

# UCS Firmware Upgrade from UCS Central

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## 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)

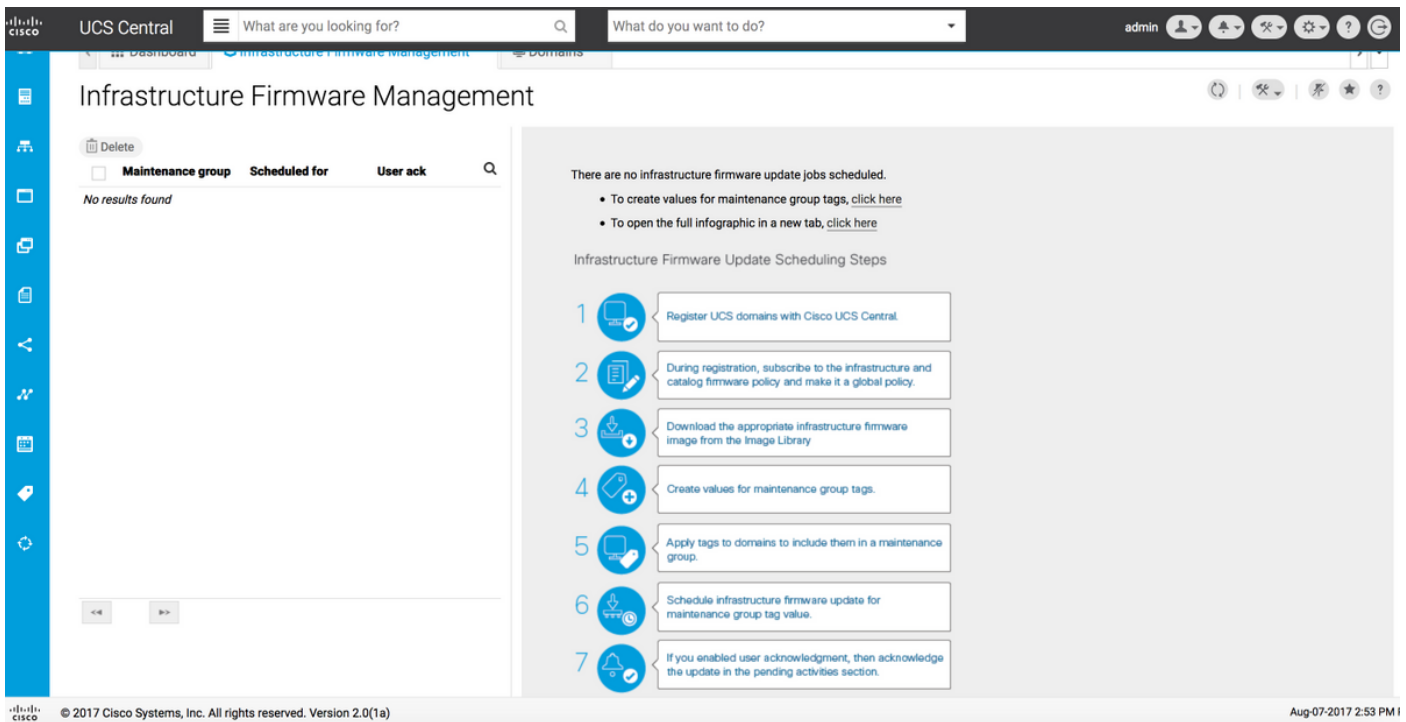
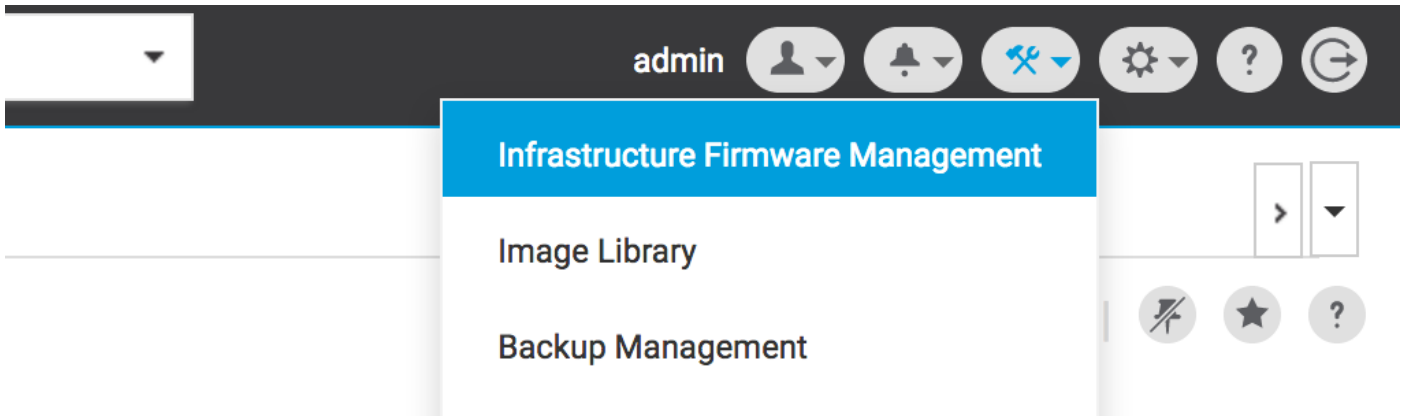
All devices used are lab devices

