Cisco DSAN 8211 Release Note

Overview

Introduction

This system release supports the Cisco Digital Service Access Node (DSAN) 8211. This document describes features and lists the resolved and outstanding items with System Release 4.00.11.

Purpose

This release note is being provided for user support related to the installation and operation of System Release 4.00.11.

Audience

This document is intended for qualified and skilled personnel who configure the system. These personnel should understand basic network configuration, RF, and network monitoring operations.

Qualified Personnel

Only appropriately qualified and skilled service personnel should attempt to install, operate, maintain, and service this product.

WARNING:

Allow only qualified and skilled personnel to install, operate, maintain, and service this product. Otherwise, personal injury or equipment damage may occur.

Related Publications

You may find the following publications useful as you implement the procedures in this document.

- *Cisco DSAN 8211 Installation Guide*, part number 4037610

In This Document

Release Purpose

This system release includes updates to support new DSAN 8211 feature sets and address the following issues.

- Added CLI commands to support manual download of DSAN configuration file and SI data file via TFTP.
- Added support for the in-band reception of EAS (SCTE-18) messages.
- Updated CLI diagnostic pages as appropriate for DSAN 8211.
- Updated the SA-DSAN-MIB and agent capabilities; improve the DSAN SNMP agent performance.
- Improved general system performance.
- Updated the DSAN Configuration Generator stand-alone application to create the DSAN configuration file manually.

Hardware

This system release is supported on hardware that has Revision 5 and later digital boards and Revision 3 and later RF boards. These units are most easily identified by their housings, which are white enamel painted.

Software

This system release is numbered as 4.00.11. A system release is a bundling of software components into a single monolithic image that is downloaded into the device via DOCSIS. Each component has an independent revision number, but the software bundle is managed as a single system release.

System Release Detailed Hierarchy

The following table details the software images that roll up into System Release 4.00.11.

Module Application	Version Number
Calliope Boot Image	1.02
Calliope Application Image	4.00.11

System Release History

The following table summarizes the release history.

Release #	Reference #	Date	Details
R1.00.28	1.0.28	09/25/2011	■ Initial customer production release for DSAN model 8211. ■ Allow the eHost to DHCP without requiring SI Time to be received. ■ Initially Disable Test Mode so root access is guaranteed.
R4.00.11	4.00.11	12/02/2011	■ Roll out major production release update with new features. ■ Support manual download of DSAN configuration file and SI data file via TFTP. ■ Support for in-band reception of EAS (SCTE-18) messages. ■ Update bootloader image to prevent flash corruption on repeated power-up failures. ■ Update CLI diagnostic pages. ■ Update the SA-DSAN-MIB and agent capabilities; improve DSAN SNMP agent performance. ■ Improve general system performance. ■ Provide the DSAN Configuration Generator tool stand-alone application to create the DSAN configuration file manually.

Supporting Software and Files

The following table details software and support files associated with this release.

Software/Files	Release #	Filename(s)	Build Date
Proprietary MIBs	201111170000Z	SA-DSAN-MIB.mib	17Nov11
Proprietary Agent Capability MIB	201111110000Z	SA-DSAN-AGENT-CAPABILITY.mib	11Nov11
DOCSIS MIB	9908190000Z	DOCS-CABLE-DEVICE-MIB.mib	17Aug09

The DSAN proprietary MIB (SA-DSAN-MIB) was updated to add support for the following functionality:

- Made single MIB to support multiple DSAN product lines.
- Added conformance statements.

The DSAN SNMP agent capabilities MIB (SA-DSAN-AGENT-CAPABILITY) was added to describe the supported MIB object group from DSAN 8211 System Release 4.00.11.

Resolved Software Items

The following table details software features that are added or updated in DSAN 8211 System Release 4.00.11.

Added CLI support for manual download of DSAN configuration file and SI data file	
Description	Updated Host processor application code to support manual download of DSAN configuration file and SI data file, as follows: ■ No out-of-band (OOB) SI data delivery was necessary. ■ Added new CLI and SNMP MIB objects for the download operation. ■ Download may be triggered by either CLI or SNMP. ■ Added CLI diagnostic page 15 to show the status of manual configuration download.

