

配置在Cisco 800系列路由器的Very-high bit rate Digital Subscriber Line固件

目录

[简介](#)

[先决条件](#)

[要求](#)

[使用的组件](#)

[配置](#)

[确定在路由器的当前固件版本](#)

[升级VDSL固件](#)

[验证](#)

[故障排除](#)

简介

本文描述如何升级在Cisco 800系列路由器的Very-high bit rate Digital Subscriber Line (VDSL)固件。

先决条件

要求

思科建议您检查您的固件版本版本注释，在您完成此升级程序前。

使用的组件

本文档中的信息根据思科897VAB路由器。然而，本文没有限制对特定软件和硬件版本。

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。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

配置

Note:使用[命令查找工具](#) ([仅限注册用户](#)) 可获取有关本部分所使用命令的详细信息。

确定在路由器的当前固件版本

输入**show controller vdsl**命令为了当前确定固件版本在您的Cisco 800系列路由器。寻找在粗体显示的输出条目在此示例输出中：

```
Router# show controller vdsl 0
Controller VDSL 0 is UP

Daemon Status: Up

XTU-R (DS) XTU-C (US)
Chip Vendor ID: 'BDCM' 'BDCM'
Chip Vendor Specific: 0x0000 0xA31E
Chip Vendor Country: 0xB500 0xB500
Modem Vendor ID: 'CSCO' ' '
Modem Vendor Specific: 0x4602 0x0000
Modem Vendor Country: 0xB500 0x0000
Serial Number Near: FHK144672GQ 886VA-K 15.2(4)M
Serial Number Far:
Modem Version Near: 15.2(4)M
Modem Version Far: 0xa31e

Modem Status: TC Sync (Showtime!)
DSL Config Mode: AUTO
Trained Mode: G.992.5 (ADSL2+) Annex J
TC Mode: ATM
Selftest Result: 0x00
DELT configuration: disabled
DELT state: not running
Trellis: ON ON
SRA: disabled disabled
SRA count: 0 0
Bit swap: enabled enabled
Bit swap count: 0 1
Line Attenuation: 0.0 dB 4.9 dB
Signal Attenuation: 3.3 dB 4.4 dB
Noise Margin: 9.8 dB 6.3 dB
Attainable Rate: 26332 kbits/s 2952 kbits/s
Actual Power: 7.1 dBm 11.9 dBm
Total FECC: 0 0
Total ES: 9721 42
Total SES: 9714 4
Total LOSS: 1086 0
Total UAS: 2670101 2670101
Total LPRS: 0 0
Total LOFS: 8342 0
Total LOLS: 0 0

Full inits: 2511
Failed full inits: 815
Short inits: 174
Failed short inits: 1353

Firmware Source File Name (version)
-----
```

VDSL user config flash:VA_A_39h_B_38h3_24h_j.bin (10)

Modem FW Version: 140305_1531-4.02L.03.B2pvC038h3_J.d24h

Modem PHY Version: B2pvC038h3_J.d24h

Vendor Version: Bpv38h3.24h 68

DS Channel1 DS Channel0 US Channel1 US Channel0

Speed (kbps): 0 25346 0 2832

SRA Previous Speed: 0 0 0 0

Previous Speed: 0 25866 0 1264

Total Cells: 0 35481077 0 3942410

User Cells: 0 0 0 0

Reed-Solomon EC: 0 0 0 0

CRC Errors: 0 220155 0 0

Header Errors: 0 0 0 0

Interleave (ms): 0.00 0.08 0.00 11.11

Actual INP: 0.00 0.00 0.00 0.69

Training Log: Stopped

Training Log Filename: flash:vdsllog.bin

Note:默认固件在flash:安置/firmware/<filename>.如果固件路径没有给在VDSL控制器下，并且或者VDSL控制器重置(shut/no-shut)或路由器重新加载;VDSL控制器采取此默认固件。请勿删除从flash:的基本固件/firmware/<filename>.