## 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.

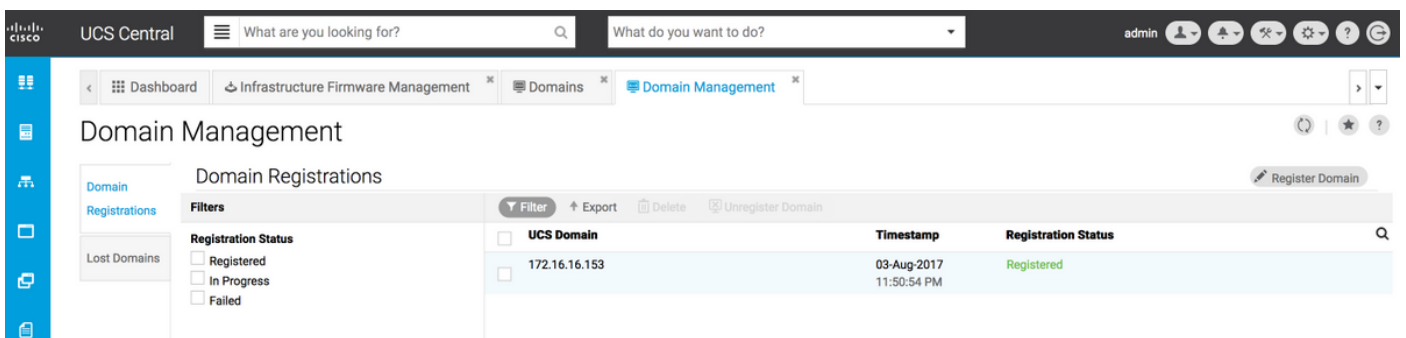
## Procedure

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.



**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
- Control

## Policy Resolution

Infrastructure & Catalog Firmware	Local	Global
Time Zone Management	Local	Global
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

## Infrastructure & Catalog Firmware

Determines whether the Capability Catalog and infrastructure firmware policy are defined in UCS Manager or in UCS Central

Cancel Register

## Policy resolution from UCS Manager

- UCS Central
- Providers
- FSM
- Faults

### Actions

- Register With UCS Central
- Unregister From UCS Central

### Status

- Repair State : **Done**
- Registration Status : **Registered**
- Cleanup Mode :  Localize Global  Deep Remove Global
- Suspend State :
- Acknowledge State :

