

The bridge to possible

Cisco Enterprise Management 3.X: Prime Infra. 3.x Ordering and Licensing Guide (Incl. Smart Licensing update)

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August 2020



How to use this ordering guide

- The Cisco Prime™ Infrastructure 3.x, Management 3.x Ordering Guide addresses key use cases and customer situations.
- Hyperlinks allow you to quickly get to the information you want, within 3 4 clicks
- Each use case includes the key ordering steps and the associated bill of materials.
- In each use case where you want to upgrade from an earlier version of Cisco® Prime Infrastructure, and <u>need</u> to migrate historical data to version 3.x, we will show you <u>various stages of upgrade paths</u> to follow.
 - Note that **customers that do not need to migrate historical data to** Cisco Prime Infrastructure **3.x**. You can do a fresh installation of it, then export MAPs, device inventory, and licenses from earlier versions and import them into Prime Infrastructure 3.x. **You can skip the intermediate steps**.
- A full list of part numbers (new product SKUs and upgrade SKUs) is provided in the Appendix
- A number of footnotes and appendixes provide links to relevant information necessary to install a new version of Prime Infrastructure 3.x or for upgrading from legacy versions
- To access information about installation/upgrading instructions please Click here.



Cisco Prime Infrastructure Ordering Guide

- > What is new with Cisco Prime™ Infrastructure 3.x (PI 3.x) licensing
- > Ordering Prime Infrastructure 3.x Traditional Licenses (new customers and existing customers)
- Ordering Prime Infrastructure 3.x Smart Licenses for (PI 3.1 or higher)
- Upgrading from PI 2.2 to PI 3.x
- Upgrading from Legacy to PI 3.x (Summary)
- Migrating from legacy offerings (WCS, LMS) to PI 2.2 to PI 3.x
- Upgrading from generation 2 to generation 3 of the Cisco® Prime Infrastructure physical appliance
- Appendices (A-L)
- A. Prime Infrastructure scale and sizing guidelines
- B. Prime Infrastructure 3.x licensing overview
- C. Complete list of product and services part numbers
- D. Complete list of upgrade and migration part numbers
- E. <u>Using Management Token as an alternative to</u> using category-specific licenses

- G. End-of-sale and end-of-life notices
- H. Using the licensing interface (incl. saving .LIC files)
- I. Obtaining a Prime Infrastructure evaluation license
- J. Contact information to get help with ordering and licensing
- K. Resources (guides: upgrade, installation)
- License application guidelines and Entitlements
- M. Smart Licensing Update



Licensing Overview in Cisco Prime Infrastructure 3.x



Cisco Prime Infrastructure 3.x Licensing Changes (1 of 2) Traditional Licensing

- Solution
 Cisco Prime™ Infrastructure 3.x (PI 3.x) are now offered under one Cisco Enterprise Management 3.x License
- PI 3.x lifecycle and assurance licenses are now combined into a single management license. These licenses are offered on a per-device basis (as in PI 1.x, 2.x) and are NOT node-locked. They are available in single-device increments (no more PAKs of 25, 50, etc.).
 - PI 3.x licenses are now linked to the category or sub-category of network devices (as in Cisco ONE™ Software) Examples include C1-PI-LFAS-AP-K9, C1-PI-LFAS-2K3K-K9, etc.
- Customers deploying Prime Infrastructure for the first time should purchase a Cisco Enterprise Management 3.x License as described in this document.
- Customers with a valid services contract on earlier versions of Prime Infrastructure (PI 2.x, 1.x, NCS 1.x etc.) can upgrade to PI 3.x at no additional cost.

Customers without a valid services contract or with expired services contracts can purchase PI 1.x/2.x to 3.x upgrade licenses and then upgrade the PI 1.x or 2.x to a PI 3.x instance, as described in this document. They MUST attach service contract in this case.

- Customers with valid support contracts on PI 2.x or 1.x can upgrade to PI 3.x at no cost.
- Inline Upgrade from PI 2.x to PI 3.1 is Not supported (Click here to download the upgrade instructions document)

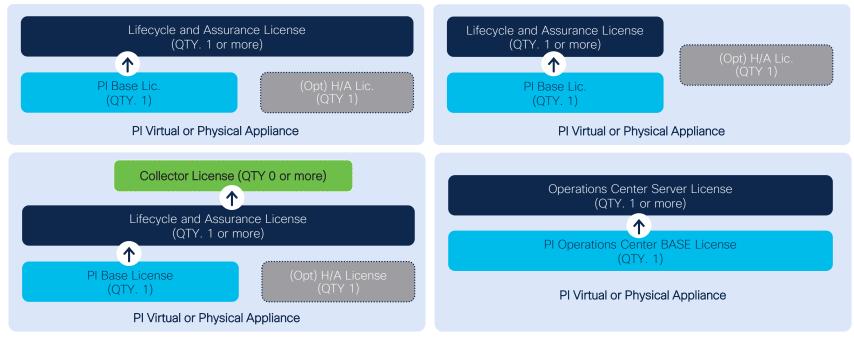


Cisco Prime Infrastructure 3.x Licensing Changes/Smart Licensing Support

- Beginning with PI 3.1 release, Prime Infrastructure licenses can be purchased using Smart Licenses.
- For more updates on Smart licensing refer Appendix M
- Cisco Prime Infrastructure 3.1 and higher will support smart license usage
 A single instance of Prime Infrastructure can run either in traditional licensing mode or smart licensing mode and not both
 - If customers are running multiple instances of Prime Infrastructure, they are allowed to transition each of these servers at once or in phases
 - Customers running two or more instances of Prime Infrastructure in smart licensing mode can use "license pooling" functionality across these servers
 - For more detailed information Smart Licensing please <u>Click here</u>



Licensing Model Overview Cisco Prime Infrastructure 3.x



- One and only one base license is required for each Prime™ Infrastructure management node (physical or virtual appliance)
- A collector license increases a PI node from 20,000 to 80,000 flows per second
- Per-device licenses are available in single-device increments



Ordering Cisco Prime Infrastructure Traditional/ Classic Licenses

(New Customers and Existing Customers Who Want to Add Capacity)



Ordering Cisco Prime Infrastructure 3.x (Traditional License)



Customers purchasing Cisco Prime® Infrastructure for the first time



Customers adding new functions or capacity to existing PI servers

- Additional capacity lifecycle and assurance
- New functionality Cisco® Prime Infrastructure Operations Center
- > Click here

Customers upgrading from NCS 1.x, PI 1.x, and 2.x



Customers purchasing Prime Infrastructure Operations Center





First-time Purchase of Prime Infrastructure (1 of 5) (Traditional License)

Before Ordering Cisco Prime Infrastructure (PI)

- Download and review the Cisco Prime™ Infrastructure 3.x Quick Start Guide (Click here to download the document)
- 2. Decide whether to deploy your PI server on a physical appliance or virtual appliance
 Customers are allowed to move from physical appliance deployment to virtual appliance deployment and vice versa
 Any Prime Instructure License that work on virtual appliance work on physical appliance and vice versa
- 3. If you want to download* virtual appliance software (Click here to download the software, choose the desired version e.g., 3.6) Physical appliance will ship with Prime Infra software pre-installed.
- 4. Review the Cisco® Prime Infrastructure scale and sizing guidelines (Click here to download the document)
 Take an approximate inventory of network devices that you will manage with PI
- 1. Number of switches, routers, wireless access points
- 2. Identify other requirements for Cisco Prime Infrastructure deployment (e.g., you may want to segment the network and deploy multiple PI instances to manage different segments; you may want to deploy PI in High Availability (HA))
- 3. Decide on the number of PI server instances based on the above guidelines and your requirements. Unless you plan to manage the same number of devices on each server instance, you must create a separate bill of materials (BoM) for each server (explained later)
- 4. Select the appropriate Management 3.x (lifecycle and assurance) part numbers and the quantity for each PI server based on the number of network devices that the PI server instance is intended to manage



First-time Purchase of Prime Infrastructure (2 of 5) (Traditional License)

Use case

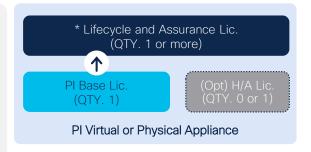
Customer wants to purchase Cisco Prime™ Infrastructure to manage its network with 500 (APs), 60 (2Ks), 20 (3Ks), ISR1K (10), ISR4K (2). Include high availability, and deploy PI on a virtual appliance



Required

- 1. Start with TOP-LEVEL part number: R-MGMT3X-N-K9 (QTY. = 1)
- 2. Select the BASE LICENSE part number: L-MGMT3X-PI-BASE (QTY. = 1)
- 3. Select SOFTWARE* part number R-PI3X-SW-K9 (QTY. = 1)
- 4. Select the HIGH AVAILABILITY** part number: L-MGMT3X-HA (QTY. = 1)
- 5. Select MGMT (LF and AS) license part number(s): L-MGMT3X-<DEV>-K9, (QTY=n) (<DEV> = Device Type and Sub Type (AP, 2K, 3K ..) n = 50/100/500/1000 .. 15,000)

 QTY depends on the number of network devices



Optional

1. Order additional support (a 1-year mandatory services contract is attached with each new order)

For example BoM 1 (Click here); For a full list of SKUs (Click here)

^{*} For instructions upgrading and installing software (Click here), To access and download Prime Infra software with CCO ID/Password (Click here)

^{**} Required only if you are deploying Prime Infra. in high availability configuration. HA license is required per HA Pair.



First-time Purchase of Prime Infrastructure (3 of 5) (Traditional License)

Example BoM #1: Customer wants to purchase Cisco Prime™ Infrastructure to manage its network with 500 (APs), 60 (2Ks), 20 (3Ks), ISR1K (10), ISR4K (2). Include HA and deploy PI on a virtual appliances (Services Part Numbers will be displayed when you order the product)

Product Part Number	Description	OTY	Services Part Number	Description	QTY
Top-Level Part Number				,	
R-MGMT3X-N-K9	Cisco® Ent MGMT: Lic For PI 3.x	1	N/A		1
Product Part Number	Description	QTY	Services Part Number	Description	QTY
Base License					
L-MGMT3X-PI-BASE	Cisco Ent MGMT: PI 3.xx Platform Base Lic	1			1
Product Part Number	Description	QTY	Services Part Number	Description	QTY
Prime Infrastructure 3.x Softwar	re Options				
R-PI3X-SW-K9	Cisco Prime™ Infrastructure 3.x Software	1			1
Product Part Number	Description	QTY	Services Part Number	Description	QTY
Prime™ Infrastructure 3.x High-	Availability License (RTU)**				
L-MGMT3X-HA	Cisco Ent MGMT: PI 3.x (if applic), H/A Lic	1			1
Product Part Number	Description	QTY	Services Part Number	Description	QTY
Lifecycle and Assurance Licens	e Options (Access Point Management)				
L-MGMT3X-AP-K9*	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 AP	500			500
Lifecycle and Assurance Licens	e Options (Catalyst® Switch Management)				
L-MGMT3X-2K-K9	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 2K	60			60
L-MGMT3X-3K-K9	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 3K	20			20
Lifecycle and Assurance Licens	e Options (Router Management)				
L-MGMT3X-ISR1-K9	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR1K	10			10
L-MGMT3X-ISR4-K9	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR4K	2			2

^{*} Customers purchasing an AP (access point) management license for 2500 or more devices can use L-MGMG3X-AP-HV-K9 (high-volume license); These licenses can only be used for AP management.

^{**} You do NOT need to purchase duplicate device management licenses for the secondary server.

High-availability deployments require that both primary and secondary appliances be identical (PHY/PHY, VM/VM, Gen 3/Gen 3, PI ver x/ver x)

The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



Ordering Cisco Prime Infrastructure Physical Appliance



First-time Purchase of Prime Infrastructure (4 of 5) If you choose a physical appliance deployment

Use case

Customer wants to purchase and deploy Cisco Prime™ Infrastructure on a physical appliance.* (Services part numbers will be displayed when you order the product.)



Required*

- Start with the TOP-LEVEL part number: PI-UCSM5-APL-K9 ** (QTY. = N)
 (N = Number of PI server instances that you plan to deploy)
 If you want to deploy PI in a high-availability configuration, order one pair of appliances for each instance.
- 2. Select the appliance SOFTWARE part number: PI-UCS-APL-IMG-3.x (3.x= 3.6, 3.7 etc QTY. = 1) If this selection is not available, go to the cisco.com download site to download an image and follow the instructions to install this image on the appliance.

For example BoM 2 (Click here); For a full list of SKUs (Click here)

Not all PI 3.x software releases are supported on the Gen 3 Physical appliance

All customers are strongly urged to upgrade to Gen 3 physical Appliance to run latest version of Prime Infrastructure.

** Option to purchase Gen 3 Appliance with SSD is also available in CCW

For information on upgrading Gen2 to Gen3 Physical appliances (Click here)



First-time Purchase of Prime Infrastructure (5 of 5) If you choose a physical appliance deployment

Example BoM #2

Customer wants to purchase and deploy Cisco Prime™ Infrastructure on a physical appliance. (Services part numbers will be displayed when you order the product.)



Product Part Number	Description	QTY	Services Part Number	Description	QTY
Top-Level Part Number: Physical Appliance (Gen 3)					
PI-UCSM5-APL-K9	Prime Infrastructure UCS® Hardware Appliance (Gen 3)	1	CON-SNT-PIUCSM5A	SMARTnet® 8X5XNBD Cisco® Prime UCS Hardware	1
Prime Infrastructure 3.x G	Prime Infrastructure 3.x Generation 3 Appliance Software Options				
PI-UCS-APL-IMG-3.x*	Cisco Prime Infrastructure 3.x UCS Appliance Software ISO	1			1

HA deployments require that both primary and secondary appliances be identical (PHY/PHY, VM/VM, Gen3/Gen3, PI ver x/ver x)

The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.

^{*} 3.x = 3.6, 3.7 etc. – please pick the version that you need

^{**} To deploy Prime Infrastructure in high availability: Purchase two servers and a high-availability license per pair of HA. You do NOT need to purchase duplicate device management licenses for the secondary server.