升级VDSL固件

1. 下载从Cisco.com软件中心的新的[VDSL2固件](#)。
2. 选择路由器>分支路由器>思科800系列路由器> Cisco 887V集成业务路由器>非常高比特率DSL (VDSL)固件。
3. 复制固件到一个指定位置。例如，路由器闪存或者TFTP server。此示例显示如何复制从TFTP server的VDSL2固件在10.76.76.160到路由器闪存：

```
Router#copy tftp flash:
```

```
Address or name of remote host []? 10.76.76.160 [Address of the TFTP Server]
```

```
Source filename []? vdsl_bond.bin_39p1 [Name of the downloaded VDSL Firmware]
```

```
Destination filename [vdsl_bond.bin_39p1]? [Name of the VDSL firmware on the router flash]
```

或者，您能输入复制ftp://usernamepassword@TFTP-Server-IPAddress flash: VDSL固件NAME命令。此输出提供一个示例：

```
Router#copy tftp flash:
```

```
Address or name of remote host []? 10.76.76.160 [Address of the TFTP Server]
```

```
Source filename []? vdsl_bond.bin_39p1 [Name of the downloaded VDSL Firmware]
```

```
Destination filename [vdsl_bond.bin_39p1]? [Name of the VDSL firmware on the router flash]
```

4. 配置路由器装载从一个指定位置的新的VDSL2固件。

```
Router#conf t
```

```
Enter configuration commands, one per line. End with CNTL/Z.
```

```
Router(config)#controller vdsl 0
```

```
Router(config-controller)#firmware filename ?
```

```
archive: Download fw file name
```

```
cns: Download fw file name
```

```
flash: Download fw file name
```

```
ftp: Download fw file name
```

```
http: Download fw file name
```

```
https: Download fw file name
```

```
null: Download fw file name
```

```
nvram: Download fw file name
```

```
rcp: Download fw file name
```

```
scp: Download fw file name
system: Download fw file name
tar: Download fw file name
tftp: Download fw file name
tmpsys: Download fw file name
xmodem: Download fw file name
ymodem: Download fw file name
```

```
Router(config-controller)#firmware filename flash:vdsl_bond.bin_39p1
```

5. 重新启动新的固件的控制器接口能采取影响：

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#controller vdsl 0
Router(config-controller)#shut
Router(config-controller)#no shut
Router(config-controller)#end
```

验证

使用本部分可确认配置能否正常运行。

[命令输出解释程序工具](#) ([仅限注册用户](#)) 支持某些 **show** 命令。请使用Output Interpreter Tool为了查看show命令输出分析。

```
Router#show controller vdsl 0
Controller VDSL 0 is DOWN
```

```
Daemon Status:          Establishing Link
```

	XTU-R (DS)	XTU-C (US)
Chip Vendor ID:	'BDCM'	'BDCM'
Chip Vendor Specific:	0x0000	0xA39A
Chip Vendor Country:	0xB500	0xB500
Modem Vendor ID:	'CSCO'	'BDCM'
Modem Vendor Specific:	0x4602	0xA39A
Modem Vendor Country:	0xB500	0xB500
Serial Number Near:	FGL18212393 C897VAB-	15.4(201503
Serial Number Far:		
Modem Version Near:	15.4(20150325:160033)	[ragvasud
Modem Version Far:	0xa39a	

```
Modem Status:          Unknown
```

```
DSL Config Mode:      ADSL2+
```

```
Trained Mode:
```

```
TC Mode:              UNKNOWN
Selftest Result:      0x00
DELT configuration:    disabled
DELT state:           not running
Bonded Status:        PTM Bonded<
Number of Ports:      2
Port ID:              0          1
Link Status:          DOWN      DOWN
Aggr US Rate(kbps):   0
Aggr DS Rate(kbps):   0
```

```
Full inits:           3
```

Failed full inits: 14
Short inits: 2
Failed short inits: 2

Firmware	Source	File Name
-----	-----	-----
VDSL	user config	flash:vdsl_bond.bin_39p1

Modem FW Version: 4.14L.04
Modem PHY Version: **A2pv6F039p1.d24m**

Line:

	XTU-R (DS)	XTU-C (US)
Trellis:	OFF	OFF
SRA:	disabled	disabled
SRA count:	0	0
Bit swap:	enabled	enabled

Training Log : Stopped
Training Log Filename : flash:vdsllog.bin

故障排除

目前没有针对此配置的故障排除信息。