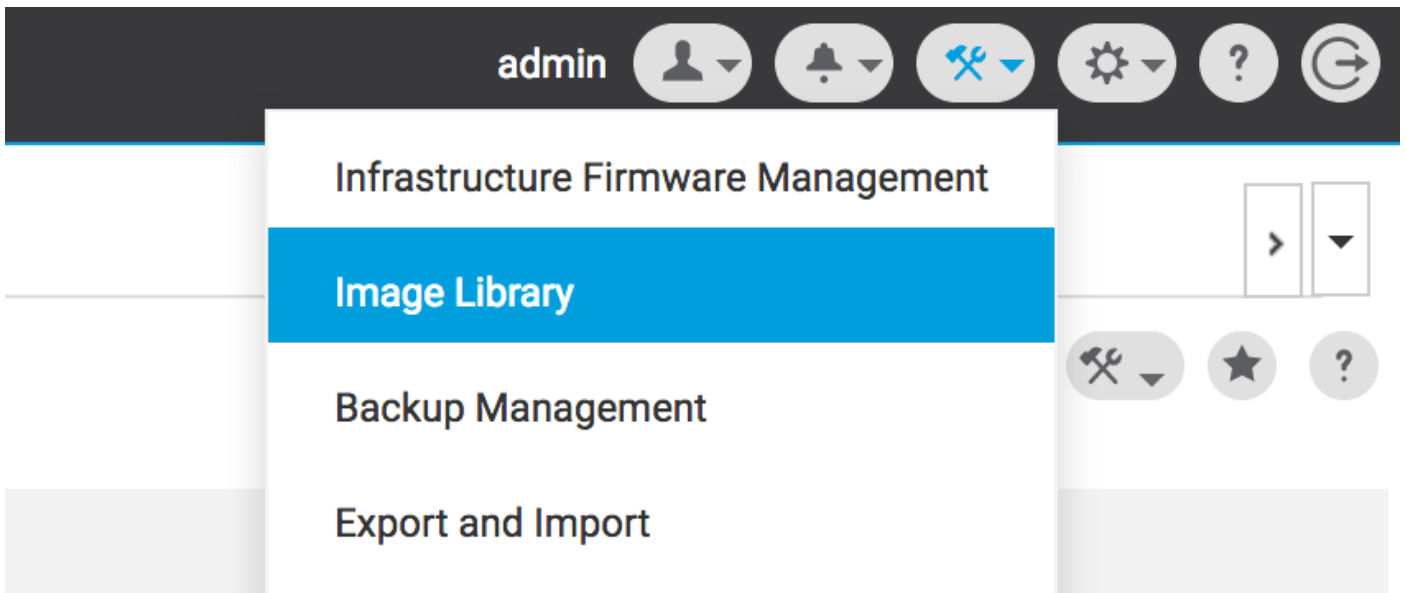
### Properties

Hostname/IP Address : **172.16.16.190**

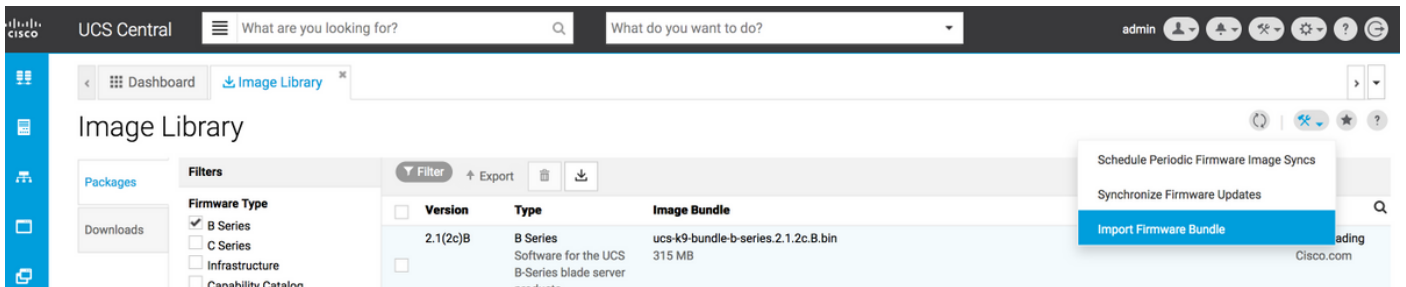
### Policy Resolution Control

- Infrastructure & Catalog Firmware :  Local  Global Determines whether the Capability Catalog and infrastructure firmware policy are defined locally or come from Cisco UCS Central.
- Time Zone Management :  Local  Global Determines whether the time zone and NTP server settings are defined locally or comes from Cisco UCS Central.
- Communication Services :  Local  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 :  Local  Global Determines whether the Global Fault Policy is defined locally or in Cisco UCS Central.
- User Management :  Local  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 :  Local  Global Determines whether DNS servers are defined locally or in Cisco UCS Central.