Adding Capacity to Existing PI 3.x Servers (1 of 2) (Traditional license) Lifecycle and Assurance

Use case

Customer wants to add network capacity and purchase corresponding Cisco Prime™ Infrastructure licenses to manage the added devices (access points, Cisco Catalyst® switches, routers) (Services part numbers will be displayed when you order the product.)



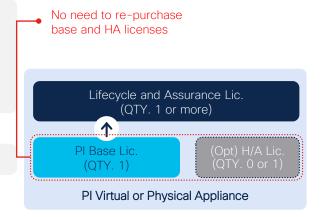
Required

- 1. Start with TOP-LEVEL part number R-MGMT3X-N-K9 (QTY = 1)
- Select MGMT (LF and AS) license part number(s): L-MGMT3X-<DEV>-K9, (QTY=n) (<DEV> = Device Type and Sub Type (AP*, 2K, 3K ..) n = 1/25/50/100/500/1000 .. 15,000)
 OTY depends on the number of network devices

The QTY depends on the number of network devices (access points, switches, routers)

Optional

1. Order additional services (a 1-year mandatory services contract is attached)



For example BoM 3 (Click here); For a full list of SKUs (Click here)

^{*}Customers purchasing an access point management license for 2500 or more devices can use L-MGMG3X-AP-HV-K9 (high-volume license)

These licenses can only be used for AP management.

The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



Adding Capacity to Existing PI 3.x Servers (2 of 2) If you choose a physical appliance deployment

Example BoM #3

Customer wants to add network capacity and purchase corresponding Cisco Prime™ Infrastructure licenses to manage the added devices (access points, Cisco Catalyst® switches, routers). (Services part numbers will be displayed when you order the product.)



Product Part Number	Description	QTY	Services Part Number	Description	QTY
Top-Level Part Number			'		
R-MGMT3X-N-K9	Cisco® Ent MGMT: Lic For PI 3.x	1	N/A		1
Product Part Number	Description	QTY	Services Part Number	Description	QTY
Lifecycle and Assurance Licens	e Options (Access Point Management)				
L-MGMT3X-AP-K9*	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 AP	100			100
Lifecycle and Assurance Licens	e Options (Catalyst Switch Management)				
L-MGMT3X-2K-K9	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K	20			20
L-MGMT3X-3K-K9	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 3K	10			10
Lifecycle and Assurance Licens	e Options (Router Management)				
L-MGMT3X-ISR1-K9	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR1K	10			10
L-MGMT3X-ISR4-K9	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR4K	2			2
Lifecycle and Assurance Licens	e Options (Router Management)				
L-MGMT3X-92XX-K9	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 Cisco Catalyst 9200 Switch	2			2
L-MGMT3X-95XX-K9	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 Cisco Catalyst 9500 Switch	4			4

^{*}Customers purchasing an access point management license for 2500 or more devices can use L-MGMG3X-AP-HV-K9 (high-volume license)

These licenses can only be used for AP management.

The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



Purchasing Cisco Prime Infrastructure Operations Center



Purchasing Cisco Prime Infrastructure 3.x Operations Center* (1 of 2)

Example BoM #7

Customer has deployed multiple instances of Cisco Prime™ Infrastructure 3.x and wants to deploy a Cisco® Prime Infrastructure Operations Center to manage those PI instances centrally. (Services part numbers will be displayed when you order the product.)

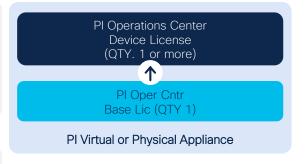


Required

- 1. Start with TOP-LEVEL part number: R-MGMT3X-N-K9 (QTY. = 1)
- 2. Select SOFTWARE* part number R-PI3X-SW-K9 (QTY. = 1)
- 3. Select the OPER CNTR BASE LICENSE part number: L-MGMT3X-OPRCTR-B (QTY. = 1)
- 4. Select OPER CNTR SERVER LICENSE part number: L-MGMT3X-OPRCTR-1 (QTY. = n) (The quantity and type depend on the number of PI instances.)

Optional

1. Order additional services (A 1-year mandatory services contract is attached.)



Example BoM #7

For a full list of SKUs refer to Appendix D-E

For instructions upgrading and installing software (Click here), To access and download Prime Infra software (Click here)



Purchasing Cisco Prime Infrastructure 3.x Operations Center* (2 of 2)

Example BoM #7

Customer has deployed multiple instances of Cisco Prime™ Infrastructure 3.x and wants to deploy a Cisco® Prime Infrastructure Operations Center to manage those PI instances centrally. (Services part numbers will be displayed when you order the product.)



Product Part Number	Description	QTY	Services Part Number	Description	QTY
Top-Level Part Number					
R-MGMT3X-N-K9	Cisco Ent MGMT: Lic For PI 3.x	1	N/A		1
Deploying Operations Cen	iter in a Virtual Appliance				
R-PI3X-SW-K9	Prime Infrastructure 3.x Software	1			1
Base License					
L-MGMT3X-OPRCTR-B	Cisco Ent MGMT: PI 3.x Oper Cntr, BASE Lic	1			1
Operations Center Server	License Options				
L-MGMT3X-OPRCTR-1	Cisco Ent MGMT: PI 3.x Oper Cntr, 1 Srv Lic	1-10			1-10

Product Part Number	Description	QTY	Services Part Number	Description	QTY
Top-Level Part Number: F	Physical Appliance (Gen 3)				
PI-UCSM5-APL-K9	Prime Infrastructure UCS® Hardware Appliance (Gen 3)	1	CON-SNT-PIUCSM5A	SMARTnet® 8X5XNBD Cisco Prime UCS HW	1
Prime Infrastructure 3.x G	eneration 2 Appliance Software Options				
PI-UCS-APL-IMG-3.x	Cisco Prime Infrastructure 3.x UCS Appliance Software ISO	1			1

The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



Upgrading from Cisco Prime Infrastructure 2.2 to PI 3.x (the latest release)



Upgrading from Legacy to PI 3.x (Summary)

Product	Version	Support-Contract	Upgrade options
	3.x and earlier	Valid	Buy UPG SKUs w/SWSS on UPG SKUs
	3.x and earlier	None/Expired	Buy UPG SKUs w/SWSS on UPG SKUs
LMC	4.0 and 4.1	Valid	Buy UPG SKUs w/SWSS on UPG SKUs
LMS	4.0 and 4.1	None/Expired	Buy UPG SKUs w/SWSS on UPG SKUs
	4.0	Valid	Buy UPG SKUs w/SWSS on UPG SKUs
	4.2	None/Expired	Buy UPG SKUs w/SWSS on UPG SKUs
MCC	7.0 and parliar	Valid	Buy UPG SKUs w/SWSS on UPG SKUs
WCS	7.0 and earlier	None/Expired	Buy UPG SKUs w/SWSS on UPG SKUs
NCC	1.0 and 1.1	Valid	Download PI 3.x and follow instructions to upgrade to PI 3.x
NCS	1.0 and 1.1	None/Expired	Buy UPG SKUs w/SWSS on UPG SKUs
	1	Valid	Download PI 3.x and follow instructions to upgrade to PI 3.x
DI	1.x	None/Expired	Buy UPG SKUs w/SWSS on UPG SKUs
PI	2.4	Valid	Download PI 3.x and follow instructions to upgrade to PI 3.x
	2.x	None/Expired	Buy UPG SKUs w/SWSS on UPG SKUs

NCS WAN 1.1: Router management functionality in PI 1.1 was incorporated into PI 1.x after PI 1.2 and there is no requirement to upgrade from NCS WAN 1.1 to later revisions; PAM 1.x: There is no upgrade path from Prime Assurance Manager

**** For instructions upgrading and installing software (Click here), To access and download Prime Infra software (Click here)

The NCS 1.0, PI 1.x, and PI 2.x licenses all work on Prime Infrastructure 3.x. License files are located in the Opt/CSCOlumos/licenses directory on your system.



Upgrading from PI 2.2.x to PI 3.x (1 of 1) (For Customers with a Valid Support Contract)





Customers with valid services contracts
No additional license purchase is required
No license PAKs are required

Fresh Installation of PI 3.x is required. No Inline upgrade is supported from PI 2.x to 3.1 due to change in DB release

Existing PI 2.2.x



PI 3.X

If you are doing a **fresh installation** of PI 3.x, they can copy the licenses from legacy systems and install them on PI 3.x (re-host of licenses is NOT required)
The NCS 1.0, PI 1.x, and PI 2.x licenses all work on PI 3.x. License files are located in the/opt/CSCOlumos/licenses directory on your system.

For instructions upgrading and installing software (Click here), To access and download Prime Infra software (Click here)



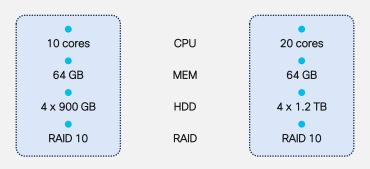
Upgrading from a
Generation 2 to Generation 3
Cisco Prime Infrastructure
Physical Appliance



Prime Infrastructure 3.x Physical Appliance Physical Appliance Generation 2 Compared to Generation 3

Generation 2 PI-UCS-APL-K9 UCSC-C220-M4S 2.30 GHz E5-2650 v3/105 W 10C/25 MB Cache/DDR4 2133 MHz

1 RU, dual power supply, hot-swappable HDD



Generation 3 PI-UCSM5-APL-K9 2.4 GHz,6148/150W DDR4 2666 MHz

1 RU, dual power supply, hot-swappable HDD

Gen 2 Appliance Scale		Gen 3 Appliance Scale
20000	Max unified APs	20,000
3000	Max autonomous APs	3000
1000	Max WLAN controllers	1000
13000	Max wired (switches, routers)	13,000
25	Max MSE	25
1000	NAMs	1000
20,000	Max number of devices (combination of wired, wireless)	20,000

Prime Infrastructure is now supported on Cisco DNA Center Appliance (DN2-HW-APL). For DN2 appliance Hardware Specifications and Scale (Click here),



Upgrading from Generation 2 to Generation 3 Prime Infrastructure Physical Appliance (1 of 2)

Example BoM #10

A customer with a Cisco® UCS generation-2 physical appliance (PI-UCS-APL-K9) wants to upgrade to a generation-3 physical appliance.



Required

- Start with the TOP-LEVEL UPG part number: PI-UCSM5-APL-U-K9 (QTY. = N)
 (N = Number of Cisco Prime® Infrastructure server instances that you plan to deploy)
 If you are deploying high availability (HA), then order one pair of appliances for each instance.
- 2. Select the appliance SOFTWARE part number: PI-UCS-APL-IMG-3.x (QTY. = 1)

 If this selection is not available, go to the cisco.com download site to download the image and follow the instructions to install this image on the appliance.

An example bill of materials (BoM) is shown in the next slide. For a full list of SKUs refer to Appendix D-E



Upgrading from Generation 2 to Generation 3 Prime Infrastructure Physical Appliance (2 of 2)

Example BoM #10

A customer with a Cisco® UCS generation-2 physical appliance (PI-UCS-APL-K9) wants to upgrade to a generation-3 physical appliance.



Product Part Number	Description	QTY	Services Part Number	Description	QTY
Top-Level Part Number: Physical Appliance Upgrade (Gen 1 to Gen2)					
PI-UCSM5-APL-U-K9	Cisco Prime™ Physical Appliance Upgrade (Generation 2 to Generation 3)	1	CON-SNT-PIUCSM5A	SMARTnet® 8X5XNBD Cisco Prime UCS HW	1
Prime Infrastructure 3.x Generation 2 Appliance Software Options					
PI-UCS-APL-IMG-3.x	Cisco Prime Infrastructure 3.x UCS Appliance Software ISO	1			1

If you plan to deploy Prime Infrastructure in high availability you will need to purchase two servers.

High-availability deployments require that both primary and secondary appliances be identical (PHY/PHY, VM/VM, Gen3/Gen3, PI ver x/ver x)

The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



Appendix A Cisco Prime Infrastructure 3.x Scale and Sizing Guidelines



Scale and Sizing Guidelines

- It is recommended to follow the respective version Quick Start Guide for Sizing and Scale Guidelines of Cisco Prime Infrastructure
- Click here to download the Prime Infrastructure Quick Start Guide document

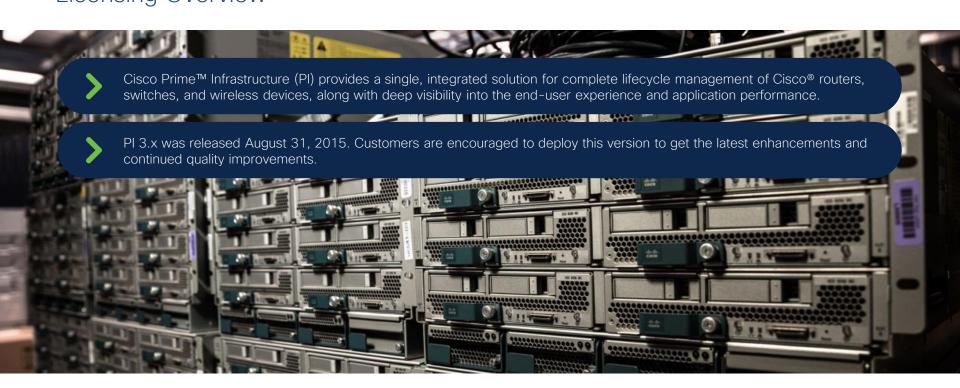




Appendix B Cisco Prime Infrastructure 3.x Licensing Overview



Cisco Prime Infrastructure 3.x Licensing Overview





Appendix D

Complete List of Prime Infrastructure
3.x Product and Services Part Numbers



New Customer Deployments (Greenfield Customer Deployments)





Customers purchasing Cisco Prime™ Infrastructure for the first time

New Customer Deployment (Greenfield Deployment)



