InView 3.6

Installation and Configuration Guide

Please Read

Important

Please read this entire guide. If this guide provides installation or operation instructions, give particular attention to all safety statements included in this guide.

Notices

Trademark Acknowledgments

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of cisco trademarks, go to this URL: **www.cisco.com/go/trademarks**.

Third party trademarks mentioned are the property of their respective owners.

The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Publication Disclaimer

Cisco Systems, Inc. assumes no responsibility for errors or omissions that may appear in this publication. We reserve the right to change this publication at any time without notice. This document is not to be construed as conferring by implication, estoppel, or otherwise any license or right under any copyright or patent, whether or not the use of any information in this document employs an invention claimed in any existing **or** later issued patent.

Copyright

Contents

About This Guide

Introduction

The InView™ Client software is a client application that may be used with a variety of server configurations. The InView software interacts with existing software on the Explorer Digital Home Communications Terminal (DHCT) and the Digital Broadband Delivery System (DBDS) to provide subscribers with the ability to view HTML content (for example, stock market information or weather reports) on their TV.

This guide provides service providers with instructions for installing and configuring the InView Client 3.6 software and new InView services on the Digital Network Control System (DNCS). This guide also provides options for how you want subscribers to view the InView application, as well as options for configuration parameters.

Scope

This document discusses the following procedures:

- Installation and configuration of the InView Client software
- Provisioning the DNCS for the InView application
- Configuration for a new InView service on the DNCS

Audience

This document was written for system operators. Field service engineers and Cisco Services engineers may also find the information in this document helpful.

Related Publications

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

- *Designing Content Using Fusion 1.3* (part number 4019791)
- *Recommendations for Data Carousel Rate Management* (part number 716377)
- *Recommendations for Installing Applications on the DNCS and Application Server* (part number 749638)
- *Services Portal 3.0 Installation and Configuration Guide* (part number 745238)

Document Version

This is the second release of this document.

1

Install the InView Client 3.6 Software

This chapter contains instructions for preparing your system for the InView application; an application that provides InView services to your subscribers.

Notes:

- The procedures are listed in sequential order, and they are written with the assumption that you will complete them without interruption.
- The content that subscribers can access from the InView main menu is referred to as InView services. For instructions on configuring new InView services, go to ***Configure a New InView Service*** (on page 49).

In This Chapter

System Requirements

To run the InView Client 3.6 software, you must have the following software installed on your system:

- System Release (SR) CV 3.4 or later
- HTML Engine 3.8
- eVOD™ 1.2
- SA Resident Application (SARA) 1.55 or later
- PowerTV® Operating System (OS) 3.5.x and 5.4, or later

Software and System Release Compatibility

InView Client 3.6 software was tested and released against SR CV 3.4 and the following set-tops and software.

Important: If you wish to run eVOD error reporting, you must comply with the information in the following table.

Explorer® DHCT	OS	SARA
1850 (rev 1.0, 1.1, 2.0, and 2.1)	6.24.0.18	1.61.6.1
4200SD (rev 1.0, 1.3, 1.4, and 1.5)	6.24.0.14	1.61.4.1
4200HD (1.0, 1.1, .1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, and 2.0)	6.24.0.15	1.61.6.1
4250SD (rev 1.4)	6.24.0.17	1.61.6.1
4250HD (rev 1.3)	6.24.0.17	1.61.6.1
8300SD	6.14.83.2-1002	1.89.20.1
8300HD	6.14.83.2-1002	1.89.20.1

Notes:

- InView 3.6 is backward compatible with InView 3.4.
- This section provides compatibility of released software. If you have a question about current testing status against InView Client 3.6, contact the representative who handles your account.
- For a complete configuration listing for the release of InView Client 3.6, please contact Cisco Services.

Before You Begin

Before installing the software, we recommend that you complete the following procedures:

- Install the application files in a sub-directory
- Determine how you want subscribers to access InView services

Install Application Files in a Subdirectory

We recommend that system operators and application developers install their application files in a subdirectory in the /export/home/dncs/apps directory. By default, the apps directory does not exist on the DNCS or the SARA server. When you are installing InView, an automatic procedure exists that will create the required directories.

Important:

- Application files installed in the recommended directories are backed up as part of our backup procedures and can be restored later, if needed.
- If you are upgrading from any version of InView software prior to version 3.0.x, it is recommended that you uninstall your existing software before you install InView Client 3.6.

Time to Complete

Installing the InView software and configuring the application on the DNCS takes approximately 30 minutes to complete.

Suggested Reference

Refer to the *Recommendations for Installing Applications on the DNCS and Application Server* (part number 749638) document for information about the following procedures:

- Overview of the process by which system files are backed up
- Recommendations for installing application files on the DNCS and the Application Server
- Instructions for creating the apps directory and related subdirectories
- Methods for installing applications

How Do Subscribers Access InView Services?

Before installing the software, decide how you want subscribers to access the InView services. You can only choose one of the following access options:

- Services Portal menu
- InView main menu
- A specific channel

Accessing InView From the Services Portal Menu

If you choose this option, subscribers will access the Services Portal menu by pressing the **Guide** button on the set-top or the **A** key on their remote control. They can then scroll through the Services Portal menu and select an InView service such as Games, News & Sports, or Entertainment.