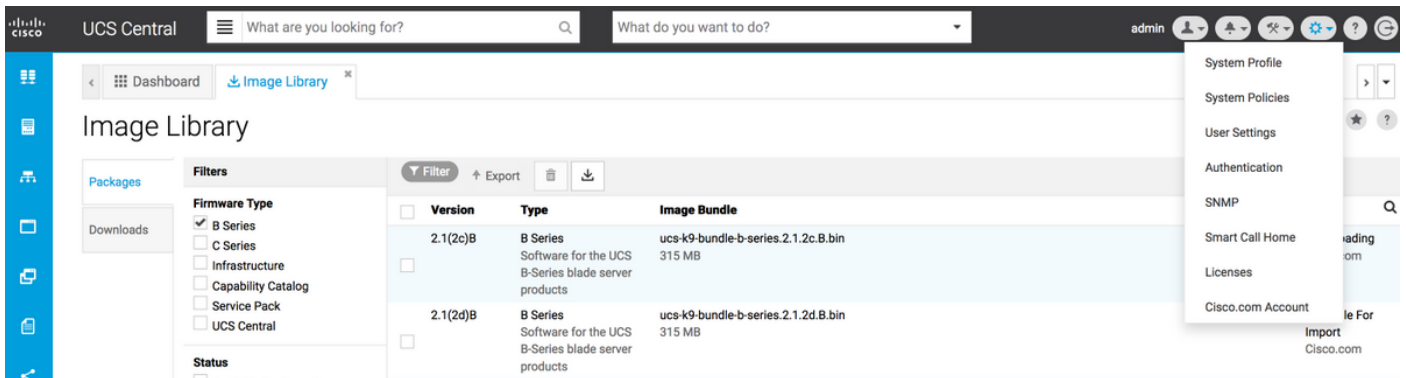
**Step 3** Download the appropriate infrastructure firmware image from the **Image Library**.