PI 3.x*

^{*} For instructions upgrading and installing software (<u>Click here</u>)
To access and download Prime Infra software (<u>Click here</u>)



Cisco Prime Infrastructure 3.x

Top-Level Part Numbers (1 of 2)

Product Part Number	Description	Services Part Number			
Top-Level Part Number					
R-MGMT3X-N-K9	Cisco® Ent MGMT: Lic for PI 3.x	N/A			
Product Part Number	Description	Services Part Number			
Top-Level Part Number: Upgrade Part Numbers for Existing Cisco PI 2.x Customers					
R-P-MGMT3X-U-K9	Cisco Prime™ Infra 1.x/2.x to Cisco Ent MGMT 3.x Upgrade	N/A			

Smart License

Product Part Number	Description	Services Part Number
Top-Level Part Number		
S-MGMT3X-N-K9	Cisco® Ent MGMT: Lic for PI 3.x	N/A



Cisco Prime Infrastructure 3.x

Top-Level Part Numbers (2 of 2)

Product Part Number	Description	Services Part Number	Description
Top-Level Part Number:	Physical Appliance (Gen 3)		
PI-UCSM5-APL-K9	Prime Infrastructure UCS® Hardware Appliance (Gen 3)	CON-SNT-PIUCSM5A	SMARTnet® 8X5XNBD Cisco® Prime UCS HW
Top-Level Part Number:	Physical Appliance Upgrade (Gen 1 to Ge	en 2)	
PI-UCSM5-APL-U-K9	Cisco Prime™ Physical Appliance Upgrade (Generation 2 to Generation 3)	CON-SNT-PIUCSM5A	SMARTnet 8X5XNBD Cisco Prime UCS HW



Note: Services part numbers will be displayed when you order the product. Gen-2 Prime UCS appliance (PI-UCS-APL-K9) is end of sale as of June 2019



Cisco Prime Infrastructure 3.x

Base License Part Numbers (1 of 1)

Product Part Number	Description	Services Part Number	Description
Base License			
L-MGMT3X-PI-BASE	Cisco® Ent MGMT: PI 3.xx Platform Base License		

Smart License

Product Part Number	Description	Services Part Number	Description
Base License			
S-MGMT3X-PI-BASE	Cisco® Ent MGMT: PI 3.xx Platform Base License		

Note: Starting with PI 2.2 and continuing to PI 3.x, we have removed the node locking for new SKUs. (Services part numbers will be displayed when you order the product.)



Cisco Prime Infrastructure 3.x

High-Availability Part Numbers (1 of 1)

Product Part Number	Description	Services Part Number	Description			
Prime™ Infrastructure 3.x High-Availability License (RTU)						
L-MGMT3X-HA	Cisco® Prime Infrastructure 3.x - High Availability RTU					

Smart License

Product Part Number	Description	Services Part Number	Description		
Prime™ Infrastructure 3.x High-Availability License (RTU)					
S-MGMT3X-HA	Cisco® Prime Infrastructure 3.x - High Availability RTU				



Cisco Prime Infrastructure 3.x Software Part Numbers (1 of 1)

Product Part Number	Description	Services Part Number	Description		
Prime™ Infrastructure 3.x Software Options					
R-PI3X-SW-K9	Cisco® Prime Infrastructure 3.x Software				

Smart License

Product Part Number	Description	Services Part Number	Description
Prime Infrastructure 3.x General	ration 2 Appliance Software Options		
PI-UCS-APL-IMG-3.x	Cisco Prime Infrastructure 3.x UCS® Appliance Software ISO	N/A	N/A



Note: Services part numbers will be displayed when you order the product.



Cisco Prime Infrastructure 3.x Collector License Options Part Numbers (1 of 1)

Collector License Options		
L-MGMT3X-N-CL	Cisco® Ent MGMT: PI 3.x Collector License, 1 Server	

Smart License

Collector License Options		
S-MGMT3X-N-CL	Cisco® Ent MGMT: PI 3.x Collector License, 1 Server	



Cisco Prime Infrastructure 3.x

Operations Center Part Numbers (1 of 1) (Traditional/Classic Licenses)

Product Part Number	Description	Services Part Number	Description				
Top-Level Part Number							
R-MGMT3X-N-K9	Cisco® Ent MGMT: Lic for PI 3.x	N/A					
Base License							
L-MGMT3X-OPRCTR-B	Cisco Ent MGMT: PI 3.x Oper Cntr, BASE Lic						
Prime Infrastructure 3.x S	Software Options						
R-PI3X-SW-K9	Cisco Prime™ Infrastructure 3.x Software						
Appliance Software Option	ons (Gen 2)						
PI-UCS-APL-IMG-3.x	Cisco Prime Infrastructure 3.x UCS Appliance Software ISO (Gen 3)	N/A					
Operations Center Server License Options							
L-MGMT3X-OPRCTR-1	Cisco Ent MGMT: PI 3.x Oper Cntr, 1 Srv Lic						



Cisco Prime Infrastructure 3.x Operations Center Part Numbers (1 of 1) (Smart Licenses)

Product Part Number	Description	Services Part Number	Description					
Top-Level Part Number	Top-Level Part Number							
S-MGMT3X-N-K9	Cisco® Ent MGMT: Lic for PI 3.x	N/A						
Base License								
S-MGMT3X-OPRCTR-B	Cisco Ent MGMT: PI 3.x Oper Cntr, BASE Lic							
Prime Infrastructure 3.x S	Software Options							
R-PI3X-SW-K9	Cisco Prime™ Infrastructure 3.x Software							
Appliance Software Option	ons (Gen 2)							
PI-UCS-APL-IMG-3.x	Cisco Prime Infrastructure 3.x UCS Appliance Software ISO (Gen 3)	N/A						
Operations Center Server License Options								
S-MGMT3X-OPRCTR-1	Cisco Ent MGMT: PI 3.x Oper Cntr, 1 Srv Lic							



Appendix E Complete List of Prime Infrastructure 3.x Product and Services Part Numbers

For Customers Upgrading from LMS 4.x / WCS / NCS 1.x / PI 1.x / PI 2.x



Cisco Prime Infrastructure 3.x Upgrade Options (1 of 2)

Product Part Number	Description	**Services Part Number	Description				
Top-Level Part Number Upgrade Part Numbers for Existing Cisco Prime™ Infrastructure 1.x/2.x Customers							
R-P-MGMT3X-U-K9	Cisco® Prime Infra 1.x/2.x to Cisco Ent MGMT 3.x Upgrade	N/A					
Base License							
L-MGMT3X-PI-BASE	Cisco Ent MGMT: PI 3.xx Platform Base Lic						
Prime Infrastructure 3.x S	Software Options						
R-PI3X-SW-K9	Prime Infrastructure 3.x Software						
Prime™ Infrastructure 3.x High-Availability License (RTU)							
L-MGMT3X-HA	Cisco Ent MGMT: PI 3.x (if applic), H/A Lic						

^{*} Customers are encouraged to add Assurance Licenses and match their number with Lifecycle Licenses

^{**} Services part number entries are left blank since they depend on the customer choice.



Cisco Prime Infrastructure 3.x Upgrade Options (2 of 2)

Product Part Number	Description	Services Part Number	Description
Device Licenses			
L-P-PI3X-LF-25-U	Prime™ Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 25 Dev		
L-P-PI3X-LF-50-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 50 Dev		
L-P-PI3X-LF-100-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 100 Dev		
L-P-PI3X-LF-500-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 500 Dev		
L-P-PI3X-LF-1000-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 100 Dev		
L-P-PI3X-LF-2.5K-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 2.5K Dev		
L-P-PI3X-LF-5K-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 5K Dev		
L-P-PI3X-LF-10K-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 10K Dev		
L-P-PI3X-LF-15K-U	Prime Infra 1.x/2.x Lifecycle to PI 3.x Lifecycle Upg 15K Dev		

Product Part Number	Description	Services Part Number	Description
Device Licenses			
L-P-PI3X-AS-25-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 25 Dev		
L-P-PI3X-AS-50-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 50 Dev		
L-P-PI3X-AS-100-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 100 Dev		
L-P-PI3X-AS-500-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 500 Dev		
L-P-PI3X-AS-1K-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 1K Dev		
L-P-PI3X-AS-2.5K-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 2.5K Dev		
L-P-PI3X-AS-5K-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 5K Dev		
L-P-PI3X-AS-10K-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 10K Dev		
L-P-PI3X-AS-15K-U	Prime Infra 2.x Assurance to PI 3.x Assurance Upg 15K Dev		



Appendix F

Using a Management Token as an Alternative to a Category-Specific Management License



Management Tokens What They Are and How to Purchase Them



Beginning with Prime™ Infrastructure 3.x, we introduced the concept of category-specific device licenses.

Example: Lifecycle and Assurance (LF-AS) licenses for managing access points, Catalyst® switches, etc.

This offers significant benefits to customers who want the ability to track their management license usage.

This requires customers to take an approximate inventory of devices and their sub-categories, namely access points and switches (Cisco® Catalyst 2000 and 3000 Series) prior to purchasing PI 3.x licenses.

Some sales teams and partners feel that this might complicate the ordering process.

As a result, we have introduced **Management Tokens** as **an alternative to category-specific device licenses**. Each PI 3.x management token equates to one LF token and one AS token.

PI 3.x device licenses are tamper-resistant, human-readable, and follow a common format. They contain the type of license (LF or AS) and the number of managed devices and duration of validity (permanent or duration).

Customers can purchase L-MGMT3X-TKN-K9= as an alternative to equivalent category-specific device licenses based on the following:



For 90% of devices: Access points (all models), switches (Catalyst 2000 and 3000), routers (ISR 1000, CSR 1000, 800 series). One token equates to one device license (LF, AS pair)

For all other devices: Switches (Catalyst 4000,6000, 9000 etc.), routers (ASR 1000, ISR 2000, 3000, 4000, etc.). Purchase "N" number of tokens per device. Mapping is shown in the next slide.



Guidelines for Purchasing Management Tokens

If the customer knows the mix of network devices that their PI will manage, they can use the mapping table (provided in the next slide) to estimate and purchase the total number of tokens needed to manage those devices.

If the customer does not know the mix of network device that their PI will manage, the recommendation is to purchase 130 tokens for every 100 devices they plan to manage with PI.

- In either case,
 - · The customer needs to know an approximate number of devices that they plan to manage with PI
 - · It is recommended that customers adjust the device quantity to accommodate for growth in network devices
 - If the customer needs to manage a Cisco® networking device (switch, router, access point) that is not on the list of devices but is on the supported device list (link provided below), they can identify the device that is closest to another device on the list shown in the next slide and purchase the corresponding number of tokens per device.

http://www.cisco.com/c/en/us/support/cloud-systems-management/prime-infrastructure/products-device-support-tables-list.html

- Prime Infrastructure does not consume license for below devices.
 - Wireless LAN controllers (WLCs) and Autonomous Access Points
 - Adaptive Security Appliance (ASA Firewall) and Voice Gateway devices
 - · Meraki Access Points, Aruba and Third-Party devices.



Management 3.x Tokens to Management 3.x License Mapping Table

Managed Device	SKU and Qty to	SKU and Qty to Purchase			SKU and Qty to Purchase		
	Token SKU	Tokens/Device		MGMT Lic/Device	MGMT 3.X License SKU	MGMT 3.X Smart License SKU	Description
APs	L-MGMT3X-TKN-K9=	1		1	L-MGMT3X-AP-K9	S-MGMT3X-AP	Cisco® Ent MGMT: PI 3.x LF, AS Lic, 1 AP
Cat 1K	L-MGMT3X-TKN-K9=	1		1	L-MGMT3X-1K-K9	S-MGMT3X-1K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 1K
Cat 2K	L-MGMT3X-TKN-K9=	1		1	L-MGMT3X-2K-K9	S-MGMT3X-2K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 2K
Cat 3K	L-MGMT3X-TKN-K9=	1		1	L-MGMT3X-3K-K9	S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 3K
Cat 4K	L-MGMT3X-TKN-K9=	2		1	L-MGMT3X-4K-K9	S-MGMT3X-4K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 4K
Cat 6K	L-MGMT3X-TKN-K9=	3		1	L-MGMT3X-6K-K9	S-MGMT3X-6K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 6K
800 Ser Router	L-MGMT3X-TKN-K9=	1		1	L-MGMT3X-800SR-K9	S-MGMT3X-800SR	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 800Ser RTR
ASR 1K	L-MGMT3X-TKN-K9=	3		1	L-MGMT3X-ASR1K9	S-MGMT3X-ASR1	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ASR1K
CSR 1K	L-MGMT3X-TKN-K9=	1	OR	1	L-MGMT3X-CSR1-K9	S-MGMT3X-CSR1	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 CSR1K
ISR 1K	L-MGMT3X-TKN-K9=	1	OR	1	L-MGMT3X-ISR1-K9	S-MGMT3X-ISR1	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR1K
ISR 2K	L-MGMT3X-TKN-K9=	2		1	L-MGMT3X-ISR2-K9	S-MGMT3X-ISR2	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR2K
ISR 3K	L-MGMT3X-TKN-K9=	2		1	L-MGMT3X-ISR3-K9	S-MGMT3X-ISR3	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR3K
ISR 4K	L-MGMT3X-TKN-K9=	2		1	L-MGMT3X-ISR4-K9	S-MGMT3X-ISR4	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR4K
Cat 92XX	L-MGMT3X-TKN-K9=	1		1	L-MGMT3X-92XX-K9	S-MGMT3X-92XX-K9	Cisco Ent MGMT: PI 3.x LF,AS, Lic 1 Cat 9200 Switch
Cat 93XX	L-MGMT3X-TKN-K9=	1		1	L-MGMT3X-93XX-K9	S-MGMT3X-93XX-K9	Cisco Ent MGMT: PI 3.x LF,AS, Lic 1 Cat 9300 Switch
Cat 94XX	L-MGMT3X-TKN-K9=	2		1	L-MGMT3X-94XX-K9	S-MGMT3X-94XX-K9	Cisco Ent MGMT: PI 3.x LF,AS, Lic 1 Cat 9400 Switch
Cat 95XX	L-MGMT3X-TKN-K9=	3		1	L-MGMT3X-95XX-K9	S-MGMT3X-95XX-K9	Cisco Ent MGMT: PI 3.x LF,AS, Lic 1 Cat 9500 Switch
Cat 96XX	L-MGMT3X-TKN-K9=	3		1	L-MGMT3X-96XX-K9	S-MGMT3X-96XX-K9	Cisco Ent MGMT: PI 3.x LF, AS, Lic 1 Cat 9600 Switch