The procedures in ***Create a SAM Service*** (on page 42) section of this document include instructions for enabling the use of the InView main menu for the Services Portal.

Accessing InView From the InView Main Menu

If you choose this option, subscribers can press the **A** or **B** key on their remote control to launch the InView main menu. They can then select an InView service from this menu.

The procedures in the ***Create a SAM Service*** (on page 42) section of this document include instructions for configuring the InView main menu to open when the **A** key or **B** key is pressed on the remote control.

Accessing InView From a Specific Channel

By choosing the channel option, your subscribers can directly access the InView service by viewing a specific channel (tuning to this channel launches InView). The subscriber can tune to the channel by pressing the channel up and channel down buttons on the set-top or by navigating to the channel using either the remote control or a keyboard.

The procedures in the ***Map a Service to a Channel*** (on page 45) section provide instructions for configuring the InView main menu to open by tuning to a specific channel.

Install InView Software on the DNCS

Overview

After installing the application files in a subdirectory and determining how subscribers will access InView services, you are ready to install the InView Client 3.6 software on the DNCS. This section provides installation instructions.

Contents of the InView Package

InView, packaged on the Fusion 1.3 CD (part number 4014183), contains the following directories:

- InView
- HTMLEngine
- eVOD

Installing the Software on the DNCS

Note: System components do not have to be shut down to install this software.

1. Open an xterm window on the DNCS, if necessary.
2. Type **su root** and press **Enter** to log on as root user. The password prompt appears.
3. Type the root password and press **Enter**.
4. Insert the Fusion 1.3 CD (part number 4014183) that contains the InView application into the CD-ROM drive of the DNCS. The system automatically mounts the CD to /cdrom/cdrom0 within 30 seconds.
5. Type **df** and press **Enter** to confirm that the system mounted the CD successfully. The last line of the df command output lists the number of free disk blocks on the CD. This is your indication that the system successfully mounted the CD.
6. Type **swmtool -d /cdrom/[directory where CD was mounted]** and press **Enter**.
7. From the Admintool: Add Software window, click **Cancel**.
8. From the Admintool: Software window, click **Properties** and select **Package Administration**.

9 Set the options on the Admintool: Package Administration window to the following values:

- **Existing Files?:** Overwrite
- **Existing Packages?:** Overwrite
- **Existing Partial Installations?:** Ask
- **Install setuid/setgid Files?:** Yes
- **Run setuid/setgid Scripts?:** Yes

Note: For the remaining options in this list, retain the default value.

10 Click **OK**. The Admintool: Software window reopens.

11 Click **Edit** and select **Add**. The Admintool: Add Software window opens.

12 Select the **InView Client**, **eVOD**, and **HTMLEngine** options and then click **Add**.

13 When the system displays a copyright message indicating that InView installed successfully, place the pointer within the Admintool: Add Software window.

14 Right-click and choose **History** and then **Store log as new file**.

15 In the Save As field of the Term Pane window, type a name to save the file using the following format: **/dvs/dncs/tmp/inview_inst_[Date].out**.

Note: Use today's date in *mmddyy* format for the [Date] portion of the log name.

16 Click **Save**. The system creates a log in the /dvs/dncs/tmp directory that contains current installation messages.

17 Press **Enter** to exit the Admintool: Add Software window.

18 From the Admintool: Software window, click **File** and select **Exit**.

19 Type **cd /** and then press **Enter**. The root directory becomes the working directory.

20 Eject the CD from the CD-ROM drive.

Edit the System Files

During the installation of the InView application, the following files are saved to the DNCS in the bin directories.

Important: Because these files accumulate with each revision of software, they will never be overwritten. Therefore, if you are upgrading to a new version of InView and a problem exists, you can reload the previous version of software.

- **InView_3.6_d.ptv**
- **InView_3.6_p.ptv**: this file overwrites the InView.ptv file
- **InView_3.6_template.cfg**: used to create a configuration file if you are installing InView for the first time

Verifying Files in the InView Directory

Verify that the InView.ptv, HTMLEngine.ptv, and inview.cfg files are in the export/home/dncs/apps/InView directory.

1. Open an xterm window.
2. Type **cd /export/home/dncs/apps**.
3. Type **ls**. The following directories should be listed and should each contain their respective .ptv file.
   - InView
   - HTMLEngine
   - eVOD

   Important: If you are installing the InView application for the first time, the inview.cfg file will not be present. You will need to build your own configuration file using the InView_3.6_template.cfg file. Go to ***Building Your Configuration File*** (on page 9) for details.
4. Are the files in the list?
   - If **yes,** access a text editor to open and edit the inview.cfg file using the parameters in ***Reviewing Configuration Parameters*** (on page 9).
   - If **no,** repeat the ***Installing the Software on the DNCS*** (on page 6) procedures. If the files are not in the list after repeating the procedure, call Cisco Services for assistance.

Building Your Configuration File

To build your configuration file, complete the following steps:

1. Access the export/home/dncs/apps/InView/3.6/bin directory and open the inview_3.6_template.cfg file.
2. Edit the file as needed.
3. Save the file to the /export/home/dncs/apps/InView/3.6 directory.

