UCS Firmware Upgrade from UCS Central

Contents

Introduction Components Used Configure Procedure

Introduction

This document describes the steps to upgrade a individual domain from UCS Central.

Previously, users scheduled infrastructure firmware updates per domain group. Cisco UCS Central 1.5 onwards has changed that feature. Now, you schedule infrastructure firmware updates for specific domains, or domains assigned to a domain group, using maintenance groups and tags.

Components Used

UCS Central 2.0(1a)

UCS Manager 3.1(3a)

All devices used are lab devices

Configure

You can trigger infrastructure firmware updates on one domain, multiple domains, or domains belonging to a domain group, based on the product family. For example, you could update the infrastructure firmware on all of the Cisco UCS Mini systems, and not update any of the blade servers. Another example is that you could update all maintenance groups on the west coast, but none on the east coast. The following is an overview of the initial steps needed.

Procedure

Click on the tools icon from UCS Central to launch the **Infrastructure Firmware Management**. The steps for the firmware upgrade are listed.



Step 1 Make sure that the UCS Domain is registered with UCS Central.

See the Cisco UCS Central Getting Started Guide for more information.

ı. cısco	UCS Central	What are you looking for?	Q What do you want to do?	•	admin 💶 🐥 🛠	🚱 ? G
	< III Dashbo	ard 👌 Infrastructure Firmware Management	* Domains * Domain Management *			> -
	Domain	Management				0 * ?
æ	Domain	Domain Registrations	_		📌 Regi	ister Domain
	Registrations	Filters	🝸 Filter 🕈 Export 🕕 Delete 🔀 Unregister Domain			
		Registration Status	UCS Domain	Timestamp	Registration Status	Q
ø	Lost Domains	Registered In Progress	172.16.16.153	03-Aug-2017 11:50:54 PM	Registered	
a		E Failed				

Step 2 During registration, make sure policy resolution for Infrastructure & Catalog Firmware is set as global.

Policy resolution from UCS Central

Domain to UCS Central Register

Basic	Policy Resolution		Infrastructure & Catalog Firmware Determines whether the Capability Catalog and infrastructure firmware policy are defined in UCS Manager or in UCS Central				
Policy	Infrastructure & Catalog Firmware	Local Global					
Resolution	Time Zone Management	Local Global					
Control	Communication Services	Local Global					
	Global Fault Policy	Local Global					
	User Management	Local Global					
	DNS Management	Local Global					
	Backup & Export Policies	Local Global					
	Monitoring	Local Global					
	SEL Policy	Local Global					
	Power Allocation Policy	Local Global					
	Power Policy	Local Global					
	Equipment Policy	Local Global					
			Cancel Register				

Policy resolution from UCS Manager

UCS Central Providers FSM Faults					
Actions	Properties				
Register With UCS Central	Hostname/IP Address : 172.16.16.190				
Unregister From UCS Central	Policy Resolution Control				
Status	Infrastructure & Catalog Firmware : O Local O Global Determines whether the Capability Catal				
Repair State : 🛉 Done		locally or come from Cisco UCS Central.			
Registration Status : ↑ Registered Cleanup Mode : ● Localize Global ◯ Deep Remove Global	Time Zone Management : CLocal Global	Determines whether the time zone and NTP server settings are defined locally or comes			
Suspend State :		from Cisco UCS Central.			
Acknowledge State :	Communication Services : CLocal Global	Determines whether HTTP, CIM XML, Telnet, SNMP, web session limits, and Management Interfaces Monitoring Policy settings are defined locally or in Cisco UCS Central.			
	Global Fault Policy : CLocal Global	Determines whether the Global Fault Policy is defined locally or in Cisco UCS Central.			
	User Management : CLocal Global	Determines whether authentication and native domains, LDAP, RADIUS, TACACS+, trusted points, locales, and user roles are defined locally or in Cisco UCS Central.			
	DNS Management : CLocal Global	Determines whether DNS servers are defined locally or in Cisco UCS Central.			

Step 3 Download the appropriate infrastructure firmware image from the Image Library.



It can be downloaded manually using Import firmware bundle option

cisco	UCS Central	What are you looking	for?	Q, Wha	it do you want to do?	•	admin 🛃 🌲 🛠 🌣	9 @ ©
	< 🎛 Dashbo	ard 🛃 Image Library 🕺						> •
	Image L	ibrary	Q 🛛 🛠	* ?				
ж	Packages Filters		▼ Filter ↑ Ex	port 💼 生			Schedule Periodic Firmware Image Syncs	
-	Developede	Firmware Type	Version	Туре	Image Bundle		Synchronize Firmware Updates	Q
e	Downloads	C Series		B Series Software for the UCS B-Series blade server	ucs-k9-bundle-b-series.2.1.2c.B.bin 315 MB		Import Firmware Bundle Cisc	ading :o.com

The image can be downloaded directly downloaded from Cisco.com, if the user credentials are set in Cisco.com Account.