Management 3.x Tokens to Management 3.x License Mapping Table

Managed Device	SKU and Qty to Purchase		OR	SKU and Qty to Purchase				
	Token SKU	Tokens/Device		MGMT Lic/Device	MGMT 3.X License SKU	MGMT 3.X Smart License SKU	Description	
IE 1K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
IE 2K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
IE 3K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
IE 4K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
IE 5K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
ME 1K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
ME 2K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
ME 3K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
SG 200	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
SG 300	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
SG 500	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-2K-K9/L-MGMT3X-3K-K9	S-MGMT3X-2K/S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K/3K	
CGR 1K	L-MGMT3X-TKN-K9	1		1	L-MGMT3X-ISR1-K9	S-MGMT3X-ISR1	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR 1K	
CGR 2K	L-MGMT3X-TKN-K9	2		1	L-MGMT3X-ISR2-K9	S-MGMT3X-ISR2	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR 2K	



Appendix G End-of-Sale and End-of-Life (EoS/EoL) Notices



EoS and EoL Notices

Oisco Prime Infrastructure/LMS/WCS End-of-Life and End-of-Sale Notices

https://www.cisco.com/c/en/us/products/cloud-systems-management/prime-infrastructure/eos-eol-notice-listing.html

♠ APIC-EM End-of-Life and End-of-Sale Notices

https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/application-policy-infrastructure-controller-enterprise-module/eos-eol-notice-c51-741252.html

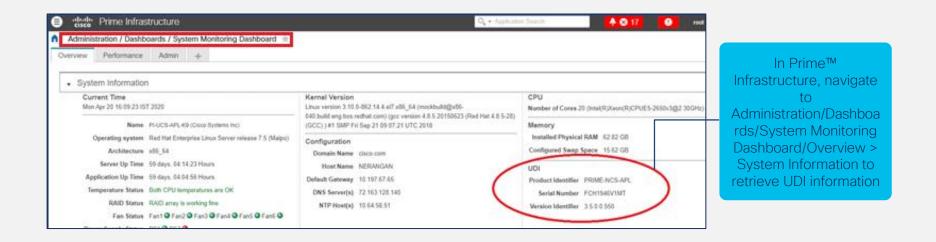
https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/application-policy-infrastructure-controller-enterprise-module/bulletin-c25-742253.html



Appendix H Using the Licensing Interface



How to Get UDI Information in PI 3.x

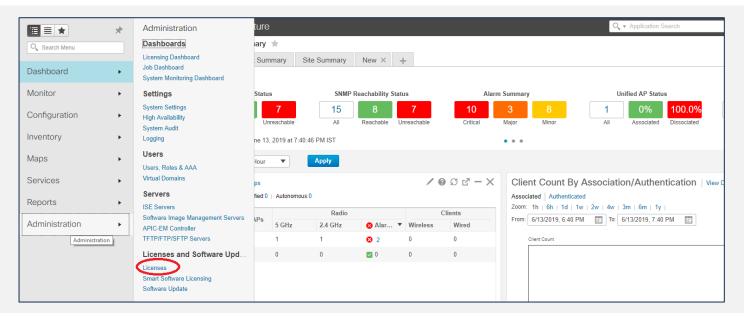


Migration from Physical appliance to Virtual appliance/Virtual appliance to Physical Appliance, requires contract to be updated with the migrated appliance serial number in order to get TAC support.



How to View the License Summary

- Navigate to Administration, then click on Licenses under Licenses and Software Updates
 - You can select 'Smart Software Licensing' if you want to enable smart licensing mode.





License Summary (PI 3.X or Later)





How to backup and save Prime Infra .Lic files?

- Customer doing Inline Upgrade (where possible), the .LIC files are automatically carried over the target version of PI; No additional action is required to migrate the licenses to the upgraded PI instance
- Customer upgrading via Fresh Install (where possible) and if you are allowed to restore your full application backup from previous version of PI, the .LIC files are automatically carried over the target version of PI; No additional action is required to migrate the licenses to the upgraded PI instance
- In some situations, customer may want to start with a PI server with no data but use existing licenses from a PI instance running a previous version of SW. In such situation, you can locate and copy .LIC files from that server and copy it over to the newly installed PI server running the desired version of SW
 - Lic files are located in/opt/CSCOlumos/licenses directory
 - At the system CLI prompt, cd to/opt/CSCOlumos/licenses
 - Locate .Lic files and FTP to some known location on your desktop/laptop PC.
 - Starting from PI 3.1 and above, you can download the license file from PI GUI by navigating to Administration > License and Software Updates > Licenses > Files > License Files



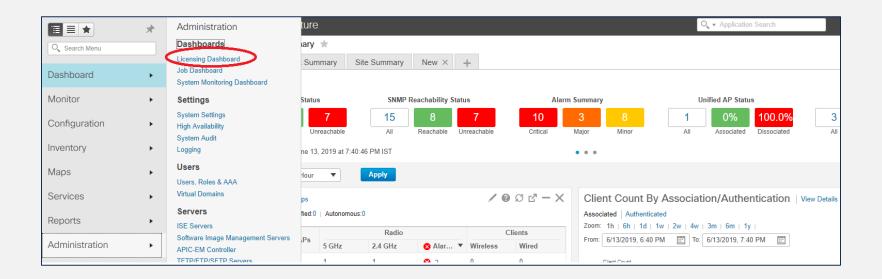
Adding, Deleting and Downloading License Files

- Administration > License and Software Updates > Licenses > Files > License Files
- To add a license file: Click on the Add button. An upload box will appear. Browse and upload a license file. Log out and log in to the system. The license will be effective.
- To delete a license file: Select the file to be deleted. Click on the Delete button. A confirmation popup box will appear. Click ok. Files will be deleted. Log out and log in from the system to let deletion take effect.
- To download a license file: Select the file to be downloaded. Click on the Download button. A confirmation popup box will appear. Click ok. Files will be downloaded.



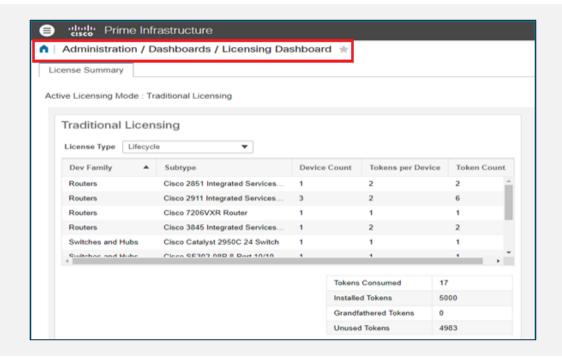


Licensing Dashboard





Licensing Dashboard





Appendix I

Obtaining a Cisco Prime Infrastructure 3.x Evaluation License and Software



Obtaining a Cisco Prime Infrastructure 3.x Evaluation License

Evaluation License

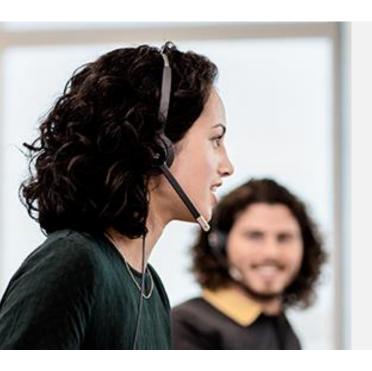
- If you need a custom evaluation license, send a request to ask-pi-license-req@cisco.com with below details
 - Customer CCO ID
 - Total number of tokens required



Appendix J Contact Information for Ordering and Licensing Assistance



Contact Information for Ordering and Licensing Assistance





- For all ordering issues in Cisco® Commerce Workspace (bookings, holds, configurations): cs-support@cisco.com
- For eDelivery support questions or ordering issues (provide PO or SO number):
 edelivery-customer-support@cisco.com
- Customer Case Management Tool to open a support case: https://www.cisco.com/cisco/psn/web/workspace



Appendix K Links to additional Resources (Release Notes, Installation Guide, Deployment Guide)



Additional Resources

- Links to Release Notes, Software Downloads, Deployment Guide, Field Notice etc.
- http://www.cisco.com/c/en/us/support/cloud-systems-management/prime-infrastructure/products-release-notes-list.html
- https://software.cisco.com/download/navigator.html?mdfid=284145020&i=rm
- http://www.cisco.com/c/en/us/support/cloud-systems-management/prime-infrastructure/products-installation-quides-list.html
- http://www.cisco.com/c/en/us/support/cloud-systems-management/prime-infrastructure/tsd-products-support-series-home.html

Note: Please use the document related to the latest release of Cisco Prime™ Infrastructure (3.x)





Appendix L Guidelines for License Application and Entitlements



Guidelines for License application (1 of 9)

- Management Servers (e.g., LMS, WCS, NCS, PI and PI Operations Center) can only accept specific licenses. Detailed list of SKUs that can run on a management server is show in the table on the **next slide**
- Demo/Evaluation licenses and Permanent licenses cannot be mixed in most cases (Exception) Demo/Evaluation Assurance licenses may be used with Permanent Lifecycle and BASE licenses
- PI servers will accept licenses that are for current PI version and earlier versions (backward compatibility)
- Node lock removed licenses can only be applied to PI 2.2 and higher versions of PI A particular instance of a node lock removed license CAN ONLY be applied on a single PI server.
- On rare occasions, customers accidently purchase licenses for later versions of PI and want to run an older version of PI; In such cases, customers can request licensing team to downgrade their licenses
- A single PI server can be run only with PI licenses or Operations Center Licenses and not both PI servers with Operations Center Licenses will run as Operations Center
- A single PI server instance either run in Traditional Licensing Mode or Smart Licensing Mode



Guidelines for License application (2 of 9)

To avoid installing incorrect licenses on management servers please use this table

Management Server													
	LMS	WCS	NCS	PI 1.1	PI 1.2,1.3 & 1.4	PI 2.0, 2.1	PI 2.2	PI 3.0	PI 3.1 - PI 3.5	PI 3.6 - PI 3.8			
Licenses Allowed													
Licenses Allowed	LMS	WCS	NCS 1.0	NCS 1.0 Pl 1.x	NCS 1.0, Pl 1.1, Pl 1.2	NCS 1.0, Pl 1x, Pl 2.x	NCS 1.0, PI 1.x, PI 2.x	NCS 1.0, PI 1.x, PI 1.x PI 3.x	NCS 1.0, PI 1.x, PI 1.x PI 3.x	NCS 1.0, PI 1.x, PI 1.x PI 3.x			
Node Locked vs. No	Node Locked vs. Node Locked Removed												
Node Locked	Υ	Υ	Υ	Υ	Υ	Υ	Ν	N	N	Ν			
Traditional (Classic) or Smart licenses													
Traditional	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ			
Smart	Ν	N	N	N	N	N	Ν	Υ	Υ	Υ			
Base License Count													
BASE=	1	1	1	1	1	1	1	1	1	1			
Lifecycle and Assurance licenses													
Lifecycle (LF)	>=1	>=1	>=1	>=1	>=1	>=1	>=1	>=1	>=1	>=1			
Assurance (AS)	NA	NA	NA	NA	1 or more	1 or more	1 or more	1 or more	1 or more	1 or more			



Guidelines for License application (3 of 9)

How to upgrade from one PI version to a later version and attach services support contract?

Customers with valid support contract on PI can upgrade from an earlier version to another later version of PI software at NO ADDITIONAL COST

Customers with <u>expired support contract</u> or with <u>no support contract</u> can use <u>upgrade licenses</u> to <u>upgrade from one version of PI to later versions of PI software and <u>attach support contract</u></u>

Customers are strongly encouraged to attach Support Contract when purchasing Upgrade licenses

- No License files are issued as part of the purchase of <u>Upgrade part numbers or purchase of support on older part numbers</u>
 The <u>existing licenses</u> on their current PI servers will work with the later versions of PI software
- Upgrade licenses <u>can only be purchased by</u> customers who have purchased the full product licenses in the past (e.g. Customers with PI 1.x/2.x licenses can purchase PI 3.x upgrade licenses)

 Upgrade licenses purchased <u>must have matching</u> licenses in terms of device count on earlier versions

 (e.g. Customers with 25 device Lifecycle license on PI 1.x/2.x can only purchase 25 device upgrade license)
- Customers can reach out to licensing team to help manually generate these licenses. To allow Cisco Licensing to manually generate these licenses, customers must show proof of ownership/purchase of the license that entitle them to upgrade.

Licensing @cisco.com is decommissioned and you can open your case online using the Support Case manager at http://cs.co/scmswl



Guidelines for License application (4 of 9)

How licenses are treated when customers upgrade from one PI version to later versions?

When customers upgrade from NCS 1.0, PI 1.1/1.2/1.3/1.4, PI 2.1 to PI (PI 2.2, 3.x), the licenses (BASE, Lifecycle (LF), Assurance (AS) in particular) from earlier versions of NCS or PI will work on later version of PI. (No additional action is required from customer side) Customers can add LFAS licenses (from PI 3.x or Cisco ONE purchases).

