



September 2006

PowerKEY CableCARD Module Software Release 1.49p2 Release Notes

Overview

Introduction

Cisco® introduces software release 1.49p2 for PowerKEY® CableCARD™ Module 1.0 (CableCARD module). These release notes detail the site requirements and implemented change requests associated with this release. In addition, these release notes provide answers to common questions regarding the download of CableCARD module software.

Audience

These release notes are written for system operators, sales and program managers, Cisco Services engineers, and field technicians.

Related Publications

You may find the following publications useful as resources when you implement the procedures in this document. Check the copyright date on your resources to assure that you have the most current version. The publish dates for the following documents are valid as of this printing. However, some of these documents may have since been revised:

- *Best Practices for Using Single-Stream PowerKEY CableCARD Modules* (part number 4015091, expected publish date: late 2006)
- *Recommendations for Setting System Information to Out-of-Band* (part number 738143, published April 2006)
- *Setting Up the PowerKEY® CableCARD™ Module on the DNCS For SR 2.5/3.5 and SR 4.0* (part number 4011765, published January 2006)
- *Setting Up the PowerKEY CableCARD Module on the DNCS For System Release 2.2/3.2 With Service Pack 3* (part number 4009745, published September 2005)

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- *SR 2.2/SR 3.2 Service Pack 2 Release Notes and Installation Instructions* (part number 4001158, published February 2005)
- *PowerKEY CableCARD Module Revision 1.0 Release Matrix for Software Version 1.49* (part number 4004036, published May 2005)
- *Setting Up the PowerKEY® CableCARD™ Module on the DNCS For System Releases 2.2 and 3.2 Service Pack 2* (part number 736131, published December 2004)
- *Downloading New Client Application Platform Software Installation Instructions* (part number 4003052, published September 2005)
- *Setting Up the PowerKEY® CableCARD™ Module on the DNCS For System Releases 2.2 and 3.2 Service Pack 1* (part number 745234, published October 2004)
- *Explorer® Digital Home Communications Terminal Staging Guide* (part number 734375, published December 2003)
- *Digital Network Control System Online Help* (available from the DNCS application or as a separate CD)

Document Version

This is the seventh release of these release notes. This release includes information about downloading the software from the Cisco FTP server along with information about the diagnostic screen display. The previous version of this document supported CableCARD module software release 1.49.

Site Requirements

System Requirements

CableCARD module software release 1.49p2 is not dependent upon the system release version of the DNCS. Therefore, it is compatible with all supported system releases.

Important! For CableCARD module upgrades, settop.res v76 or later is required.

Upgrade Path

You can perform a code version table (CVT) download to go from CableCARD module software release 1.48 (or later) to release 1.49p2. To obtain CableCARD software release 1.49p2, refer to **Software Download from FTP Server**, next in this section. For complete download instructions, refer to *Downloading New Client Application Platform Software Installation Instructions*.

Important! Follow the recommendations in *Recommendations for Setting System Information to Out-of-Band* and *Best Practices For Using PowerKEY CableCARD Modules* before upgrading to CableCARD module software release 1.49p2.

Software Download from the FTP Server

If you are downloading this application from the FTP server maintained by Cisco Services, you will need the following information:

- **FTP site address:** **ftp.sciatl.com or 172.18.45.203**
- **User Name:** **anonymous**
- **Password:** **email address of user logging in**
- **FTP Directory Path:** **/pub/scicare/RELEASED/CableCARD_1.49p2**
- **File Name:** **CableCARD_1.49p2.tar.gz**

Note: If you accessing the FTP server from a connection that is *behind* the Cisco network firewall, then the FTP directory path is:
/external_pub/scicare/RELEASED/CableCARD_1.49p2.

Important!

- You will need to extract the SAICblcrd package from the TAR file. Detailed instructions for performing this task as well as for installing the package are found in **Chapter 2** of *Downloading New Client Application Platform Software Installation Instructions*.

Site Requirements

TIPS:

- When installing the PowerKEY CableCARD software on the DNCS, look for the SAIcblcrd (CableCARD) package instead of the SARA ResApp package as indicated in **Chapter 2** of *Downloading New Client Application Platform Software Installation Instructions*.
- The file you will adding is going to be in the /dvs/cablecard/ directory. The file you should install is pdl_v149a.rom. There is a second file in the directory called pdl_149b.rom. This file is provided for sites (labs) that need to test switching between versions of CableCARD module code. These files are the same with the exception of the version labeling.