Added support for in-band reception of EAS (SCTE-18) messages	
Description	Updated Host processor application code to support in-band reception of EAS (SCTE-18) messages, as follows: ■ Used Major and Minor channel numbers in the EAS message for a details channel. ■ Added new CLI and SNMP MIB objects for setting the default EAS forcetune output channel and EAS priority threshold. ■ Added CLI diagnostic page 14 to show EAS status and event history.

Removed mandatory DHCP options 66 and 67	
Description	Options 66 and 67 in DHCP option 55 parameters are no longer required. Minimum DHCP option 55 parameters required are 1, 3, 6, 15, 51, and 54.

Updated bootloader image to prevent flash invalidation on repeated power-up failure	
Description	Modified the bootloader image to prevent the invalidation of flash images in the event of repeated failures at start-up. Previously, the boot would invalidate the flash image after 7 repeated start-up failures and try to download a new image. This has been disabled to prevent accidental triggering.

Update CLI diagnostic pages	
Description	Updated Host processor application code to remove support for the following CLI diagnostic pages: ■ 4.3 eCM Available Flows based on ADSG Tunnels ■ 4.4 Out-of-Band (OOB) Receiver Information ■ 4.5 DAVIC Receiver Details Page ■ 4.6 DAVIC Status Log Page ■ 4.7 DAVIC OOB Available Flows Page Updated Host processor application code to add support for the following CLI diagnostic pages: ■ 14.0 EAS Status ■ 15.0 Manual Configuration Download

Update SA-DSAN-MIB and agent capabilities; improve DSAN SNMP agent performance	
Description	Made changes to the SA-DSAN-MIB and its agent capabilities statement, as follows: ■ Added new SNMP MIB objects to support manual configuration download and default EAS forcetune parameter setting. ■ Added conformance statements to the SA-DSAN-MIB. ■ Updated the agent capabilities for DSAN 8211 based on supported MIB object groups in the conformance statements. Made enhancement to Host processor application code to improve the SNMP request handling on the following tables: ■ saDsanSnmpMgrTable ■ saDsanEventLogLevelTable ■ saDsanSessionTable

Improve general system performance	
Description	Updated Host and Video processor code to improve system performance as follows: ■ Improved the overall analog channel power flatness by changing the default BL81K ASIC DAC gain setting. Also improved channel 99 video quality by changing the default BL81K ASIC DirectRF shifting value. ■ Changed the BL81K DDR2 memory clock timing from 256 MHz to 192 MHz for improved BL81K memory performance. ■ Resolved the incorrect display of FEC stat (RS Tot Blocks count) when a counter is rolled over. Reported the FEC stat rollover event to the log file. ■ Supported the PSI information extraction from the PAT/PMT table carried in multiple MPEG2 TS packets. The maximum size of PAT/PMT table supported was 1024 bytes. ■ Adjusted the runtime PSI packet monitoring interval. With this adjustment, it took 0-60 seconds to fully detect the PID change of individual channel. ■ Resolved spurious "lid opened" alarm on a system bootup when the lid was closed. ■ Initialized the system clock with the eCM time.

Update DSAN Configuration Generator tool to create the DSAN configuration file	
Description	Updated the DSAN Configuration Generator stand-alone Windows-based application tool to create the DSAN eHost configuration file manually.

Outstanding Software Items

The following table details software items that remain unresolved in DSAN 8211 system release 4.00.11.

Occasional Missing Characters in Closed Captions	
Incident #	CSCtt37639
Severity	3
Description	Some contents cause occasional missed characters in the Closed Captioning data. This issue has been confirmed by BroadLogic to be a known issue with the BL81K ASIC. SCTE-20 and SCTE-21 closed captions are carried in MPEG2 User Data within the video PID stream. Testing with content shows a typical dropped character pair about once every 10 seconds with content that has been 3:2 pulldown encoded (conversion of film frame rate to NTSC frame rate).

For Information

If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.

Cisco Systems, Inc.
5030 Sugarloaf Parkway, Box 465447
Lawrenceville, GA 30042

678 277-1120
800 722-2009
www.cisco.com

December 2011 Printed in USA Part Number 4043370 Rev A