When customers upgrade from PI 1.x or 2.x to PI 3.x version. the LF and AS licenses from earlier PI release will continue to work on PI 3.x. (No additional action is required from customer side)

Until PI 2.2

LF and AS Licenses

LF and AS licenses were offered with separate Part #s and offered in Packs of 25, 50, .. 15K device licenses only

Consumption model

All managed devices (APs, Routers, and Switches and stacks) consumed just one LF and/or AS (where applicable) Licenses per device Tokens vs License

Each LF/AS/BASE device license translates to a single corresponding LF/AS Tokens and BASE license.

e.g., 25 device LF license (L-PI2X-LF-25 translates to 25 LF tokens

Licensing Dashboard on PI 3.1.3 and above can be used to display all the purchased and grandfathered tokens

Beginning with Cisco ONE (2.x and 3.x) and PI 3.0

LF and AS Licenses

LF and AS licenses were offered in LF+AS Bundled Part #s. LF and AS licenses were no longer available for purchasing separately.

LFAS license could be purchased in increment of 1 device license rather than having to purchase Packs of 25, 50 etc.

Different LFAS licenses are offered for different device categories (e.g APs, Routers, Switches and sub categories (cat 2K, 4k etc)



Guidelines for License application (5 of 9)

How should customers attach missing Assurance (AS) licenses to existing PI 2.x or 3.x servers?

- We recommend that the customer match Lifecycle (LF) and Assurance (AS) licenses. Customer must purchase PI 3.x enterprise management license to add capacity to assurance license
- We are exploring ways to use any unused LF licenses (tokens) as Assurance (AS) licenses (tokens) PI server will let customers know that customers need to match AS and LF licenses

Can I convert term based smart PI license got via Cisco DNA license purchase into PI traditional license?

- No. 'PI-LFAS-AP-T / PI-LFAS-T' are term based smart PI licenses comes with Wireless DNA license (AIR -DNA Essential and Advantage) and DNA license of Cat 9K switches (Advantage & Premier). These PI term licenses are smart licenses and can't be converted into traditional licenses. Customer should run Prime Infrastructure in smart licensing mode to consume these term based smart PI licenses
- If customer is already running PI in traditional licensing mode with perpetual licenses, then they should convert all of these perpetual licenses to smart and assign to same smart account where the term based smart PI licenses are being deposited. These traditional licenses will remain perpetual after converting to smart



Guidelines for License application (6 of 9)

How does the new consumption model in PI 3.x work?

License (Token) Consumption model beginning with 3.1.3

Most management licenses (APs, ISR 1K Routers, and Cat 2K and 3K Switch licenses) convert to 1 LF token and 1 AS token These managed devices (APs, ISR 1K Routers, and Cat 2K and 3K Switch licenses) consume 1 token (LF and AS (as applicable)) per device

Other management licenses (ISR 2K, 3K, 4K, Cat 4K, 6K Switch licenses) convert to 2 or more LF and AS token pairs. These managed devices (ISR 2K, 3K, 4K, Cat 4K, 6K Switch licenses) consume 2 or more LF and AS token pairs per device

Stack of switches will now consume 1 license per stacked switch. (i.e., a stack of three Cat 3850s will consume three LF and AS pairs.

License Grandfathering Process (Automatic process and no action required on the part of customer) Customers can upgrade to 3.1.3 and above will not be required to purchase additional licenses to accommodate for new consumption model. This above feature is enabled using an automatic grandfathering process. A dashboard on PI 3.1.3 can be used to display all the purchased and grandfathered tokens. Starting from PI 3.8, grandfather tokens are considered when CSSM reporting compliance in smart licensing mode.



Guidelines for License application (7 of 9)

How should customers resolve licensing issues (license consolidation, license split, redeem missing licenses?

- Occasionally, customers request licensing team to <u>consolidate</u> a bunch of smaller licenses into a single license; Cisco licensing is generally given approval to oblige with the above requests.
- Occasionally, customers request Cisco to <u>split</u> their large lifecycle license to multiple smaller chunks(e.g Split 10 K licenses to 2 x 5 K licenses)
 - In these cases, customers must ensure that they have one BASE license for each of the individual instances of PI server being deployed they must purchase the <u>necessary BASE license</u> to satisfy this requirement.



Guidelines for License application (8 of 9)

How should customers resolve LMS and Compliance licensing issues?

- Occasionally, customers either <u>misplace</u> licenses or never redeem their PAKs for licenses.

 Cisco licensing will generate these missing licenses and will require the customer to provide proof of purchase or evidence that they upgraded using PUT tool.
 - Ex 1. Customers purchased or upgraded from NCS 1.0 to PI 1.1 (with valid services contract) and did not redeem LMS PAK and potentially misplaced the LMS PAK; They can come back to licensing team later and request LMS licenses. Customers must how proof of upgrade.
 - Ex 2. Customers upgraded from LMS 4.1 to 4.2 (via PUT) and did not redeem PI 1.1 PAK; They can come back to licensing team later and request unredeemed PI licenses. Customers must show **proof of upgrade**.
- LMS 4.2 Licenses cannot be purchased independently and can only be purchased by purchasing PI 1.x (where x <>0), PI 2.x.

Customers purchasing PI 1.x (where x <> 0), PI 2.x get PI licenses <u>and LMS 4.2 licenses</u> (provided as a shadow or duplicate license). Hence these LMS licenses cannot be again converted to PI licenses since it would amount to "double dipping".



Guidelines for License application (9 of 9)

How do customers get clarification on NCS WAN Licenses?

NCS WAN 1.1 Licenses were offered for customers purchasing PI 1.1 and these were only used to test router management functionality on NCSWAN (a separate instance of NCS 1.x).

Router management function on PI was integrated to main branch of PI and hence NCS WAN 1.1 has been discontinued. Hence these NCS WAN 1.1 licenses cannot be again converted to PI licenses since this would also amount to "double dipping"

Customers are eligible to get a free BASE license if and only if they have purchased upgrade from WCS to PI 1.x/WCS to NCS 1.x in the past. For other cases, they have to buy the base license.



Attaching/renewing Services Contract

How do customers attach services contract?

By purchasing support contracts, the customers benefit greatly by receiving free upgrades from one version of the product to an another at no additional cost.

They also receive world class/industry leading technical support

A large majority of business customers purchase and regularly renew service contract for all Cisco products

The support contracts are offered with various terms (1yr, 3yr, etc.) and conditions (5x8, 24x7, etc.)

Customers are encouraged to select the terms & conditions that are most suitable for their business needs.

Oustomers are responsible for attaching and periodically renewing support contracts per published Cisco Guidelines

Occasionally, customers let the support contract expire or try to attach contract past the EoS/EoL milestones. In such cases, customers should purchase upgrade licenses and use that opportunity attach services contracts.

The UPG SKUs are listed at 25% of list price of the full product. After applying the discounts, these upgrade SKUs become very attractive alternative way to re-attach expired support contracts and missing support contracts and enjoy the full benefits described above. You could view paying for upg SKUs as paying a "late fee" for attaching services contract passed the deadline.



Appendix M Smart Licensing Update



Ordering Cisco Prime Infrastructure Smart Licenses



Smart License Workflow

Before ordering Smart Licenses

- Preate at least one smart account and one or more virtual accounts within that smart account
 - For instructions on creating smart account and virtual accounts within a Smart Accounts (Click here)
 - For instructions on purchasing and assigning a BoM to a Smart Account/Virtual Account (Click here)
 - For instructions on managing smart licenses (aka entitlements) with Smart Account/Virtual Accounts (Click here)

When Purchasing Smart Licenses

- You will assign those purchases to your Smart Virtual Account
 - For instructions on managing smart licenses (aka entitlements) with Smart Account/Virtual Accounts (Click here)

Before Using Smart Licenses

- You will need to enable Smart Licensing Mode in Pl
 - For instructions on enabling smart licensing in Prime Infrastructure instance (Click here)



First-Time Purchase of Prime Infrastructure (1 of 2) (Smart License)

Use case

Customer wants to purchase Cisco Prime™ Infrastructure to manage its network with 500 (APs), 60 (2Ks), 20 (3Ks), ISR1K (10), ISR4K (2). Include high availability, and deploy PI on a virtual appliance



Required

- 1. Start with TOP-LEVEL part number: S-MGMT3X-N-K9 (QTY. = 1)
- 2. Select the BASE LICENSE part number: S-MGMT3X-PI-BASE (QTY. = 1)
- 3. Select SOFTWARE* part number R-PI36-SW-K9 (QTY. = 1)
- 4. Select the HIGH AVAILABILITY** part number: S-MGMT3X-HA (QTY. = 1)
- Select MGMT (LF and AS) license part number(s): S-MGMT3X-<DEV>-K9, (QTY=n) (<DEV> = Device Type and Sub Type (AP, 2K, 3K ..) n = 1/25/50/100/500/1000 .. 15,000)
 OTY depends on the number of network devices



Optional

1. Order additional support (a 1-year mandatory services contract is attached with each new order)

For example BoM 1s (Click here); For a full list of SKUs (Click here)

^{*} For instructions upgrading and installing software (Click here), To access and download Prime Infra software (Click here)

^{**} Required only if you are deploying Prime Infra. in high availability configuration.



First-Time Purchase of Prime Infrastructure (2 of 2) (Smart License)

Example BoM #1s

Customer wants to purchase Cisco Prime™ Infrastructure to manage its network with 500 (APs), 60 (2Ks), 20 (3Ks), ISR1K (10), ISR4K (2). Include HA and deploy PI on a virtual appliances (Services Part Numbers will be displayed when you order the product)



Product Part Number	Description	QTY	Services Part Number	Description	QTY		
Top-Level Part Number							
S-MGMT3X-N-K9	Cisco® Ent MGMT: Lic For PI 3.x Fnd Apps	1	N/A		1		
Product Part Number	Description	QTY	Services Part Number	Description	QTY		
Base License							
S-MGMT3X-PI-BASE	Cisco Ent MGMT: PI 3.xx Platform Base Lic	1			1		
Product Part Number	Description	QTY	Services Part Number	Description	QTY		
Prime Infrastructure 3.x Software Options							
R-PI36-SW-K9	Cisco Prime™ Infrastructure 3.x Software	1			1		
Product Part Number	Description	QTY	Services Part Number	Description	QTY		
Prime™ Infrastructure 3.x High-Availability License (RTU)**							
S-MGMT3X-HA	Cisco Ent MGMT: PI 3.x (if applic), H/A Lic	1			1		
Product Part Number	Description	QTY	Services Part Number	Description	QTY		
Lifecycle and Assurance License Options (Access Point Management)							
S-MGMT3X-AP	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 AP	500			500		
Lifecycle and Assurance License Options (Catalyst* Switch Management)							
S-MGMT3X-2K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 2K	60			60		
S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 3K	20			20		
Lifecycle and Assurance License Options (Router Management)							
S-MGMT3X-ISR1	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR1K	10			10		
S-MGMT3X-ISR4	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR4K	2			2		

^{*} Customers purchasing an AP (access point) management license for 2500 or more devices can use S-MGMG3X-AP-HV (high-volume license); These licenses can only be used for AP management.

** You do **NOT** need to purchase duplicate device management licenses for the secondary server.

High-availability deployments require that both primary and secondary appliances be identical (PHY/PHY, VM/VM, Gen1/Gen1, Pl ver x/ver x)

The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



Adding Capacity to Existing PI 3.x Servers (1 of 2) (Smart License) Lifecycle and Assurance

Use case

Customer wants to add network capacity and purchase corresponding Cisco Prime™ Infrastructure licenses to manage the added devices (access points, Cisco Catalyst® switches, routers, Cisco Nexus® switches). (Services part numbers will be displayed when you order the product.)



Required

- 1. Start with TOP-LEVEL part number S-MGMT3X-N-K9 (QTY = 1)
- Select MGMT (LF and AS) license part number(s): S-MGMT3X-<DEV>-K9, (QTY=n) (<DEV> = Device Type and Sub Type (AP*, 2K, 3K ..)
 n = 1/25/50/100/500/1000 .. 15,000)
 QTY depends on the number of network devices

The QTY depends on the number of network devices (access points, switches, routers)

Lifecycle and Assurance Lic. (QTY. 1 or more) PI Base Lic. (QTY. 1) PI Virtual or Physical Appliance

No need to re-purchase

Optional

1. Order additional services (a 1-year mandatory services contract is attached)

For example BoM 3s (Click here); For a full list of SKUs (Click here)

*Customers purchasing an access point management license for 2500 or more devices can use S-MGMG3X-AP-HV (high-volume license) These licenses can only be used for AP management. The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



Adding Capacity to Existing PI 3.x Servers (2 of 2) (Smart license) Lifecycle and Assurance

Example BoM #1s

Customer wants to add network capacity and purchase corresponding Cisco Prime™ Infrastructure licenses to manage the added devices (access points, Cisco Catalyst® switches and routers). (Services part numbers will be displayed when you order the product.)



Product Part Number	Description	QTY	Services Part Number	Description	QTY	
Top-Level Part Number						
S-MGMT3X-N-K9	Cisco® Ent MGMT: Smart Lic For PI 3.x	1	N/A		1	

Product Part Number	Description	QTY	Services Part Number	Description	QTY	
Lifecycle and Assurance License Options (Access Point Management)						
S-MGMT3X-AP	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 AP	100			100	
Lifecycle and Assurance License Options (Catalyst Switch Management)						
S-MGMT3X-2K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Catalyst® 2K	20			20	
S-MGMT3X-3K	Cisco Ent MGMT: PI 3.x LF,AS Lic, 1 Cat 3K	10			10	
Lifecycle and Assurance License Options (Router Management)						
S-MGMT3X-ISR1	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR1K	10			10	
S-MGMT3X-ISR4	Cisco Ent MGMT: PI 3.x LF, AS Lic, 1 ISR4K	2			2	

^{*}Customers purchasing an access point management license for 2500 or more devices can use S-MGMG3X-AP-HV (high-volume license) These licenses can only be used for AP management. The services part number and description cells are left blank since the content will vary depending on the type of services SKU and duration of service you select.



