Transaction Details”,
- “Term Details”,
- “Controller Request Details”
- “Support Details”

Note that all fields will not be available at all times. Fields are displayed depending on the availability of data.

The screenshot shows the Cisco Software Central interface for Plug and Play Connect. The 'Transactions' tab is selected. A table lists transactions with columns for Transaction Date, Type, SKU, Quantity, Order, Status, and Actions. A transaction from 2019-Oct-11, 11:35:34 is highlighted. A modal window is open, displaying details for a transaction from 2019-10-07 12:36:17.158. The modal is titled 'Transaction : 2019-10-07 12:36:17.158' and contains the following sections:

- General**
 - Transaction Details
 - Product ID: ISR4321-DNA
 - Quantity: 1
 - Order: 108569132 Line#: 1.0
 - Web Order Details: 88232766
 - Virtual Account: DEFAULT
 - Term Details
 - Subscription ID: Sub320535
 - Subscription Type: SaaS
 - Initial Term(months): 36
 - Renewal Term(months): 0
 - Subscription Event: New Order
 - Controller Request Details
 - End Customer Email: matrunahak@google.com
 - Controller Status: COMPLETED
 - Notes: None
 - Support Details
 - Last Updated: 2019-10-07 12:40:51.745
 - Transaction ID: CSCPNP2200



XIV. Manage External Virtual Account

Manage External Virtual Account – End Customer

1 The button “Enable External Management” is used if Customer wants to have an External Account to manage their devices.

2 When the Button is clicked the Account goes through a clean up activity.

3 Once Account is enabled for external management, view of the account will be restricted to only devices, device logs, Event Log and Transactions.

The screenshot displays the Cisco Software Central interface for the 'Plug and Play Connect' section. The top navigation bar includes 'Cisco Software Central > Plug and Play Connect', language settings, user information, and account details. The main navigation tabs are 'Devices', 'Controller Profiles', 'Network', 'Certificates', and 'Manage External Virtual Account'. A red circle '1' highlights the 'Enable External Management...' button in the top action bar. A modal dialog box (2) titled 'Enable External Device Management' is shown, warning that this action will delete all controller profiles and certificates and clear the configuration of all devices in the virtual account. The dialog asks 'Are you sure you want to continue?' with 'OK' and 'Cancel' buttons. In the background, the 'Devices' tab is active, and a red circle '3' highlights a message stating: 'This account is in the process of being setup for external management. Once all devices are unconfigured, the account will be available for use again.' Below this message, the 'Disable External Management...' button is highlighted. The table below shows a list of devices with columns for Serial Number, Base PID, Product Group, Controller, Last Modified, Status, and Actions. Two devices are listed, both with a status of 'Unconfigured'.

Serial Number	Base PID	Product Group	Controller	Last Modified	Status	Actions
SN1	ISR4221/K9	Router	--	2019-Mar-07, 18:17:15	Unconfigured	Show Log...
342D836D-67B8-DA0C-836...	VEDGE-CLOUD-DNA	Router	--	2019-Mar-07, 18:17:15	Unconfigured	Show Log...

Manage External Virtual Account – Service Provider

Cisco Software Central > Plug and Play Connect

English [Change] Hello, Jayashree Narayanan PnP Pega Test Account TTEST001

Plug and Play Connect

Devices | Controller Profiles | Network | Certificates | **Manage External Virtual Account**

+ Add Virtual Accounts... Delete Selected...

Smart Account Virtual Account Devices Account Status

No Record to display.

Manage Devices in Another Smart Account

Select the Smart Account and the virtual accounts that contain the devices to be managed.

Parent Smart Account: PnP Pega Test Account

Available Virtual Accounts:

Search

DEFAULT

MultiTenancy_JanScope

2 Shown

Plug and Play Connect

Devices | Controller Profiles | Network | Certificates | **Manage External Virtual Account**

+ Add Devices... + Add Software Devices... Edit Selected... Delete Selected...

Serial Number	Base PID	Product Group	Smart Account	Virtual Account	Controller	Last Modified	Status	Actions
11OD2159875632	VEDGE-1000-AC-K9	Router	TRACK4B...	DEFAULT	THARCLOUDHOST...	2019-Mar-08, 22:55:25	Provisioned	Show Log...
DC88146D-6261-20E2...	VEDGE-CLOUD-DNA	Router	TRACK4B...	DEFAULT	THARCLOUDHOST...	2019-Mar-08, 22:55:24	Provisioned	Show Log...
6ESAD30D-8B15-82F...	VEDGE-CLOUD-DNA	Router	TRACK4B...	DEFAULT	THARCLOUDHOST...	2019-Mar-08, 22:55:23	Provisioned	Show Log...

- 1 “Manage External Virtual Account” tab gives the ability to claim other virtual accounts of users, who want their devices to be managed
- 2 The user claiming the virtual account to manage the devices should have access to the claimed account. For more information about access please click [here](#).
- 3 Once an Account has been claimed for management, view of the User who is managing the new Customer Account



PnP Help "FAQ" tab update

PnP FAQ Help Link

- 1 User can access FAQ document related to PnP Connect by clicking on help link.

Help link is not related to any tab user is in and available at all times.

- 2 FAQ document opens up in a pop up window with the frequently asked questions and answers.

The screenshot illustrates the process of accessing the PnP FAQ help link. In the top right corner of the Cisco Software Central interface, a red box labeled '1' highlights the 'Help' link in the navigation bar. A red arrow points from this link to a second red box labeled '2', which highlights the PDF document titled 'Cisco Plug and Play Connect FAQ' that opens in a new window. The document is displayed in a pop-up window with a dark header bar showing the URL 'software.cisco.com/web/fw/softwareworkspace/pnp/doc/PNPHelp.pdf' and the title 'Authoring Template: Product Bulletin 1 / 9'. The main content area of the document features the Cisco logo, the text 'Q&A – Cisco External', and the title 'Cisco Plug and Play Connect FAQ' above a large image of a server rack.

Licensing Support

To open a case with GLO:

- Open a case using [Support Case Manager](#)
- Choose the category “SDWAN - PNP Related Issues”
- In the description, include information like SA, SO#, Device details, specific product, questions or issues.
- Other teams to contact for urgent issues:

Smart Order Issues- smartordersupport@cisco.com

Smart Account Issues - smart-ops-support@cisco.com

General Smart Account and Smart Licensing queries- ask-smartlicensing@cisco.com

Device related and license installation Issues - tac@cisco.com



XV. References

References

Reference Material	Link
Release Notes for Cisco Plug and Play Connect	http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Plug-and-Play/release/notes/pnp-connect-release-notes.html
Manage your Cisco Plug and Play Connect	https://software.cisco.com/
Solution Guide	http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Plug-and-Play/solution/guidexml/b_pnp-solution-guide.html
Release Notes for Cisco Network Plug and Play	http://www.cisco.com/c/en/us/support/cloud-systems-management/one-enterprise-network-controller/products-release-notes-list.html
Configuration Guide for Cisco Network Plug and Play on Cisco APIC-EM	http://www.cisco.com/c/en/us/support/cloud-systems-management/one-enterprise-network-controller/products-installation-and-configuration-guides-list.html