Reviewing Configuration Parameters

The parameters in the inview.cfg file enable system operators to decide how to configure the InView main menu. This section includes the optional and required parameters that you must use when editing the inview.cfg file.

Required Configuration Parameter

The following parameter, StartURL, is required. You must define this parameter for the InView browser to operate.

Parameter	Value	Description
StartURL	URL	Identifies the URL that will be accessed when the InView main menu is activated

Optional Configuration Parameters

The following tables provide information about the optional configuration parameters. These parameters should be set up appropriately for the service you wish to offer. It is recommended that you save this customized configuration file as [service].cfg, where [service] is the name of the service.

Example: myservice.cfg

Optional HTML Engine Parameters

Optional HTML Engine Parameters	Values	Description
ActiveCursorColor	Integer	Specifies the color of the outline cursor when selected
AppHandlesTVColon	Boolean	Specifies the InView main menu that is responsible for handling the TV-captured window by requesting SARA to create a Service Resource Environment (SRE) compliant window
CursorColor	Integer	Specifies the color of the outline cursor

Optional HTML Engine Parameters	Values	Description
CursorType	Integer 0-1	Specifies the type of cursor used for HTML navigation: **0** = Hand **1** = Outline **Default** = Outline
Environment DomainName=	String	Expands URLs that are not fully qualified
Environment HTMLEnginePath=	String	Specifies the source of the HTML engine when installing the engine in RAM. This option is normally used by developers
Environment NameServer=	Numerical IP address	Identifies the IP address of the DNS server
Environment SSLEnabled=	Integer	Specifies if the Secure Socket Layer (SSL) is to be enabled: **1** = ON **0** = OFF (default)
He_DoubleBuffer	Integer	Sets the double buffering mode: **0** = WaitNone **1** = WaitHTML(no Images) **10** = Wait All
HTMLPreference He_AntiAliased	Integer 0-3	Specifies how to turn on the flickering control for horizontal lines: **0** = Disable the anti-flickering **1** = Enable the anti-flickering only for lines **2** = Enable the anti-flickering only for images **3** = Enable the anti-flickering for both lines and images **WARNING:** Assigning a value of 2 or 3 to the HTMLPreference HE_AntiAliased parameter will cause objects to be redrawn on the screen several times. HTMLPreference HE_AntiAliased parameter values of 2 or 3 result in slower performance.

Optional HTML Engine Parameters	Values	Description
HTMLPreference He_TenKeY	Integer 0, 3, 4, 5	Enables 10-key tuning within the InView service; users can tune to other channels using the following remote control keys: **0** = Disable **3** = Max channel number 999 **4** = Max channel number 9999 **5** = Max channel number 99999
ProxyHost	Numerical IP address	Identifies the IP address of the proxy server you wish to use
ProxyOverides	Numerical IP address	Identifies the IP address of the DNS server to be contacted directly rather than through the proxy host
ProxyPort	Integer	Identifies the port number of the proxy server
UserTextSize	Integer	Specifies the default font size to be used when displaying HTML content

Optional InView Client Parameters

Optional InView Client Parameters	Values	Description
EnableAboutScreen	Integer (0-1)	If enabled, the Info button will launch the About screen **Note:** The default setting is (1) True.
AppBarURL	URL*	Specifies the path of the AppBar JPEG resource file
BarAdURL	URL*	Specifies the path of the AppBar Advertising logo JPEG resource file
BarMSOURL	URL*	Specifies the path of the AppBar MSO logo JPEG resource file
BusyIndicatorURL	URL*	Specifies the path of the busy indicator .gif or animated .gif file resource **Note:** If this variable is omitted or cannot be retrieved, the busy indicator will not appear on the screen.
ChromaColor	Integer (red, green, blue)	Specifies the chroma color value **Note:** The default chroma color value is 240,8,8.
HTMLPreference He_PersistDialogPath	String	Specifies the path of the customized exit dialog **Note:** The path needs to end with persistent/ (for example, http://servername/persistent/).

* URLs are limited to bfs, snfs, or file.

Optional InView Client Parameters	Values	Description
ErrorURL	URL*	Specifies the path of the HTML page that will display when there is a problem in loading another page **Note:** This URL is used only when two-way communication is not available and the DisableTwoWayComCheck option is not checked.
EVOD_ConfirmationAcceptDefault	String	Defines the text for the purchase confirmation screen key (A) (unless defined by the content)

Optional InView Client Parameters	Values	Description
EVOD_ConfirmationCancelDefault	String	Defines the text for the purchase confirmation screen key (C) (unless defined by the content)
EVOD_ConfirmationFooterDefault	String	Defines the text for the purchase confirmation screen footer (unless defined by the content)
EVOD_ConfirmationHeaderDefault	String	Defines the text for the purchase confirmation screen header (unless defined by the content)
EVOD_ConfirmationText1Default	String	Defines the text for the purchase confirmation screen for line 1 (unless defined by the content)
EVOD_ConfirmationText2Default	String	Defines the text for the purchase confirmation screen for line 2 or line 3 (unless defined by the content)
EVOD_ConfirmationText3Default	String	Defines the text for the purchase confirmation screen line 3 (unless defined by the content)

* URLs are limited to bfs, snfs, or file.