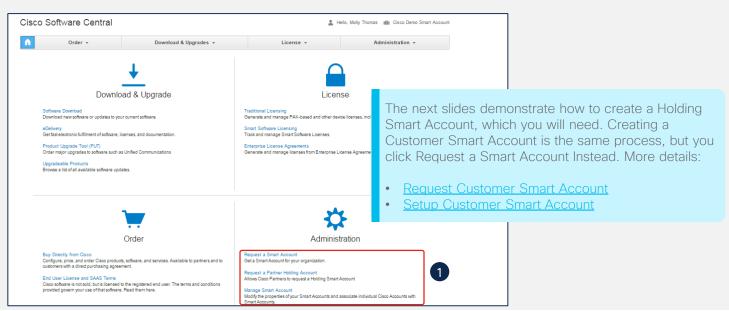
Setting up Smart Accounts and Virtual Accounts



Cisco Software Central (CSC)

Request Smart Account - Setup Holding Account for Partners and Distributors

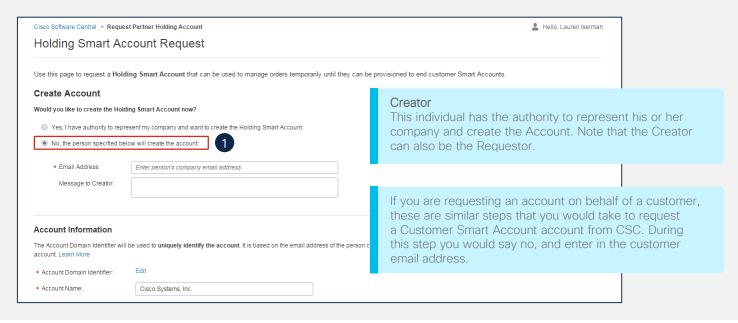
1 Access Cisco Software Central (CSC) – <u>software.cisco.com</u> and click **Request a Partner Holding Account** to create a Holding Account. To create your Customer Smart Account or to request a Customer Smart Account on behalf of an end customer, click **Request a Smart Account**.





Cisco Software Central (CSC) Request Smart Account - Select an Account Creator

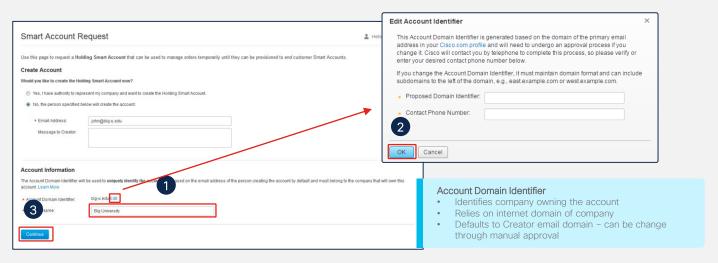
1 On the Smart Account Request page, select Yes or No to assign yourself or someone else to be the account creator and represent the company.





Cisco Software Central (CSC) Request Smart Account - Update the Account Domain Identifier (Optional)

- 1 Click **Edit** to update the Domain Identifier of the Account (optional requires additional approval time)
- 2 In the Edit Account Identifier dialog box, review and update domain identifier information and click OK.
- 3 Enter Account Name (Company Name) and click **Continue** to complete the smart account request.

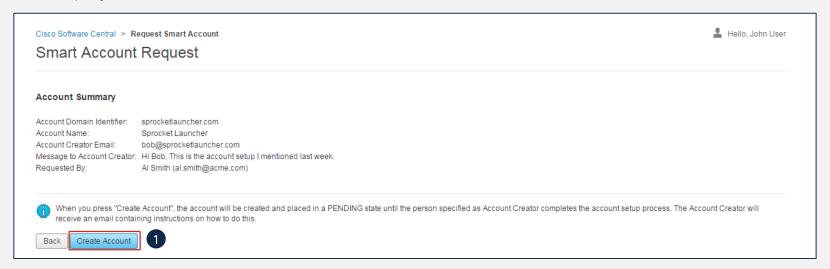




Cisco Software Central (CSC) Request Smart Account - Complete Initial Request

Review the Account information and Click **Create Account**.

It will go into pending state until the person specified as the Creator completes the setup process. They will receive an email with instructions. If the requestor indicated that they were also the creator, then they will proceed to selected the company address at this time, which is demonstrated in the next section.





Complete Smart Account Setup

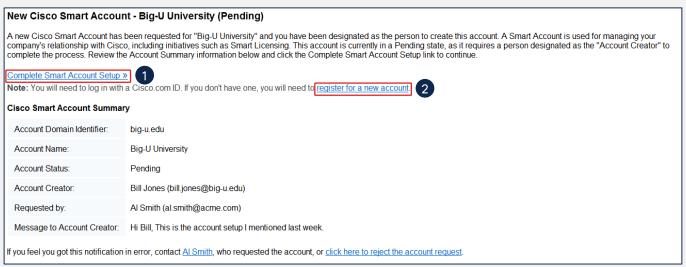
Cisco will approve the domain (if edited) and Send Approval Email with Next Steps



Cisco Software Central (CSC) Complete Smart Account Setup

Creator will receive this email from Cisco to complete the Smart Account Setup. Once this is complete and Cisco has approved any domain changes, the account will be created and ready for use.

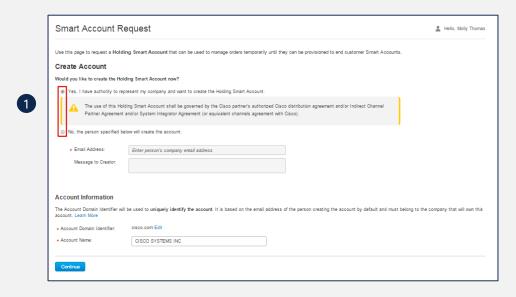
- 1 Click Complete Smart Account Setup to continue with the smart account creation.
- 2 You need a CCO ID. If you don't have one, click register for a new account.





Cisco Software Central (CSC) Accept Creator Role

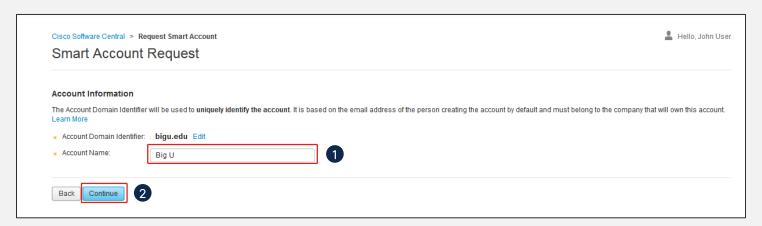
1 Creator will Accept the role or decline and/or nominate another person. In this example, we are assuming they accepted the creator role.





Cisco Software Central (CSC) Complete Smart Account Setup

- 1 Enter the Account Name in the Account Name field. Edit domain if needed.
- 2 Click Continue.

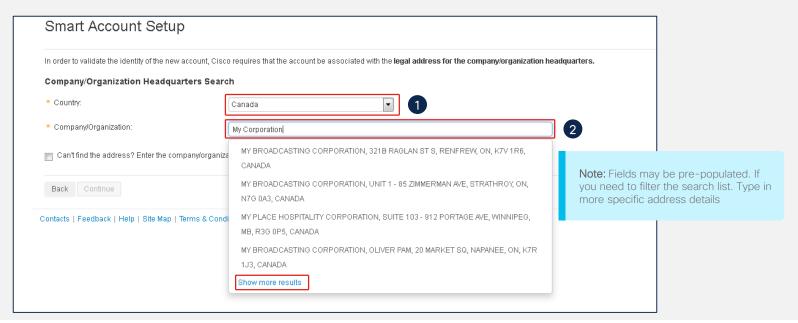


*Note: the Account Name should reference the Company Name, to mirror the Domain of the Account Owner's Company. E.g. If the Domain is Cisco.com, the Account Name should be Cisco.



Cisco Software Central (CSC) Complete Smart Account Setup - Search Address

- 1 Select the corporate headquarters legal country location for the Smart Account.
- 2 Enter the name of the company. Search results will populate. You can also click **Show more Results**

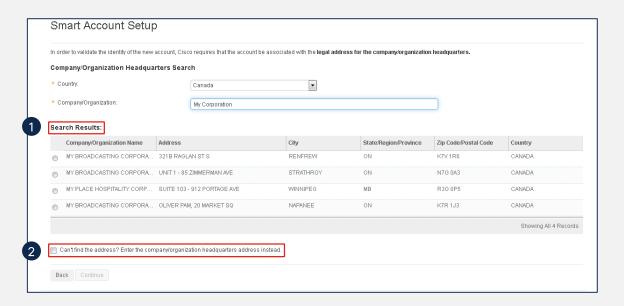




Cisco Software Central (CSC) Complete Smart Account Setup - Select Address

1 This is the Show more Results screen. Select Address and click **Continue**.

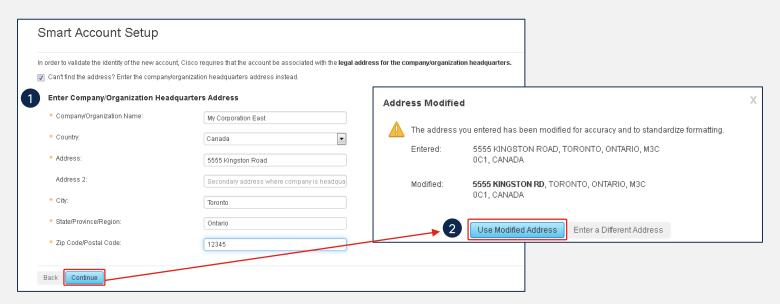
2 If you are unable to find your address, click Can't find the address? checkbox to create a new address.





Cisco Software Central (CSC) Complete Smart Account Setup - Create Address

- 1 Enter the company/organization headquarters address if you cannot find the address. Click **Continue**.
- 2 Click Use Modified Address.

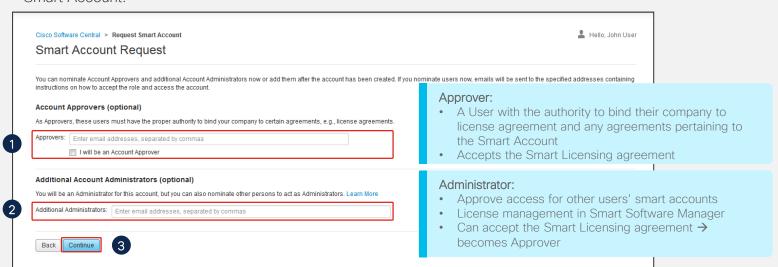




Cisco Software Central (CSC)

Complete Smart Account Setup - Select Additional Approvers and Administrators

- 1 Add Approvers or designate yourself as the approver. The Approver should have the authority to bind the company in any agreements pertaining to the Smart Account.
- 2 Add Account Administrators.
- 3 Click Continue.





Cisco Software Central (CSC) Complete Smart Account Setup

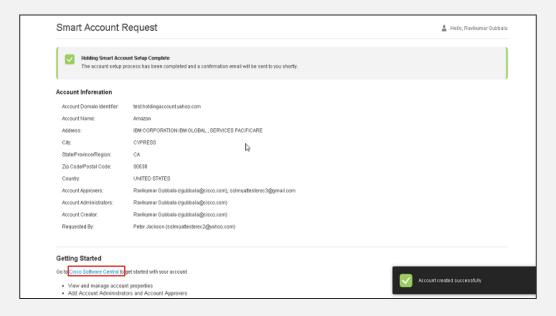
1 Review the account information and click Create Account to complete the Account Setup.





Cisco Software Central (CSC) Complete Smart Account Setup - Confirmation

1 Confirmation page. Click **Cisco Software Central** to view and manage your Smart Account. To manage the individual Smart Licenses, go to SSM.





Purchasing and Assigning a BoM to a Smart Account



CCW Ordering Scenarios



PAK Based Licenses

Smart Account assignment is optional but recommended since PAKs will automatically

be available in LRP and visible at the enterprisewide level.

The best practice is to **assign** the End Customer Smart Account at **the time of order** for the PAKs to be automatically available in LRP. You can assign an end Customer Smart Account up until the order is fulfilled, which is usually 24-48 hours after the order is placed.

Otherwise, PAKs can be assigned to the Smart Account post order in LRP so Customers can benefit from enterprise-wide access control and visibility.

Smart Licenses

Smart Account assignment is **mandatory** to submit the order. The Smart Licenses will be automatically activated and available in SSM.

Detailed Smart Account assignment scenarios will be covered later in this deck, but the initial order can be assigned to either the Customer Smart Account or the Holding Smart Account and re-assigned to the Customer Smart Account post order.

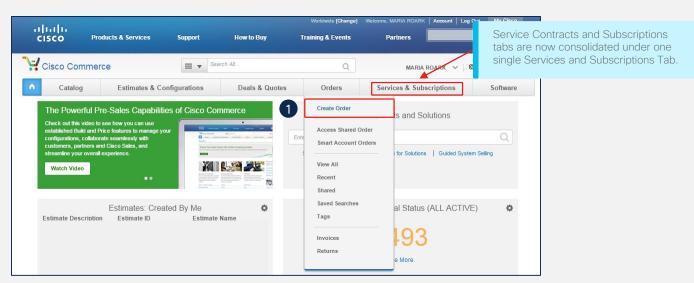
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CCW Getting Started

You can only assign smart accounts in CCW Order.

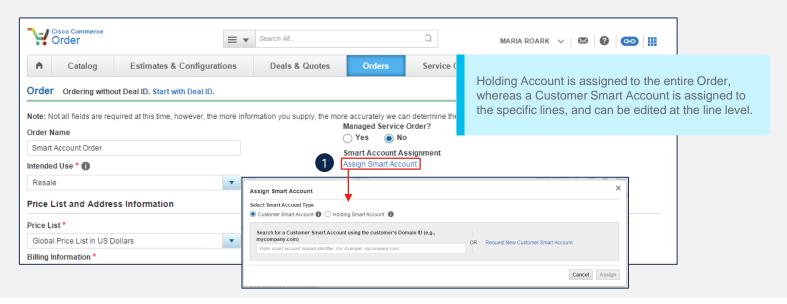
- 1 Create standalone order and add a smart account enabled SKU and assign smart account information.
- 2 Add a smart account enabled SKU in Quote, convert to an order, and assign smart account in Order.





