Release Notes for Cisco 887V VDSL2 Router with VDSL2 firmware for Release A2pv6C030.d22e and A2pv6C016a1.d22e

Contents

Introduction

These release notes describe new enhancements and fixed caveats for the Cisco 887V VDSL2 Router using VDSL2 firmware release A2pv6C030.d22e and A2pv6C016a1.d22e. These release notes are updated as needed.

System Requirements

This section describes the system requirements for firmware Releases A2pv6C030.d22e and A2pv6C016a1.d22e. It includes the following sections:

Cisco Systems, Inc.
www.cisco.com

Memory and IOS Software Requirements

Table 1 lists the memory and IOS Software requirements for the Cisco 887V platforms, using VDSL2 firmware Release A2pv6C030.d22e and A2pv6C016a1.d22e.

> **Note** This firmware version is compiled with the SDK version 4.02L.03 and supports IOS release 15.6(2)T and earlier releases up to the supported version mentioned in the firmware release note. This firmware is not supported with Cisco IOS 15.6(3)M version and later releases.

Table 1 Memory and IOS Requirements for the Cisco 887V VDSL2 platforms

Platform	Flash (MB)	DRAM (MB)	IOS Release	VDSL2 Firmware File
CISCO887V	128	256	12.4(24)T	vdsl.bin.A2pv6C030.d22e.IOS124T
CISCO887V	128	256	15.0(1)M*	vdsl.bin.A2pv6C030.d22e.IOS1501M1
				vdsl.bin.A2pv6C016a1.d22e.IOS1501M1

*Minimum 15.0(1)M release to support independent VDSL2 firmware loading is 15.0(1)M1

Determining the Firmware Version

To determine the version of VDSL2 Firmware currently running on your Cisco 887V router, issue the following IOS command and look for the output in BOLD:

Router#show controller vdsl 0

```
Firmware        Source         File Name (version)
--------        ------         -------------------
VDSL            embedded       VDSL_LINUX_DEV_01212008 (1)


Modem FW  Version:     090210_1620-4.02L.01.AvC011b.d21j1
Modem PHY Version:     AvC011b.d21j1
```

Upgrading to a New VDSL2 Firmware Release

Perform the following steps to upgrade to a new VDSL2 firmware release:

1. Download the new VDSL2 firmware from Cisco.com Software Center, at
   http://www.cisco.com/cisco/web/download/index.html

Choose Routers -> Branch Routers -> Cisco 800 Series Routers -> Cisco 887V Integrated Services Router -> Very High Bitrate DSL (VDSL) Firmware.

2. Copy the firmware to a designated location; for example router flash, or a TFTP server.

3. Configure the router to load the new VDSL2 firmware from a designated location.

```
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.bin.A2pv6C030.d22e.IOS1501M1
```

4. Restart the controller interface for the new firmware to take effect

```
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
Router#
```

New and Changed Information

The following are changes made with VDSL2 firmware release A2pv6C030.d22e

- Support Dynamic D in G993.2 VDSL2 mode
- Improve US rate for EU128 in G993.2 VDSL2
- Fix a bug causing instability under B7-9 mask in G993.2 VDSL2
- Fix QLN monitoring in G993.2 VDSL2 mode
- Improve robustness in G994 message processing against ill-structured messages

- Improve DS bitswap speed in G993.2 VDSL2 mode
- Improve consistency in calculating attainable rate in G993.2 VDSL2 mode
- Improve DS rate in fast path on short loops in G993.2 VDSL2
- Improve DS bitswap speed in G993.2 VDSL2 mode
- Improve DS rate on loops longer than 4000ft in G993.2 VDSL2 mode
- Support extended framing parameters in G993.2 VDSL2 mode
- Improve stability on certain loops with US0 only in G993.2 VDSL2 mode
- Improve up stream rate in G993.2 VDSL2 8MHz Profile
- Improve loop attenuation measurement accuracy
- Improve INP robustness in G993.2 VDSL2 mode
- Fixed showtime drop when PhyR is enabled in G993.2 VDSL2 mode

Additional References

Use this release note with the documents and websites in this release note and the documents listed in the following sections:

- Platform-Specific Documents, page 4
- Release-Specific Documents, page 4

Release-Specific Documents

The following documents are specific to Release 15.0 and apply to Release 15.0(1)XA:

- *New and Changed Information*
- *Caveats for Cisco IOS Release 15.0M0*

Platform-Specific Documents

Hardware installation guides, configuration and command reference guides, and additional documents specific to the Cisco 800 series routers are available at:

http://www.cisco.com/en/US/products/hw/routers/ps380/tsd_products_support_series_home.html

Cisco IOS Software Documentation Set

The Cisco IOS software documentation set consists of the Cisco IOS configuration guides, Cisco IOS command references, and several other supporting documents.

Documentation Modules

Each module in the Cisco IOS documentation set consists of one or more configuration guides and one or more corresponding command references. Chapters in a configuration guide describe protocols, configuration tasks, and Cisco IOS software functionality, and contain comprehensive configuration examples. Chapters in a command reference provide complete command syntax information. Use each configuration guide with its corresponding command reference. Cisco IOS Software Documentation is available in html or pdf form. Select your release and click the command references, configuration guides, or any other Cisco IOS documentation you need.

Obtaining Documentation, Obtaining Support, and Security

For information on obtaining documentation, obtaining support, providing documentation feed-back, security guidelines, and also recommended aliases and general Cisco documents, see the monthly What's New in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

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Notices

See the *Notices* section in About Cisco IOS Release Notes located at:

http://www.cisco.com/en/US/docs/ios/12_4/12_4x/12_4xy15/ReleaseNote.html.

Use this document in conjunction with the documents listed in the "Additional References" section on page 4.