It can be downloaded manually using Import firmware bundle option



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



#### Step 4 Create Maintenance Group Tag.

Maintenance Group Tag can be applied per domain group

# 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

**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.

Domain Group

NA-6200

Include all Sub-Domain Groups

Cancel

Create

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

By Domain Group **Manually**



Filters

Domain Group

- Ungrouped
- root

Platform

- UCS 6100/6200 Series FI
- UCS Mini 6300 Series FI
- UCS 6300 Series FI

Domain

Hardware

Configuration

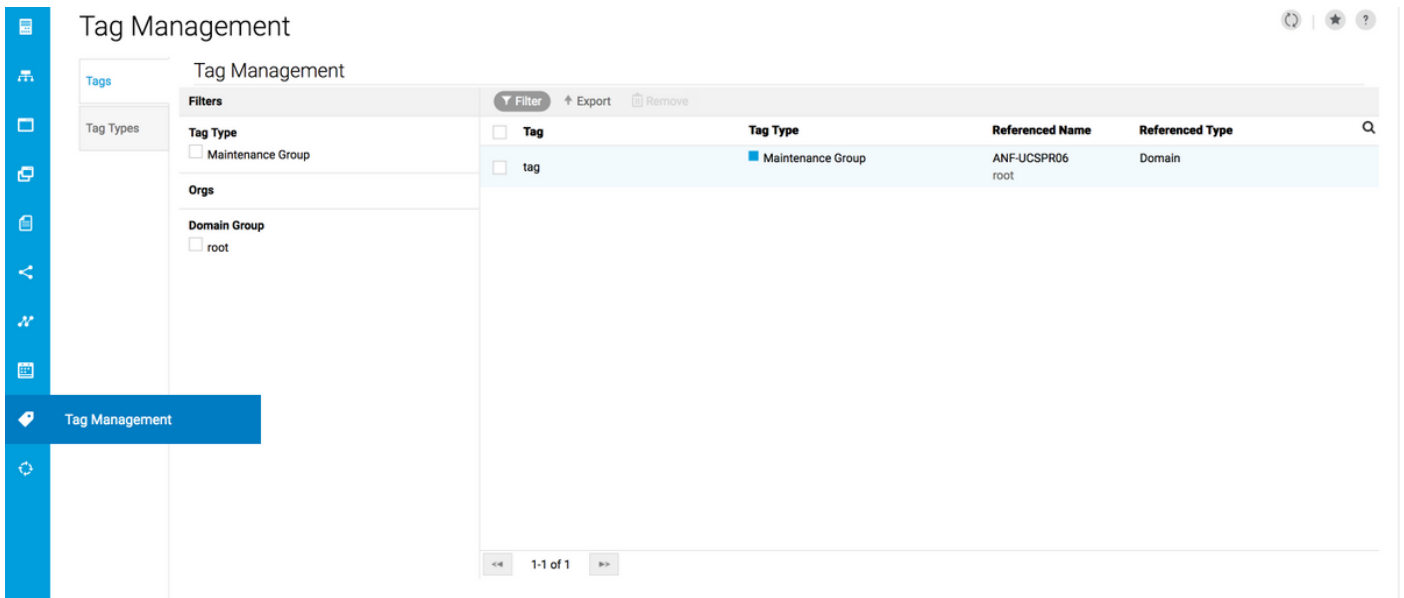
Status

Domain	Hardware	Configuration	Status
<input checked="" type="checkbox"/> ANF-UCSPR06 root 172.16.16.153	UCS-FI-6248UP Fabric A, B (HA) 1 Chassis 0 FEX 3 Blades 0 Rack Mounts	UCS 6100/6200 Series FI 3.1(3a)A 3.1(3)SP0(Default) FW Set Startup	OK Fault Level: Major