Optional InView Client Parameters	Value	Description
EVOD_SvcUnavailAcceptDefault	String	Defines the text for the key (A) to dismiss the Service Unavailable dialog (unless defined by the content)
EVOD_SvcUnavailHeaderDefault	String	The Service Unavailable dialog is shown whenever an overlay InView service is launched on top of a channel-based InView service. This text is the Service Unavailable dialog header (unless defined by the content)
EVOD_SvcUnavailText1Default	String	Defines the text for the Service Unavailable dialog line 1 (unless defined by the content)
EVOD_SvcUnavailText2Default	String	Defines the text for the Service Unavailable dialog line 2 (unless defined by the content)
EVOD_SvcUnavailText3Default	String	Defines the text for the Service Unavailable dialog line 3 (unless defined by the content)
RestictToTitleSafe	Boolean	If the value is set to TRUE, the HTML content is restricted to the Title Safe area of the TV, which is 559 x 424 pixels **Note:** The default is full screen.

Optional InView Client Parameters	Value	Description
ScreenSaverMode	Integer 0-2	Specifies what will happen when the Screen Saver Idle time has been reached: **0** = display a text string **1** = exit the application **2** = toggle to TV **Note:** To toggle to TV mode, you must specify a toggle key in the inview.cfg file. The default is text string.

Optional InView Client Parameters	Value	Description
ScreenSaverTO	Integer	Specifies the idle time in minutes to display in the screen saver. The default idle time is 20 minutes **Note:** If this value is set to 0, the screen saver will never appear.
SetProfileData_HomeID	String	Specifies the string value of the home ID to be used as an index to the HTML engine JavaScript profile data object
SetProfileData_ZipCode	String	Specifies the string value of the zip code to be used as an index to the HTML engine JavaScript profile data object
TVRect	Boolean	If the value is set to TRUE, the InView client will create a TV window **Note:** This window will override any TV window specified in the HTML content.

Optional InView Client Parameters	Value	Description
TVRectPos	String	Specifies the dimensions for the TV window **Format:** Xmin, Ymin, Xmax, Ymax
UseWebRatings	Integer	Specifies whether to recognize Web ratings if the content contains them. Use of this option assumes a mapping between Web rating and SARA rating and is contained in the config file: **0** = does not use Web ratings **1** = uses Web ratings
VideoIcon	Integer 0-4	Specifies the location to display the VideoIcon when in Full TV toggle mode: **0** = No Logo **1** = Upper Left **2** = Upper Right **3** = Lower Right **4** = Lower Left **Note:** The default is 0.
VideoIconTO	Integer	Specifies the time in seconds to display the video icon **Notes:** ■ If set to 0, the icon will never time out and will always be displayed. ■ The default is 0.
VideoIconURL	URL*	Specifies the path of the VideoIcon JPEG resource

* URLs are limited to bfs, snfs, or file.

2

Preparations to Add the InView Carousel

This chapter addresses how to prepare for the addition of a new InView carousel on the DNCS. After you successfully complete these procedures, you will be ready to add the InView carousel.

In This Chapter

Determine the Available Bandwidth on the BFS for Inband or Out-of-Band Sources

Prior to adding a new inband or out-of-band source, you must to determine the amount of unused bandwidth. To verify the data rate settings and recommendations on managing inband and out-of-band data carousel rates, refer to *Recommendations for Data Carousel Rate Management* (part number 716377).

Verify the Number of Sessions Before Adding an Inband Source

Overview

When a new inband source is added to your system, it will increase the overall session count on the QAM. By verifying the session count *prior* to adding the new inband source, you can determine whether the new inband source was successfully added at the end of these procedures.

Verifying the Number of Sessions on the QAM

Important: If your system is running in an RCS environment, you will need to locate the respective QAM that will carry the new session.

1 Facing the front of the QAM modulator, press the **OPTIONS** button to cycle through the QAM menu screens until you see the **Session Count** screen.

Example: The following diagram shows an example of the Session Count screen.

2 Record the number of sessions in the space provided.

Total Session Count: _____

Note: The session count will be referenced *after* you have completed the remaining procedures in this chapter. This value will allow you to verify that you have successfully added all sessions on the QAM after you have changed its configuration.

3

Provision the DNCS for InView 3.6

This chapter describes how to provision the DNCS for the InView 3.6 application and any associated files. These instructions also include procedures to add and configure a BFS carousel for the application.

