# 升级Catalyst 9400 SVL设置上的CPLD

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# 简介

本文档介绍在Catalyst 9400 StackWise虚拟链路(SVL)设置上升级复杂可编程逻辑设备(CPLD)版本 的分步过程。

# 先决条件

### 要求

Cisco建议您具备Catalyst 9400上的Stackwise虚拟设置和配置的基础知识。

使用的组件

本文档中的信息基于PID: C9404R软件和硬件版本。

模块:

C9400-SUP-1XL

C9400-LC-24XS

软件版本:17.09.4a

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原 始(默认)配置。如果您的网络处于活动状态,请确保您了解所有命令的潜在影响。

## 拓扑



# 问题

在Catalyst 9400中,升级Cisco IOS®版本时,在极少数情况下,设备的CPLD版本没有升级。可以 通过<u>https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst9400/software/release/17-</u> <u>13/release\_notes/ol-17-13-9400/rommon\_versions.html</u>链路检查特定版本的CPLD和Rommon版本

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请参阅以下代码段:

<#root>

9400-1#show platform Chassis type: C9404R

Switch 1

Slot	Туре	State	Insert time (ago)
1	C9400-1 C-24XS		00.02.00
1/0	C9400-LC-24XS	ok	00:00:56
2	C9400-SUP-1XL	ok	00:05:00
2/0	C9400-SUP-1XL	ok	00:00:53
RO			
ok, active	2		
	00:05:00		
P1	C9400-PWR-3200AC	ok	00:04:38
Р9	C9404-FAN	ok	00:04:37
Slot	CPLD Version	Firmware Version	
1	20062105	17.10.1r	
2	20062105	17.10.1r	

#### Switch 2

Slot	Туре	State	Insert ti	me (ago)			
1	C9400-LC-24XS	ok	00:04:57				
1/0	C9400-LC-24XS	ok	00:00:08				
2	C9400-SUP-1XL	ok	00:04:57				
2/0 R0	C9400-SUP-1XL	ok	00:00:07				
ok, stan	dby						
	00:04:57						
P1	C9400-PWR-3200AC	ok	00:04:35				
P9	C9404-FAN	ok	00:04:33				
Slot	CPLD Version	Firmware Version					
1	19032905	17.10.1r		>>>>>>CPLD	did no	ot get	upgraded
2	19032905	17.10.1r		>>>>>>CPLD	did nc	ot get	upgraded

在这种情况下,备用的CPLD在升级后没有升级。

# 升级 程序

步骤1:请使用show redundacny验证SVL是否正常运行。

#### <#root>

Hardware Mode = Duplex Configured Redundancy Mode = sso

Operating Redundancy Mode = sso

Maintenance Mode = Disabled Communications = Up

Current Software state = ACTIVE

Uptime in current state = 4 minutes

Image Version = Cisco IOS Software [Cupertino], Catalyst L3 Switch Software (CAT9K\_IOSXE), Version 17.9
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2023 by Cisco Systems, Inc.
Compiled Fri 20-Oct-23 10:44 by mcpre
BOOT = bootflash:packages.conf;

Peer Processor Information :

Standby Location = Switch 2 >>>>>Switch 2 is standby

Current Software state = STANDBY HOT Uptime in current state = 0 minutes Image Version = Cisco IOS Software [Cupertino], Catalyst L3 Switch Software (CAT9K\_IOSXE), Version 17.9 Technical Support: http://www.cisco.com/techsupport Copyright (c) 1986-2023 by Cisco Systems, Inc. Compiled Fri 20-Oct-23 10:44 by mcpre BOOT = bootflash:packages.conf;

第二步:要升级CPLD版本,请使用以下命令:

<#root>

upgrade hw-programmable cpld filename bootflash: switch  $\{1-2\}$  RP active

#### <#root>

9400-1#

upgrade hw-programmable cpld filename bootflash: switch 2 R0

Firmware upgrade requires the SVL member to reload. Do you want to proceed?(y/n)y Use cli 'redundancy reload peer' to upgrade the firmware on peer

9400-1#

redundancy reload peer

Stack is in Half ring setup; Reloading a switch might cause stack split Reload peer [confirm] Preparing to reload peer

第三步:您可以看到CPLD正在升级:

#### <#root>

Chassis 2 reloading, reason - Admin reload CLI May 4 01:34:23.829: %PMAN-5-EXITACTION: R0/0: pvp: Initializing Hardware.....

System Bootstrap, Version 17.10.1r, RELEASE SOFTWARE (P) Compiled Tue Aug 2 13:02:51 2022 by rel

Current ROMMON image : Primary Last reset cause : SoftwareResetTrig C9400-SUP-1XL platform with 16777216 Kbytes of main memory

Starting System FPGA Upgrade .....

Programming SPI Primary image is completed.

Authenticating SPI Primary image ..... IO FPGA image is authenticated successfully.

Programming Header ..... FPGA HDR file size: 12 Image page count: 1 Verifying programmed header ..... Verifying programmed header ..... Programmed header is verified successfully.

Power Cycle is needed to complete System firmware upgrade. It takes ~7 mins to upgrade firmwre after power cycle starts.

DO NOT DISRUPT AFTER POWER C Initializing Hardware.....

Initializing Hardware.....

System Bootstrap, Version 17.10.1r, RELEASE SOFTWARE (P) Compiled Tue Aug 2 13:02:51 2022 by rel

第四步:确认CPLD是否在待机状态下升级:

#### <#root>

F241.24.02-9400-1#show platform Chassis type: C9404R

Switch 1

 Slot
 Type
 State
 Insert time (ago)

 1
 C9400-LC-24XS
 ok
 00:29:38

 1/0
 C9400-LC-24XS
 ok
 00:25:34

2	C9400-SUP-1XL	ok	00:29:38	
2/0	C9400-SUP-1XL	ok	00:25:31	
R0	ok, a	ctive	00:29:38	
P1	C9400-PWR-320	0AC ok	00:29:16	5
P9	C9404-FAN	ok	00:29:14	
Slot	CPLD Version	Firmwa	re Version	

1	20062105	17.10.1r
2	20062105	17.10.1r

#### Switch 2

Slot	Туре	State		Insert time (ago)
1	C9400-LC	-24XS	ok	00:29:35
1/0	C9400-L0	C-24XS	ok	00:00:11
2	C9400-SU	P-1XL	ok	00:29:35
2/0	C9400-SU	JP-1XL	ok	00:00:10
R0		ok, sta	ndby	00:29:35
P1	C9400-PV	VR-3200	AC ok	00:29:13
P9	C9404-FA	AN	ok	00:29:11

Slot CPLD Version Firmware Version

1 20062105 17.10.1r >>>>>>CPLD got upgraded

2 20062105 17.10.1r >>>>>>CPLD got upgraded

第五步:在这种情况下,如果需要升级活动交换机的CPLD版本,您必须执行以下步骤:

#### <#root>

1. Do a switchover

9400-1#

redundency force-switchover

>>>>>>Initially Switch 1 is active and Switch 2 is standby. After switchover it is vise-versa

2. Upgrade the CPLD version of previous active [now standby] with the command:

9400-1#

upgrade hw-programmable cpld filename bootflash: switch 1 R0

3. Reload the the standby

9400-1#

redundancy reload peer

#### 关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言,希望全球的用户都能通过各 自的语言得到支持性的内容。

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