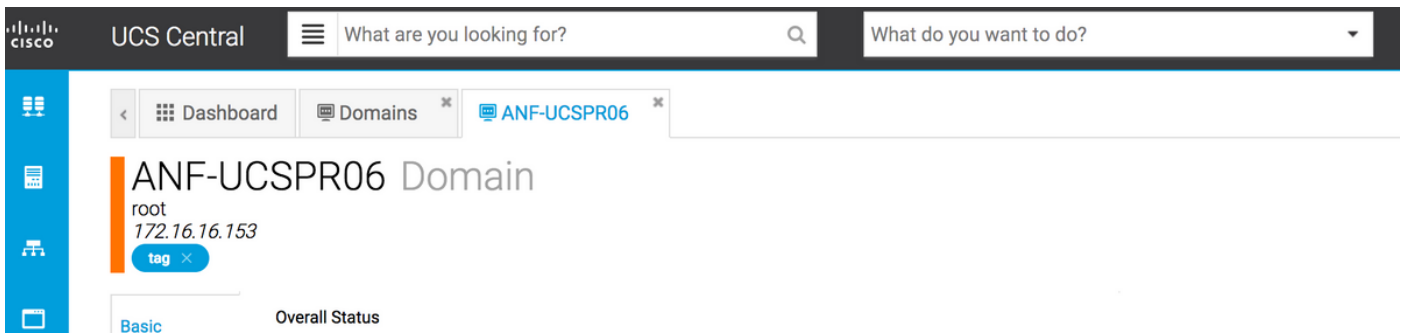
Cancel

Create

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

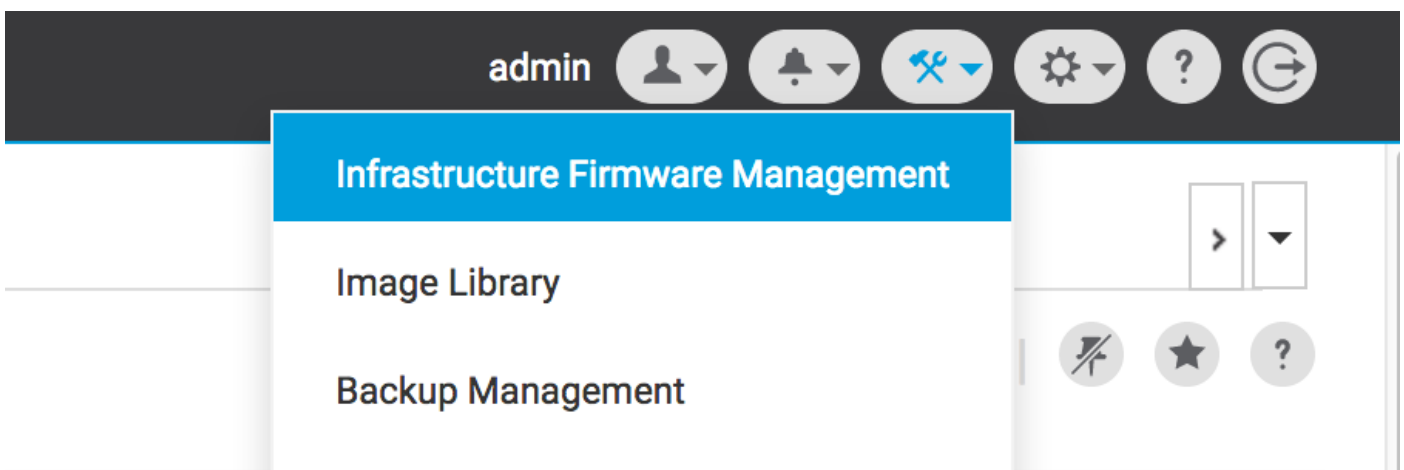


**Step 5** Domain will have the newly created tag



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

Infrastructure Firmware Management



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

Infrastructure Firmware Update

# Infrastructure Firmware Update Schedule



Maintenance group \*  
tag

## Infrastructure firmware version

UCS 6100/6200 Series Fabric Interconnect

2.2(8g)A

UCS 6100/6200 Series Service Pack

UCS Mini 6300 Series Fabric Interconnect

None

UCS Mini 6300 Series Service Pack

UCS 6300 Series Fabric Interconnect

None

UCS 6300 Series Service Pack

Catalog version

None

Force Deploy

Enabled

Disabled

Evacuation

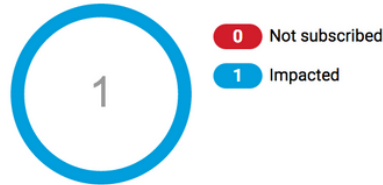
Enabled

Disabled

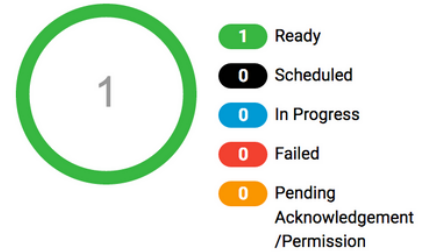
## Settings

Settings	Value
Catalog Version	
Force Deploy	Disabled
Evacuation	Disabled

## Impacted domains



## Firmware status



## Impacted Domains

Domain	Current Version	Firmware Status	Domain Status	Q
ANF-UCSPR06	3.1(3a)A	Ready	OK	
UCS 6100/6200 Series FI	3.1(3)SP0(Default)			

Cancel

Schedule

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.

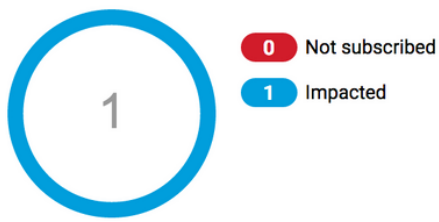
## User acknowledgement required to install

Enabled

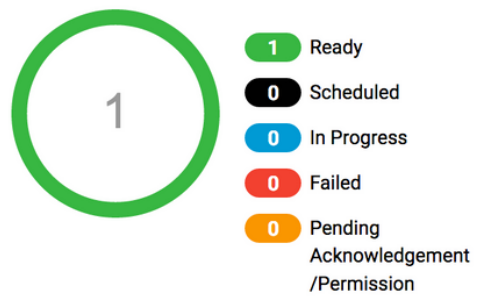
Disabled

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

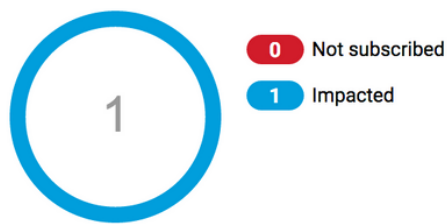
## Impacted domains



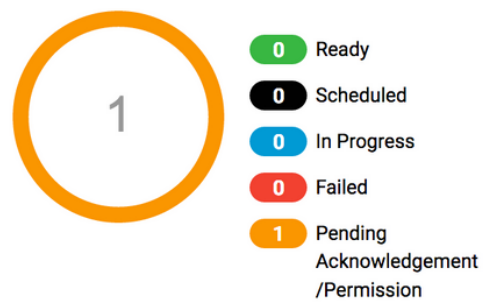
## Firmware status



## Impacted domains



## Firmware status



## Impacted Domains

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