In This Chapter

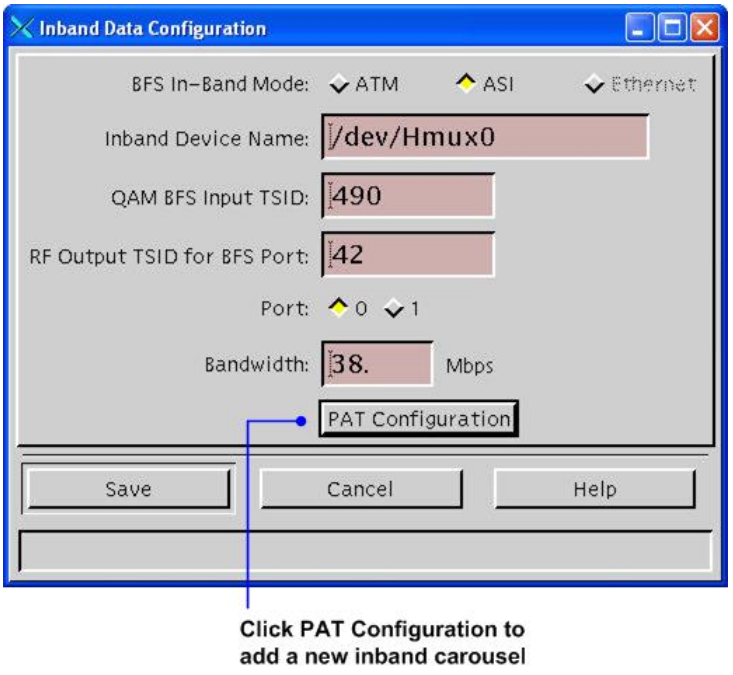
Add a New Inband Carousel

Overview

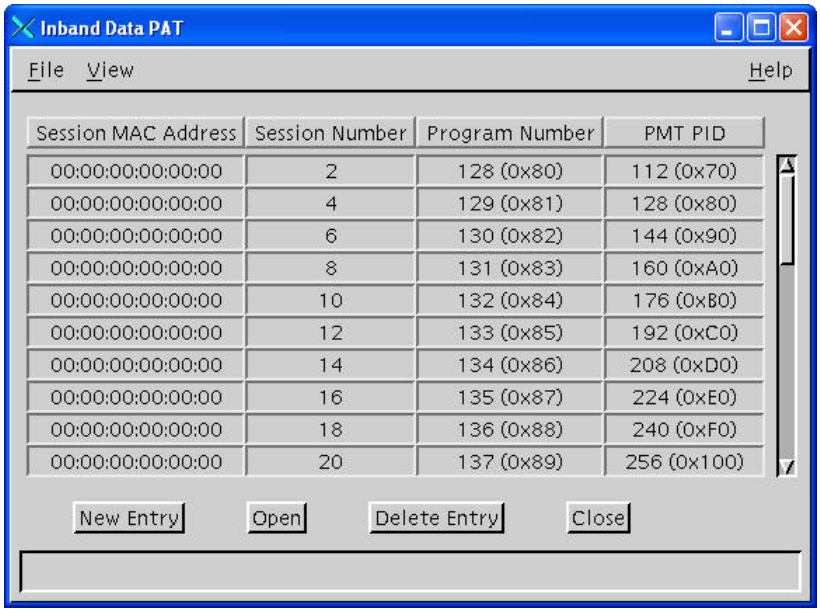
This section includes the procedures for adding a new inband carousel for the InView application. Please note the system configuration you are using and follow the procedures for this task carefully.

Adding a New Inband Carousel

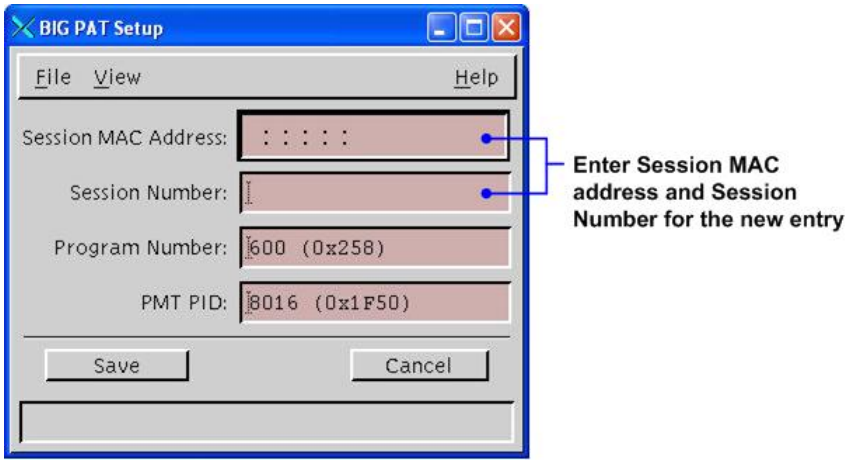
1. From the DNCS Administrative Console, click the **Application Interface Modules** tab.
2. Click **Inband Data Config**. The Inband Data Configuration window opens.



3 Click the **PAT Configuration** button. The Inband Data PAT window opens.



4 Click **New Entry**. The BIG PAT Setup window opens.



5 Type 12 zeros (00:00:00:00:00:00) in the Session MAC Address field and press **TAB**.

Note: You do not have to type the colons in this field.

6 From the Session Number field, enter an even-numbered value that is greater than 200 and record it here _____

Notes:

- Sessions 1-200 are reserved for system-built sessions.
- For consistency purposes, we recommend that you use the same session number while building the BFS source.
- The values in the Program Number field and the PMT PID field appear automatically.