CCW Getting Started - Upfront Smart Account Assignment

1 On the Order Initiation page, you can assign a Smart Account upfront by clicking **Assign Smart Account**. The assignment will cascade to all licenses on the order, for both Smart Account Mandatory (Smart Licenses) and Smart Account Optional SKUs (Classic PAKs). You can also assign Smart Accounts after you have added items.



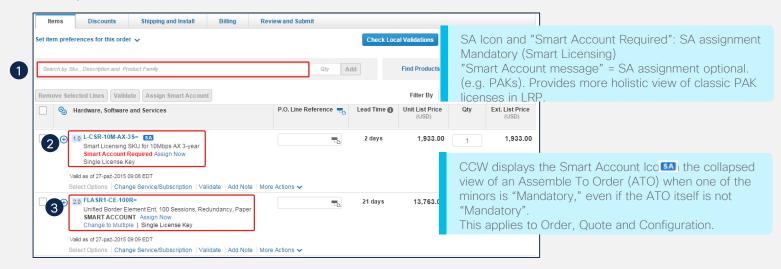


CCW When is Smart Account Assignment Required



- 1 Add SKUs through the as-is CCW process.
- Por mandatory Smart License SKUs, the An and Smart Account Required message in red text are displayed.

 Smart Account assignment is required to submit the order.
- 3 For optional Smart SKUs, Smart Account message is displayed in black text.

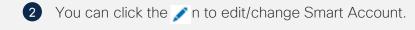


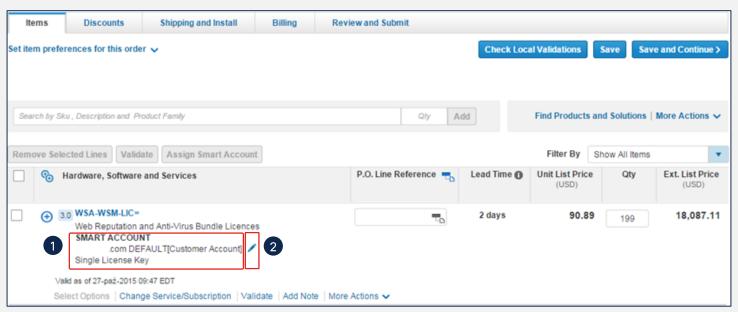


CCW

View Smart Account Name and edit Smart Account (Items tab)

1 For SKUs already assigned to a Smart Account, the name of the Smart Account is displayed in black.







CCW Smart License Delivery Email

- 1 For Smart License enabled products, the provisioning is not completed through the standard eDelivery process. In the email received, C comer will need to click **To View Your Smart Licenses**. This will take them to SSM, where they will view licenses and register them to a device.
 - If the licenses are Classic/PAK licenses, it will say **Register Claim Certificates (PAKs)** instead and those will be accessible in LRP through the as-is process today or automatically available in LRP if assigned to a Smart Account in CCW.



Note: PAKs will continue to be fulfilled through the selected option – physical or eDelivery.

If they were assigned to a Customer Smart Account from CCW, they will be automatically available in LRP. If they weren't, then they will be registered and managed in LRP following the as-is process.

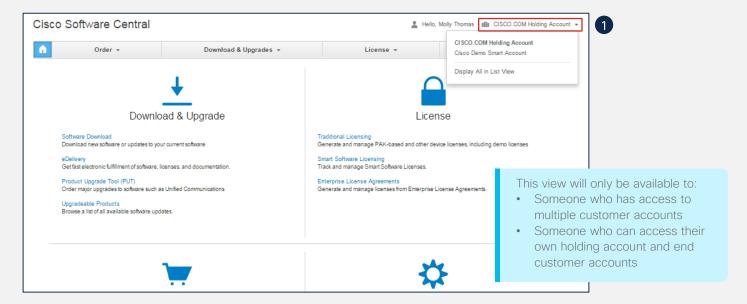


Manage Smart Accounts



Cisco Software Central (CSC) Manage Smart Accounts - Access Multiple Smart Accounts

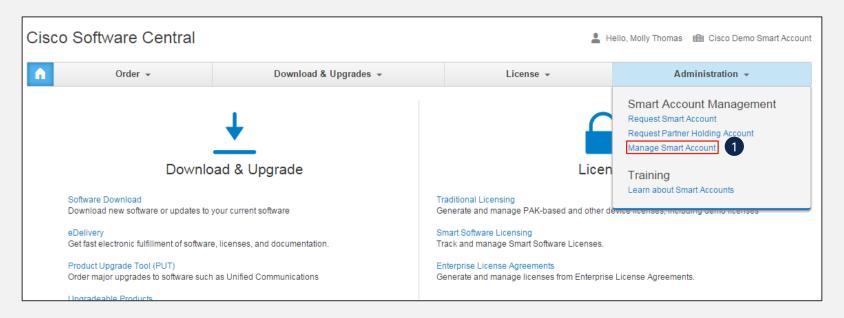
1 Click the Arrow icon next to the Smart Account name to display the list of accounts and then select the desired account to switch to.





Cisco Software Central (CSC) Manage Smart Accounts

To access and manage Smart Account, click Manage Smart Account.

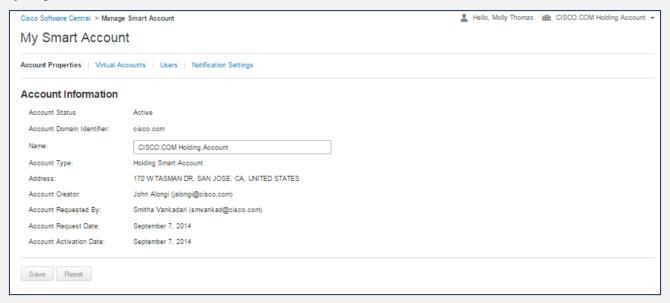




Cisco Software Central (CSC) Manage Holding Smart Accounts - Account Properties

1 Account Name can be modified by Account Approver or Administrator in Account Properties tab.

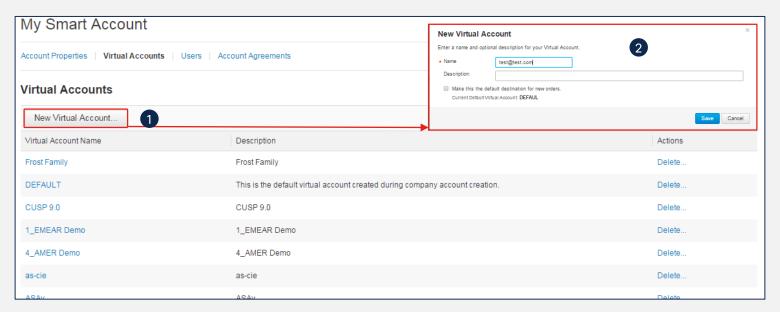
*Note: the Account Name should reference the Company Name, to mirror the Domain of the Account Owner's Company. E.g. If the Domain is Cisco.com, the Account Name should be Cisco.





Cisco Software Central (CSC) Manage Holding Smart Accounts - Virtual Accounts

- In Virtual Accounts tab, click **New Virtual Account** to add a new Virtual Account.
- 2 Enter name and description and make it the default account if desired. Click **Save**.

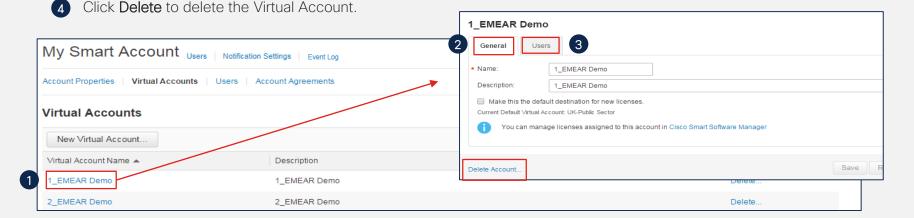




Cisco Software Central (CSC) Manage Holding Smart Accounts - Edit Virtual Accounts

- 1 Click Virtual Account link to edit the existing virtual accounts.
- 2 You can edit name, description, and change default in the General tab.
- 3 Associated users display in the Users tab.

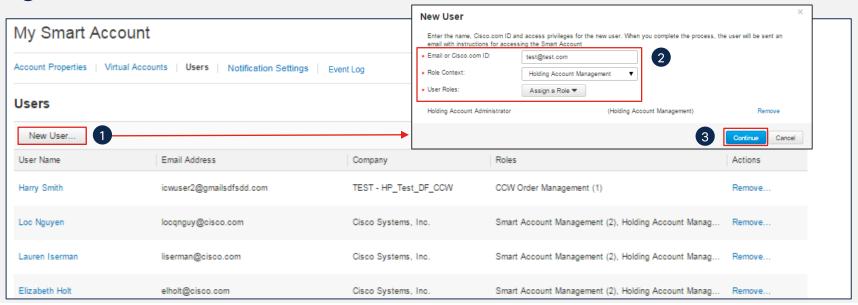
Note: Manage orders assigned to the Holding Smart account in CCW.





Cisco Software Central (CSC) Manage Holding Smart Accounts - Users

- 1 Click Add New User. 3 Click Continue.
- 2 Enter CCO ID or Email and select Role Context and User role.





Holding Smart Account Roles

Account Creator is automatically provided the Smart Account Administrator and Holding Account Administrator roles

Role Context	User Roles	Main Tasks	Role in CSC	Role in CCW
Smart Account Management	Smart Account Approver	Add users	View and approve Smart Licensing Agreement Authority to bind the company to license agreements View Account properties Add/delete Smart Account Approvers and Administrators	• None
	Smart Account Administrator	Account Properties	View and approve Smart Licensing Agreement (upon accepting becomes Approver) Edit Account properties License Management in SSM Add/delete Smart Account Approvers and Administrators	• None
Holding Account Management	Holding Account Administrator	Administer Account Organization and Users Create Virtual Accounts Add users to account	Edit Account properties Add/Delete Holding Account Administrators, Holding Virtual Account Administrators, Holding Account Order Management Users, Holding Virtual Account Order Management users Add/Delete/Edit Holding Virtual Accounts	None
	Holding Virtual Account Administrator	Manage specific Virtual Account. Does not have access to overall account	View Account properties View Virtual Accounts View users of Holding Accounts Add/Delete Virtual Account Administrators and Holding Virtual Account Order Admin Users (for that specific virtual account) Set Mail Notifications related to order provisioning	• None
CCW Order Management	Holding Account Order Administrator	Search and View Orders assigned to the account (including Virtual Accounts) Re-assignment of Smart Account in CCW	View Account properties View all Virtual Accounts Set Mail Notifications related to order provisioning	View the Holding Account and Holding Virtual Account Orders in CCW. Modify assignment of Smart accounts in CCW
	Holding Virtual Account Order Administrator	Search and View Orders assigned to a specific Virtual Account Re-assignment of Smart Account in CCW for the specific Virtual Account	View Account properties View specific Virtual Accounts Set Mail Notifications related to order provisioning	Modify assignment of Smart accounts for Orders assigned to the specific Virtual account in CCW. Set Mail Notifications for which they are a member of the Virtual Account.



Holding Smart Account Roles

Account Creator is automatically provided the Smart Account Administrator and Holding Account Administrator roles

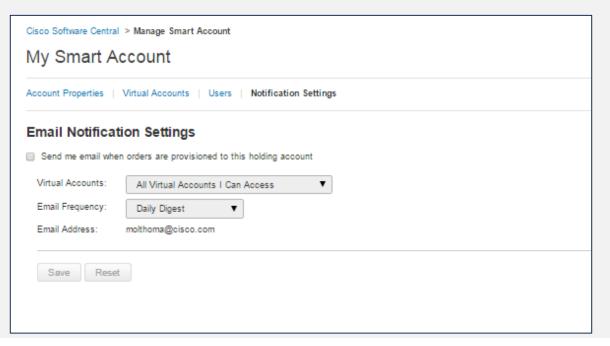
Role Context	User Roles	Main Tasks	Role in CSC	Role in SSM
Smart Account Management	Smart Account Approver	Approve Cisco Agreements and Add users	View and approve Smart Licensing Agreement Authority to bind the company to license agreements Edit Account properties Add/delete Smart Account Approvers and Administrators	• None
	Smart Account Administrator	Approve Cisco Agreements and Add users	View and approve Smart Licensing Agreement (upon accepting Administrator becomes Approver) Edit Account properties License Management in SSM Add/delete Smart Account Approvers and Administrators	• None
Smart Licensing	Smart Licensing Administrator	Administer Account Organization and Users Manage license inventory of overall account Create Virtual Accounts Add users to account #If partner is managing the entire account on your behalf, provide them with this role	View and approve agreements View Account properties Add/Delete Smart Licensing Administrators and Smart Licensing Virtual Account Administrators Add/Delete/Edit Virtual Accounts	View and approve agreements Add/Delete/Edit Virtual Accounts Takes action on Alerts Generate tokens for all Virtual Accounts to register products Transfer product instances and licenses across virtual accounts View logs, history and reports Set Mail Notifications Manage satellites and sync collectors
	Smart Licensing Virtual Account Administrator	Manage specific Virtual Account. Does not have access to overall account Manage license inventory of specific Virtual Account *If partner is managing on specific Virtual Accounts on your behalf, provide them with this role	View Account properties Add/Delete Smart Licensing Virtual Account Administrators for their specific Virtual Accounts Generate tokens for their Virtual Accounts in SSM Transfer product instances and licenses across Virtual Accounts tor which they are a member in SSM Register products and manage satellites, sync collectors for Virtual account for which they are a member in SSM Set Mail Notifications	View Virtual Accounts Takes action on Alerts for specific Virtual Accounts Generate tokens for specific Virtual Accounts to register products Transfer product instances and licenses across virtual accounts they own View logs, history and reports for specific Virtual Accounts Set Mail Notifications Manage satellites and sync collectors

Account Management for Customer Smart Accounts is done within CSC and License management and activation is done in SSM



Cisco Software Central (CSC) Manage Holding Smart Accounts - Notification Settings

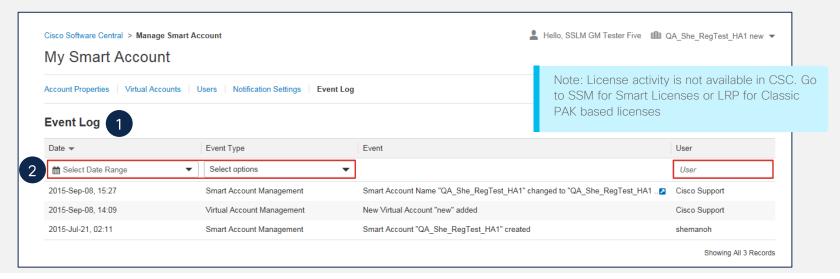
1 Edit email notification settings for when orders are provisioned to the Holding Smart Account





Cisco Software Central (CSC) Manage Holding Smart Accounts - Event Log

- 1 View all activity at the Smart Account level to have better visibility into the Smart Account.
- 2 Filter results by a specific date range, Event type (user management, virtual account management or Smart Account management), or search by the user who took the action.