-ili-ili- cisco	UCS Central	What are you looking f	or?	Q. What	at do you want to do?	▼ ad	min 💶 🐥 😵 🔕	• • •
	< 🏼 Dashbo	ard 🛃 Image Library 🗶					System Profile	> •
	lmage L	ibrary					System Policies User Settings	* ?
ж	Packages	Filters	▼ Filter ↑ Exp	ort 🛍 坐			Authentication	
_		Firmware Type	Version	Туре	Image Bundle		SNMP	Q
	Downloads	C Series	2.1(2c)B	B Series	ucs-k9-bundle-b-series.2.1.2c.B.bin		Smart Call Home	ading
ø		Capability Catalog		B-Series blade server products	312 MB		Licenses	om
a		Service Pack	2.1(2d)B	B Series	ucs-k9-bundle-b-series.2.1.2d.B.bin		Cisco.com Account	le For
<		Status		Software for the UCS B-Series blade server products	315 MB		Cisco	o.com

Step 4 Create Maintenance Group Tag.

Maintenance Group Tag can be applied per domain group

Maintenance Group Tag Create

aintenance Group Tag Value *
ag
elect how to apply tags to Domains
By Domain Group Manually
The Maintenance Group tag applies to all existing domains within the Domain Group. It will not be applicable to any new domains that get added further to the domain group. If you select to include sub-domain groups, the Maintenance Group tag also applies to all sub-domain groups.
omain Group
VA-6200 -
Include all Sub-Domain Groups

Maintenance Group Tag can be applied per domain. We will apply to the domain individually.

* ? Maintenance Group Tag Create Domains must be tagged with a Maintenance Group tag to schedule an infrastructure firmware update. When you create a Maintenance Group tag in this dialog, all selected domains are tagged with it. Maintenance Group Tag Value * Tag Select how to apply tags to Domains Manually By Domain Group + 💼 Q Domain Hardware Configuration Status Filters Q Domain Group ANF-UCSPR06 UCS-FI-6248UP Fabric A, UCS 6100/6200 Series FI OK B (HA) 3.1(3a)A Fault Level: Major root Ungrouped ~ 172.16.16.153 1 Chassis 0 FEX 3.1(3)SP0(Default) root 3 Blades 0 Rack Mounts FW Set Startup Platform UCS 6100/6200 Series FI UCS Mini 6300 Series FI UCS 6300 Series FI Cancel Create

You can verify if the Tag created has Tag Type as Maintenance Group under Tag Management.

* ?

	Tag Management							
æ	Tag Management							
		Filters	▼ Filter ↑ Export 🔟 Ren					
	Tag Types	Тад Туре	Tag	Тад Туре	Referenced Name	Referenced Type	Q	
ø		Maintenance Group	tag	Maintenance Group	ANF-UCSPR06 root	Domain		
		Orgs						
e		Domain Group						
<		root						
N								
-	Tag Managemen	t						
0								
<i>\</i>								
			<1.1.0f1 >>>					

Step 5 Domain will have the newly created tag

.1 1.1 1. cisco	UCS Central 🗧 What are you looking for?	Q What do you want to do?	•
	Image: Second		
	ANF-UCSPR06 Domain		
Æ	tag ×		
	Basic Overall Status		

Step 6 Launch the Infrastructure Firmware Management from the tools Icon.

Infrastructure Firmware Management

admin 💶 🚑 🛠	🌣 ? 🕞
 Infrastructure Firmware Management	
 Image Library	> •
Backup Management	* * ?

Select the tag for the Maintenance group, the Infrastructure firmware version & the calalog version.

Infrastructure Firmware Update

Infrastructure Firmware Update Schedule

Maintenance group *		Settings	Value			
tag	-	Catalog Version				
Infrastructure fir	mware ver	Sion Force Deploy	Disabled			
UCS 6100/6200 Series Fal	bric Interconnect	Evacuation	Disabled			
2.2(8g)A	-	line in a stand where	a a la a	Circovers etc	4	
UCS 6100/6200 Series	Service Pack	impacted dor	nains	Firmware sta	itus	
UCS Mini 6300 Series Fab	ric Interconnect		-			
None	-		Not subscribed		Ready	
UCS Mini 6300 Series S	ervice Pack	1	1 Impacted	1	Scheduled	
LICS 6200 Series Eabric In	terconnect	· · · · ·			0 In Progress	6
None	T				Failed	
UCS 6300 Series Service	e Pack				Pending Acknowled /Permissic	gement
Catalog version					<i>, , , , , , , , , ,</i>	
None	•	Impacted Do	mains			
Force Deploy		Domain	Current Version	Firmware Status	Domain Status	Q
Enabled Disabled		ANF-UCSPR06	3.1(3a)A	Ready	ОК	
-		UCS 6100/6200 Ser	es Fi 3.1(3)SP0(Default)			
Evacuation						

Select whether the update requires **User acknowledgment** in the User acknowledgement required to install field. If it is Enabled, you must manually acknowledge the update request before the domain is updated. In this case we have set it as enabled.



Monitor the Impacted domains and wait for the Pending Acknowledgement to get set to 1.



Step 7 Under the **Pending Activites**, you can acknowledge the **Pending Acknowledgement** status to begin the upgrade.

cisco	UCS Central	are you looking for?	Q	What do you want to	o do?	•	admin 💶 (<mark>▲ ③ ③ ③ ③</mark>
	< III Dashboard 🕹 Infrast	ructure Firmware Mana	igement × 🔒 Pending	Activities ×				3 .
8	Pending Activitie	s						0 : 🖲 🛞 🖲
.	Filters	Filter + Expo	rt					
	Domain Group	Name	Configuration	Туре	Schedule	Status	Pending Changes	۹
	Ungrouped	ANF-UCSPR06 root	N/A	Infra FW Update	Maintenance Group Scheduler tag	Pending Acknowledgemen	t	Acknowledge
e								