7 Click **Save**. The BIG PAT Setup window closes and the new session is added the Inband Data PAT table.

8 From the Inband Data Configuration window, click **Save**. The following message appears: **Save complete**

9 Click **Done**. The Inband Data Configuration window closes.

Create a BFS Source and Source Definition for the Inband Source

Overview

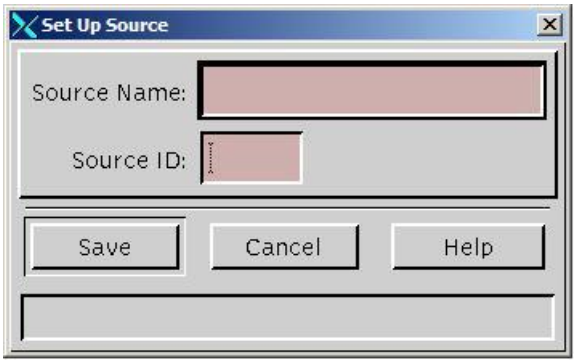
This section describes how to create a BFS source on the DNCS and how to create a source definition for the BFS source.

Adding a BFS Source and Creating a Source Definition

Complete the following steps to create a BFS source (InView) on the DNCS and to create a source definition for the BFS source.

Note: This process activates the source definition and also creates the session.

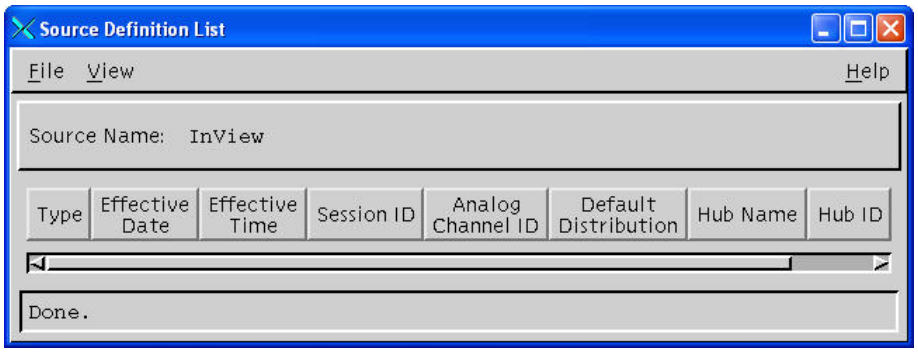
1. From the DNCS Administrative Console, click the **DNCS** tab, click the **System Provisioning** tab, and then click **Source**. The Source List window opens.
2. Select **File** and click **New** to open the Set Up Source window.



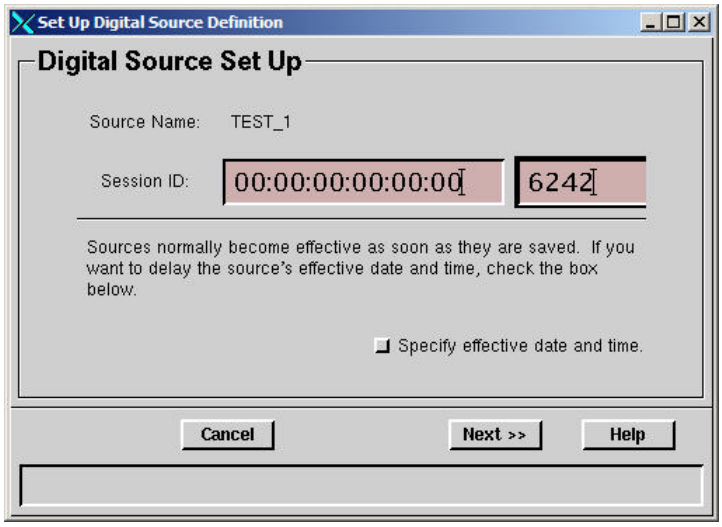
3. Click in the **Source Name** field and type **InView** to identify the source.

   Note: Capitalize the letters I and V in the word InView.
4. Click in the **Source ID** field and type the session number that you recorded in step 6 of ***Adding a New Inband Carousel*** (on page 22).
5. Click **Save**. The new source appears in the Source List window.
6. From the **Source List** window, select **InView**.

7 From the **File** menu, select **Source Definitions**. The Source Definition List window opens.



8 From the Source Definition List window, click **File** and select **New Digital**. The Digital Source Set Up window opens.



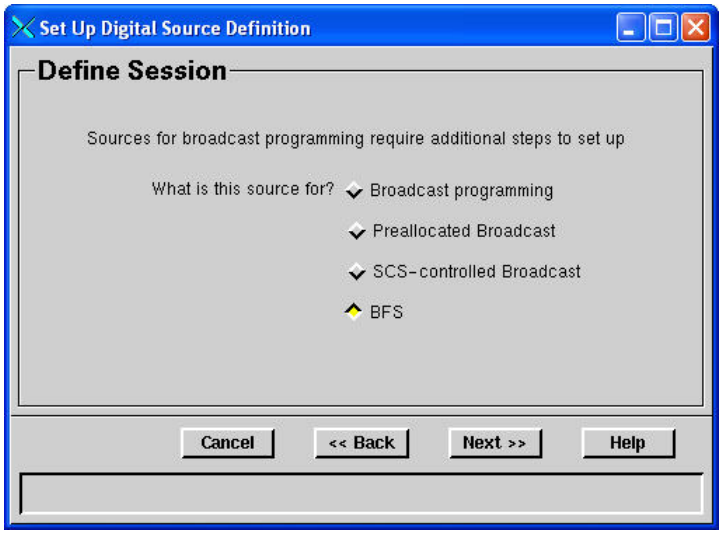
9 From the Digital Source Set Up window, click in the left **Session ID** field and type the session MAC address that you used when you added an inband data carousel to the BIG PAT table.

