



December 2006

Setting Up Dual Sources and Hiding Services from One-Way CableCARD™ Hosts

Overview

Introduction

System operators have identified a need for CableCARD™ hosts to tune different sources when a particular service is selected based on the capabilities of the host. Fully interactive set-tops with a CableCARD slot can operate as a two-way CableCARD host, while the majority of retail CableCARD hosts do not and are one-way only. For example, the vast majority of CableCARD host televisions sold at retail stores are one-way devices and cannot perform interactive services like VOD.

A new feature in the Digital Network Control System (DNCS) allows you to specify two sources for a single Service Application Manager (SAM) service. This feature allows you to identify one source for two-way CableCARD hosts, as well as existing set-tops with embedded security, and another source for one-way CableCARD hosts.

In addition to adding the ability to tune to a different source, a second capability has been provided. You can now hide services from a one-way CableCARD host. This additional capability allows you to offer selected services to only the existing embedded security set-top population as well as to the newer two-way CableCARD host devices.

How One-Way CableCARD Hosts Get Services

The DNCS builds the channel map (that is passed from the CableCARD module to the CableCARD host) by looking for SAM services with a watchtv or music application URL. Typically, any service using one of these URLs will be put into the CableCARD channel map. The DNCS allows you to add an extension to the SAM services application URL in order to cause one of the following behaviors:

- The Cable Card host will tune to an alternate source ID when the service is selected.
- The DNCS will not include the service in the CableCARD channel maps when they are built.

In addition, you can use this feature to prevent PPV and IPPV services from displaying as "black screen" services on one-way CableCARD hosts. This condition is prevented by modifying the URL for the event use service that is associated with the PPV/IPPV service.

As indicated earlier, these modifications only impact the service information sent to one-way hosts.

Purpose

This document provides the procedure for specifying two sources for a single SAM service. This procedure is useful when provisioning one-way CableCARD host devices (for example, most retail televisions with CableCARD slots). A procedure for hiding services from one-way CableCARD hosts is also provided. This procedure does not affect services on two-way hosts such as newer CableCARD host-equipped set-tops.

System Requirements

These features are now available in the following System Releases (SRs):

- SR 2.2 Service Pack 3*
- SR 2.5/3.5/4.0 Service Pack 1
- SR 4.0*
- SR 2.7/3.7/4.2

***Note:** For system releases marked with an asterisk, IPPV/PPV services are not hidden from CableCARD hosts.

Audience

This document is written for anyone using the Digital Broadband Delivery System (DBDS) with the Cisco® Resident Application (SARA).

Document Version

This is the third release of this guide. In addition to minor text and graphic changes, the following table provides the technical changes to this guide.

Description	See Topic
Added information on blocking PPV and IPPV services	System Requirements (on page 2)

SAM Service Configuration Options

Introduction

This section provides the information you need for configuring the SAM service for using dual sources or for hiding services from one-way CableCARD hosts. For detailed steps on modifying a SAM service, see the online Help for your Digital Network Control System (DNCS).

Assumptions

This information assumes that the following conditions have been met:

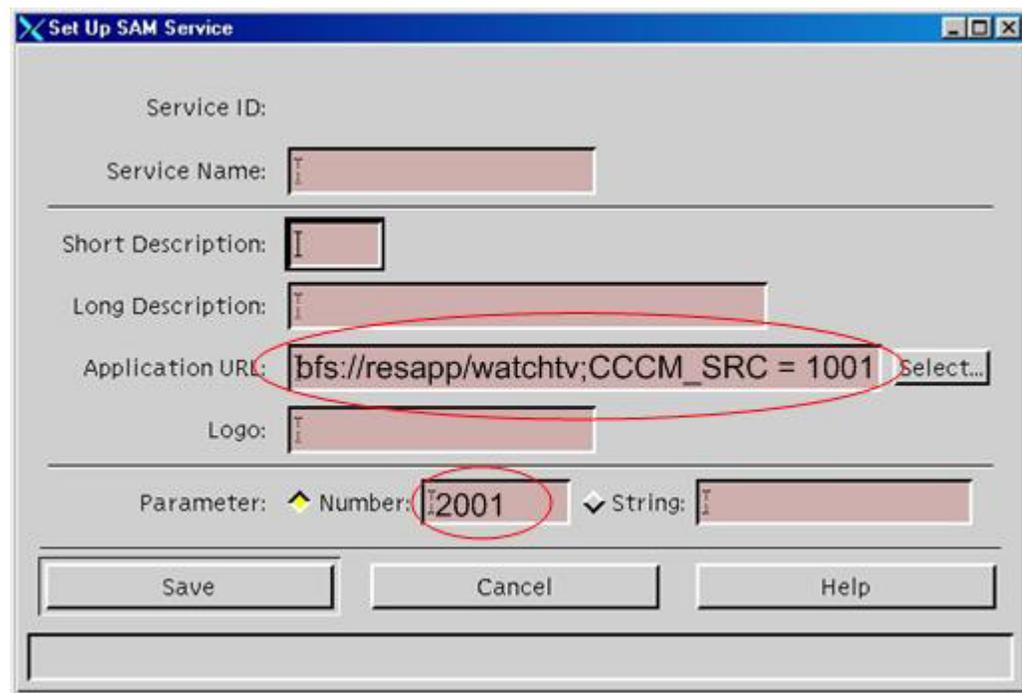
- A DNCS release with the CableCARD Alternate Source feature has been installed.
- The new digital source definitions have been added to the DNCS.