Diagnostic Display

After loading CableCARD module software release 1.49p2 onto the CableCARD module, the CableCARD module diagnostic screen on the TV will show the version as **OS Build: 2.3.149.3 Wed May 10 2006**. This is the value your installers and staging area personnel should look for in order to confirm that the CableCARD module has downloaded the correct software.

What's Fixed?

Overview

This section outlines the solutions implemented to correct several issues discovered in previous releases of CableCARD module software.

Implemented CRs

CR 51911 Software Enhancements Eliminate CableCARD Module Resets Caused by Split Channels

Split channels are channels that change content during the broadcast day by sending updated SAM tables when the content change occurs. For example, channel 100 broadcasts CNN from 8 a.m. to 8 p.m. and then broadcasts Fox News from 8 p.m. to 8 a.m. Previously, when this content change occurred, the CableCARD module would reset. This reset caused a brief interruption in service. Now, out-of-band SAM table updates related to split channels occur without resetting the CableCARD module.

CR 59222 Software Enhancements Correct Data Channel Loss

This fix allows the CableCARD module to detect and recover from a data channel error condition in order to avoid a lock-up condition that could occur with certain hosts. Previously, subscribers had to unplug the TV or remove the CableCARD module in order to recover from this condition.

CR 59223 CableCARD 1.49p2 Includes a Performance Improvement Enhancement

This enhancement improved scheduling of the SAM table version check and added better error handling in the SAM table loading procedure.

CR 59260 Software Enhancements Provide Improved Downloads

Previously, the CableCARD module could become "stuck" in download mode if a OSM UNConfig trigger was inadvertently sent from the DNCS. Now the CableCARD module ignores OSM download requests.

Note: The CableCARD module fully supports CVT downloads.

Common Questions Regarding the Download of CableCARD Module Software

Overview

This section provides answers to common questions regarding the download of CableCARD module software.

Important! Follow the recommendations in *Recommendations for Setting System Information to Out-of-Band* and *Best Practices For Using PowerKEY CableCARD Modules* before upgrading to CableCARD module software release 1.49p2.

Common Questions

Q: How long should it take for a CableCARD to load new code?

A: The CableCARD module should load code at nearly the same speed as other CVT-based products. For example, if digital home communication terminals (DHCTs) take 5 minutes to load code, then the CableCARD module should also take 5 minutes to load code. Note, however, that the specification for the host devices does not provide a status indicator as we see with DHCTs. Cisco has received reports of host devices getting “stuck” while downloading code. Field experience has shown that giving the CableCARD module a reasonable amount of time (1.5 times the normal DHCT download time) and then rebooting the host device, or removing and then reinserting the CableCARD module, resolves this issue.

Q: How can I make downloads as fast as possible?

A: The best way to provide fast downloads is to remove any unused files from the image list. If your site has the Doctor Utility version 5.1.0.1 (or later) or the listCVT utility, then you can use either utility to identify unused files on the image list.

Q: What will subscribers see on their host device?

A: In most cases, subscribers will receive a loading software message that is generated by the host device.

Q: What if the customer reboots the TV during the download process?

A: The CableCARD module operates from a bootloader program. If the downloadable software on the CableCARD module is corrupted or missing due to an interrupted download, the bootloader program remains intact and functional. In these cases, the CableCARD module will restart the download process.

Q: Can I download new code to a group of CableCARD modules?

A: Yes. The CableCARD module bootloader program supports CVT group downloads even when the module is used with a one-way host device. To take advantage of this feature, you must first load the EMM CD for the CableCARD module into the DNCS and put the CableCARD module in service (one-way or two-way). A complication arises in that the CableCARD module should be inserted into the host device when it is placed into the CVT group. This allows the module to receive its appropriate group assignment.

Important! The CableCARD module should also be inserted into a host device when it is removed from the group.

Q: Why should I download software version 1.49p2 to all CableCARD modules?

A: Although CVT download groups are supported and a group assignment message can be created and placed on a “fast refresh list” to help CableCARD modules receive their CVT group assignment, this approach is only reasonable for limited types of testing. Note that this is also difficult to accomplish as part of your normal system operations.

Q: Should we expect any CableCARD modules to fail as a result of the download process?

A: Yes. This download process poses a very small risk that some CableCARD modules may encounter a problem. Field experience with these modules has shown this risk to be exceptionally low. System operators should be prepared to replace some CableCARD modules in the rare case of a download-related failure.

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.



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