Example: 00:00:00:00:00:00

10 Click in the right **Session ID** field and type the source ID that you used when you added the InView source.

Note: If you would like to set an effective date and time for this session, click the **Specify effective date and time** option; however, it is not required.

11 Click **Next**. The Define Session window opens.



12 Select **BFS** and click **Next**. The Save Source Definition window opens.

13 Click **Save**. The system saves the source definition in the DNCS database and creates the session you just built. The Source Definition List window refreshes to show the new source definition.

14 From the Source Definition List window, click **File** and select **Close**.

15 From the Source List window, click **File** and select **Close**.

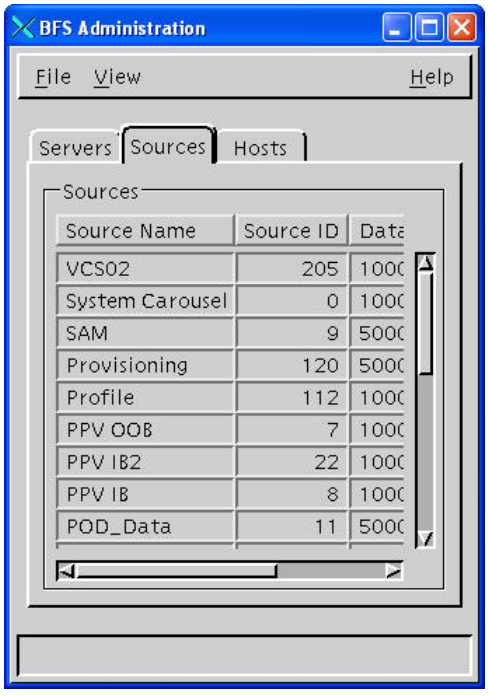
Create the Out-of-Band and Inband Carousels

Overview

This section provides procedures for creating the out-of-band and inband carousels for the InView applications.

Creating an Out-of-Band Carousel

1. From the DNCS Administrative Console, click the **Application Interface Modules** tab.
2. Click **BFS Admin**. The BFS Administration window opens.



3. Click the **Sources** tab.
4. Click **File** and select **New**. The Set Up BFS Source window opens.

5 To configure the out-of-band BFS source, complete the following fields:

   a **Source Name**—type **InView-oob**

   Important: Capitalize the letters I and V in the word InView.

   b **Source ID**—type a source ID for the out-of-band source

   Note: For recommendations on selecting a source ID, see *Recommendations for Data Carousel Rate Management* (part number 716377).

   c **Source Type**—select **BFS**

   d **Transport Type**—Select **Out-of-band**

   e **Device Name**—this field is unavailable when creating an out-of-band source

   f **Data Rate and Block Size**—refer to *Recommendations for Data Carousel Rate Management* (part number 716377) and type the recommended values based on the version of your system release and the number of third-party applications your system supports

   g **Indication Interval**—maintain the default value

   h **Source**—click **enable**

   i **Available Hosts**—select **dncsatm** and click **Add** to move the dncsatm host to the Selected Hosts column

6 Click **Save**. The Set Up BFS Source window closes and the BFS Administration window is updated with the new InView out-of-band source.

7 Keep the BFS Administration window open and go to ***Creating an Inband Carousel*** (on page 30).

Creating an Inband Carousel

1. From the BFS Administration window, click **File** and select **New**. The Set Up BFS Source window opens.
2. To configure the inband BFS source, complete the following fields:
   a. **Source Name**—type **InView**

      Important: Capitalize the letters I and V in the word InView.

   b. **Source ID**—enter the source ID associated with InView

   c. **Source Type**—select **BFS**

   d. **Transport Type**—Select **ASI In-band**

   e. **Device Name**—maintain the default value

   f. **Data Rate and Block Size**—refer to *Recommendations for Installing Applications on the DNCS and Application Server* (part number 749638) and type the recommended values based on the version of your system release and the number of third-party applications your system supports

   g. **Indication Interval**—maintain the default value

   h. **Source**—click **enable**

   i. **Available Hosts**—select **dncsatm** and click **Add** to move the dncsatm host to the Selected Hosts column
3. Click **Save**. The Set Up BFS Source window closes and the BFS Administration window is updated with the new InView inband source.
4. From the BFS Administration window, click **File** and select **Close**.