Specifying Two Sources for a Single SAM Service

To illustrate the dual source concept, assume that in your network you have two services: NBC analog and NBC digital. The analog NBC service uses source ID 1001. The digital NBC service uses source ID 2001. You want one-way CableCARD hosts to tune to the analog source ID (1001). You want the all other devices to tune to the digital source ID (2001).

To specify two sources for a single SAM service, you need to modify the Set Up SAM Service window as follows:

- Modify the existing Application URL to include the CCCM_SRC=#### (where #### is the source ID of the service that you want the CableCARD host to display). In our example, the URL would be `bfs://resapp/watchtv;CCCM_SRC=1001`.
- Confirm that the number in the Parameter field is the source ID of the service that you want the set-top to display. In our example, the source ID would be 2001.



The screenshot shows the 'Set Up SAM Service' dialog box with the following fields and values:

- Service ID: [Empty]
- Service Name: [Empty]
- Short Description: [Empty]
- Long Description: [Empty]
- Application URL: `bfs://resapp/watchtv;CCCM_SRC = 1001` (circled in red)
- Logo: [Empty]
- Parameter: Number: `2001` (circled in red), String: [Empty]

Buttons: Save, Cancel, Help

Hiding Services from One-Way CableCARD Hosts

To hide services from one-way CableCARD hosts, you create or modify the Application URL using the NO_CCCM modifier. Adding this modifier causes the DNCS to build CableCARD channel maps without including this service. In our example, the URL would be `bfs://resapp/watchtv;NO_CCCM`. The parameter field still identifies the source ID of the service that set-tops will display.

The screenshot shows a dialog box titled "Set Up SAM Service". It contains several input fields and buttons. The "Application URL" field is highlighted with a red oval and contains the text "bfs://resapp/watchtv;NO_CCCM". Other fields include "Service ID:", "Service Name:", "Short Description:", "Long Description:", "Logo:", "Parameter: Number: 2001", and "String:". Buttons for "Save", "Cancel", and "Help" are located at the bottom of the dialog box.

Recommended Housekeeping

After you have configured your system for dual sources or you have hidden a service from a one-way CableCARD host, you should update the channel map to make the changes take effect. You can trigger this update by following the recommended housekeeping steps in this section or by forcing an update to the channel map. See **Forcing a Channel Map Update**, next in this section.

When you move to a dual source configuration, you may have some SAM services configured for channels that will no longer be used in the channel map. Take the following housekeeping steps to remove any unused SAM services:

- Delete the IPG mapping to this service using the IPG Service List GUI on the DNCS.
- After you delete the IPG mapping to this service, you should also delete the SAM service on the SAM Service List GUI on the DNCS.

Forcing a Channel Map Update

If you do not take the steps under **Recommended Housekeeping**, you must force a channel map update to make your configuration changes take effect. Open any channel map from the Display Channel Map List user interface by double-clicking on the channel map name and click Save. Then close the Display Channel Map List user interface. Note that modifications to the channel map are not necessary. You just need to open and save the channel map to force the update.

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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April 2012 Printed in USA

Part Number 4011367 Rev C