Smart Account Transaction Traceability

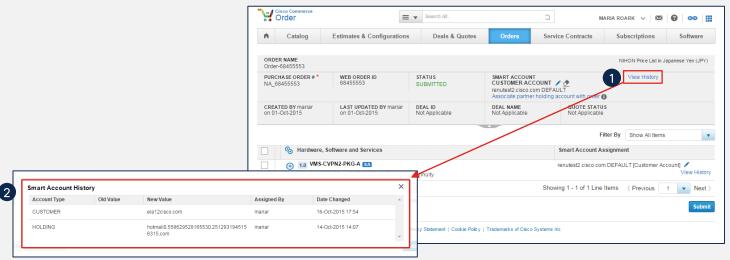


Smart Account Transaction Traceability View History

You can now view Smart Account transactions in the post-sale assignment page via a new "View History" link at the header and line levels.

2 You can access Smart Account Historical details for both Customer and Holding Accounts.

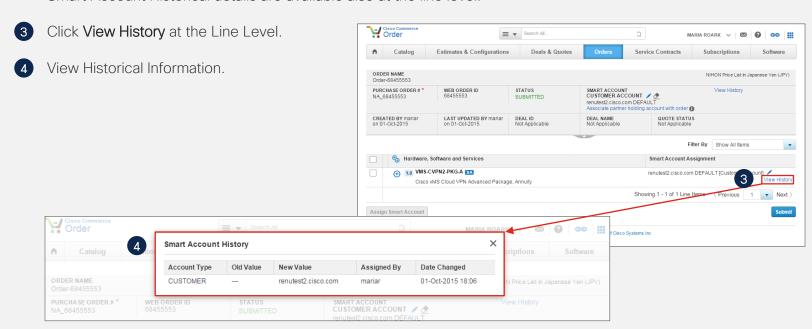
1 Click View History at the Header level.





Smart Account Transaction Traceability View History

Smart Account Historical details are available also at the line level.





Customer Support Submitting Cases

Software Licensing Support

• Customers with Software Licensing issues/questions can open a case using standard Cisco processes:







Software Licensing Support Hours

Monday – Friday: 8:00 am – 5:00 pm (US PT)

Product Support

- Technical Assistance Center (TAC)
 - Customers can contact TAC for product support issues & questions using existing Cisco processes



Prime Migration to Cisco DNA Center



Cisco DNA Center and Prime Paradigms



Configuration - Traditional Network Management vs Intent Based

Traditional Management





Intent Based Automation

Provisioning is achieved using Templates and Configuration Groups



Configuration Templates are mostly customer provided CLIs pushed via management console



Abstract services normalized across device types Pushes Cisco CVD best practices

Manual failure recovery via another CLI template



Maintain profile versions with In-built transactionality Capability to roll back on failure

Day 0 and Day N updates via multiple CLI template or composite templates



Simplified Day 0/N updates via settings and profiles at site/regional level



SWIM - Traditional Network Management vs Intent Based

Traditional Management





Intent Based Automation

Separate Software Update Workflows for Wired and Wireless devices

No concept of image standardization

Limited set of Pre Checks that cannot be customized

No support for Software Image Patches

Compliance of Images is done by manually creating the scripts to be executed



- Standardization of software by Network device role, device type and location
- Pre and Post check Validations provide seamless updates
- Patching capabilities to reduce downtime during software upgrades
- Automatic Compliance and Integrity Checks for Images



Streaming Telemetry vs. SNMP/Legacy Polling

Traditional Telemetry

Streaming Telemetry

SNMP/Legacy data pull methods





Intent-based 📣 Wireless Infrastructure 🛜



Pull based data import

CPU overhead with data crawlers

Data intensive without optimizations

No real time notification and false alarms

Min polling has too many black holes

- Push based data export
- Low CPU overhead
- Optimized for Data export (KPI, Events)
- Notification send seconds after change
- Reduced delay in management data



Alarms vs. Insights

Traditional Telemetry

SNMP/Legacy data pull methods



Streaming Telemetry







Raw info - need expert to understand

Every event generates an alarm

Many alarms for the same root cause

No guidance about how to resolve alarm

No correlation with affected users

- Very descriptive with explanation of the issue
- Alarm and false positive suppression
- Correlated insights with root cause analysis
- Suggested actions based on expert knowledge
- Clear indication of affected users and locations



Migration Scenarios



Deployment with Prime and Cisco DNA Center

Cisco® Catalyst® 9400 Series

- Cisco DNA Center is used for Day 0 and Day 2
- One time migration from Prime to Cisco DNA Center

Cisco® Catalyst® 9400 Series

- Run Cisco DNA Center and Prime together in the network
- Cisco DNA Center is used for Automation or Assurance or both for parts of the network

There is only one system that will make changes to the network



Migration Scenarios

- Full Migration from Prime to Cisco DNA Center
- Prime and Cisco DNA Center Co-existence
 - Cisco DNA Center on Assurance Mode
 - Cisco DNA Center on Automation + Assurance Mode
 - Cisco DNA Center on Automation Mode

PI = R/W, Cisco DNA Center = RO

PI = RO, Cisco DNA Center = R/W

PI = RO, Cisco DNA Center = R/W

There is only one system that will make changes to the network



Full Migration: Prime to Cisco DNA Center



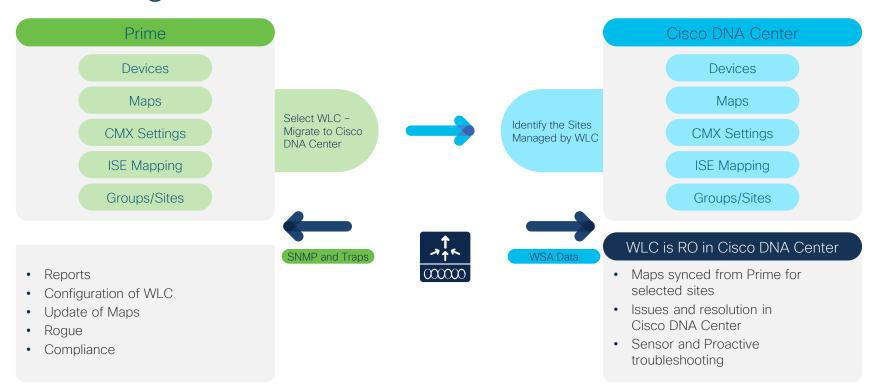
One time migration to Cisco DNA Center





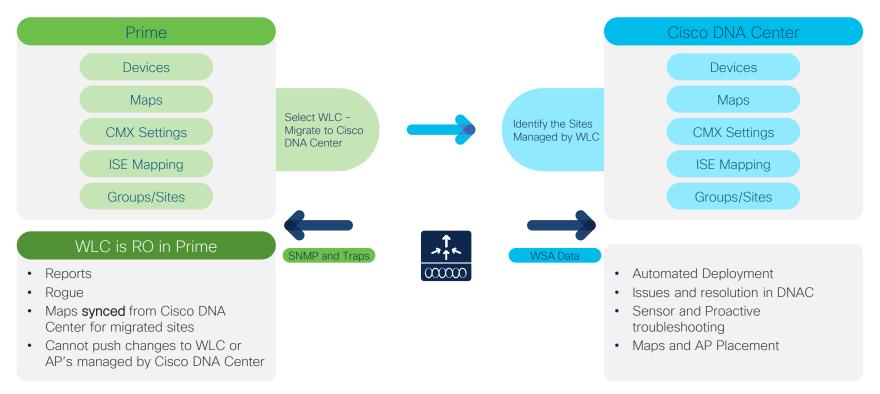


1. Assurance in Cisco DNA Center and Config in Prime



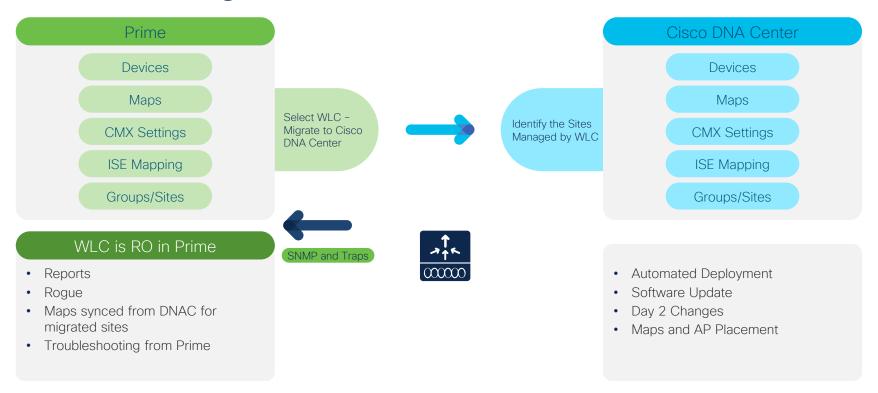


2. Assurance and Automation in Cisco DNA Center





3. Automation in Cisco DNA Center and Monitoring with Prime





Updated slide

Gaps



Lifecycle Management: Prime Infra vs Cisco DNA Center

Updated slide

Feature	Prime Infra	Cisco DNA Center	Comments
Discovery and Inventory	✓	✓	Cisco DNA Center supports CDP,LLDP and IP range based discovery only
Device Groups and Port Groups	✓	*	Port Groups will be available in the upcoming release of Cisco DNA Center
Configuration Templates	✓	✓	Network profiles and Template Editor is available in Cisco DNA Center
Configuration Archive	✓	*	Will be available in the upcoming release of Cisco DNA Center
Baseline/Configuration compliance	✓	*	Will be available in the upcoming release of Cisco DNA Center
Software Image Management	✓	✓	Cisco DNA Center supports SMU Upgrade and Image compliance
Wired Topology	✓	✓	
Plug and Play	✓	✓	
ISE and CMX Integration	✓	✓	
Cisco DNA Spaces Integration	×	✓	
CLI preview	✓	*	Will be available in the upcoming release of Cisco DNA Center
Reporting	✓	✓	Limited Reports in Cisco DNA Center
SDA	×	✓	
Proactive Sensor Testing	×	✓	
Third Party Device support	✓	✓	Multivendor Device Pack SDK support is in roadmap for Cisco DNA Center
Integration with ITSM (ServiceNow)	×	✓	
IPAM Integration (Infoblox/BlueCat)	×	✓	
Tableau Integration for Reports	×	✓	









Assurance Management: Prime Infra vs Cisco DNA Center

Updated slide

Feature	Prime Infra	Cisco DNA Center	Comments
Device Health Monitoring	✓	✓	
Interface Health Monitoring	✓	✓	
Performance Monitoring	✓	✓	
Alarms and Events	✓	✓	Cisco DNA Center reports issues and correlated Insights
Issues, Suggested Actions and Remediation	×	✓	Cisco DNA Center uses Al Network Analytics and Machine Learning
Syslogs	✓	*	Certain syslogs are shown. Full support is in roadmap
Path trace	×	✓	
Wireless heatmaps for troubleshooting	✓	✓	
Real Time Client and Application Data	✓	✓	
Rogue Management and Detection	✓	✓	
WIPS	✓	✓	
Application Visibility and Control	✓	✓	
Real Time Troubleshooting	✓	✓	
360 views	✓	✓	
Application performance Monitoring	✓	✓	
End User Experience Monitoring	✓	✓	
Application Policies	✓	✓	
Device Health Monitoring	✓	✓	











System and Platform: Prime Infra vs Cisco DNA Center

Updated slide

Feature	Prime Infra	Cisco DNA Center	Comments
On Premise - Virtual Machine	✓	*	VM deployment is in roadmap for Cisco DNA Center
On Premise -Hardware Appliance	✓	✓	
Cloud Deployment	×	✓	
High Availability	✓	✓	
North Bound APIs	✓	✓	
Backup and Restore/Disaster Recovery	✓	✓	
Operation Center (Manager of Manger)	✓	*	Roadmap Feature for Cisco DNA Center
Smart Licensing	✓	✓	
IPv6 Support	✓	✓	
Audit logging	✓	✓	
RBAC	✓	✓	
Device Support	✓	✓	



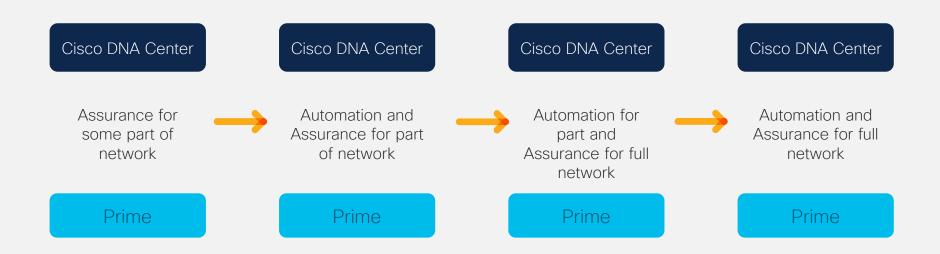








Gradual migration from Prime to Cisco DNA Center



cisco

The bridge to possible