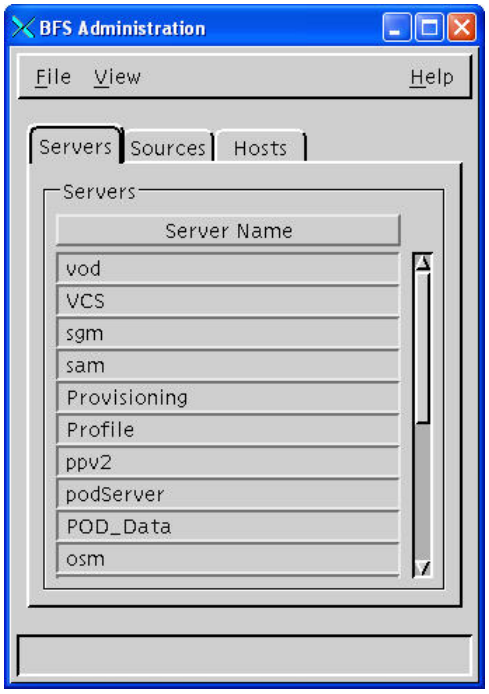
Authorize the InView Server

Overview

This section describes how to authorize the InView server for the inband or out-of-band carousel. Authorizing the InView server allows the BFS to send the data carousel to the InView client on the DNCS.

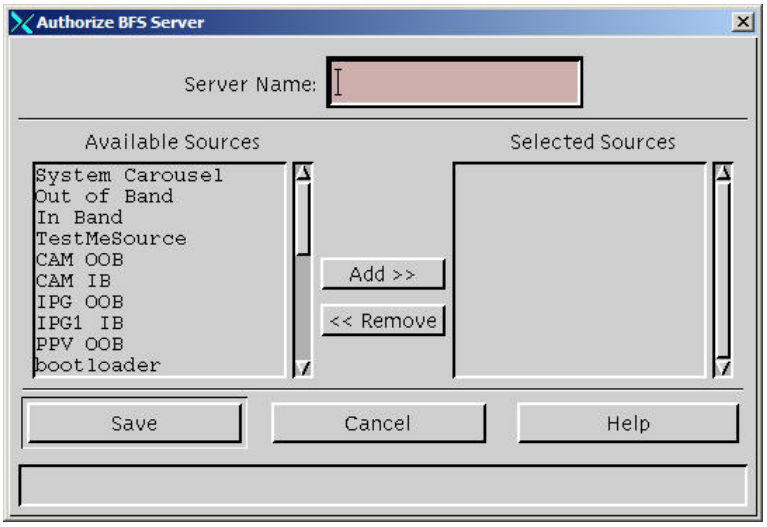
Authorizing the InView Server

1 From the DNCS Administrative Console, click the **Application Interface Modules** tab and then click **BFS Admin**. The BFS Administration window opens.



2 Click the **Servers** tab.

3 Click **File** and select **New**. The Authorize BFS Server window opens.



4 From the Server Name field, enter **InView.**

Important: Capitalize the letters I and V in the word InView.

5 From the Available Sources list, locate and then select the **InView** source.

6 Click **Add**. The InView source is moved to the Selected Sources list

7 Click **Save**. The Authorize BFS Server window closes and the system creates the inband InView server.

8 Repeat steps 3–7 to authorize the out-of-band InView server. Please note the following modifications:

a For the Server Name field, enter **InView-oob**.

b From the Available Sources list, select **InView-oob**.

9 From the BFS Administration window, click **File** and select **Close**.

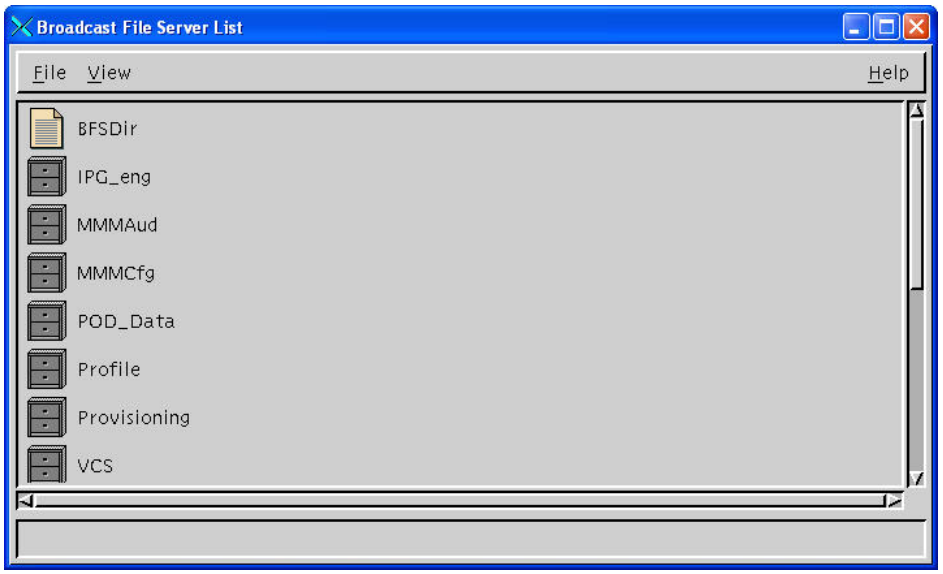
Create the Client InView Server

Overview

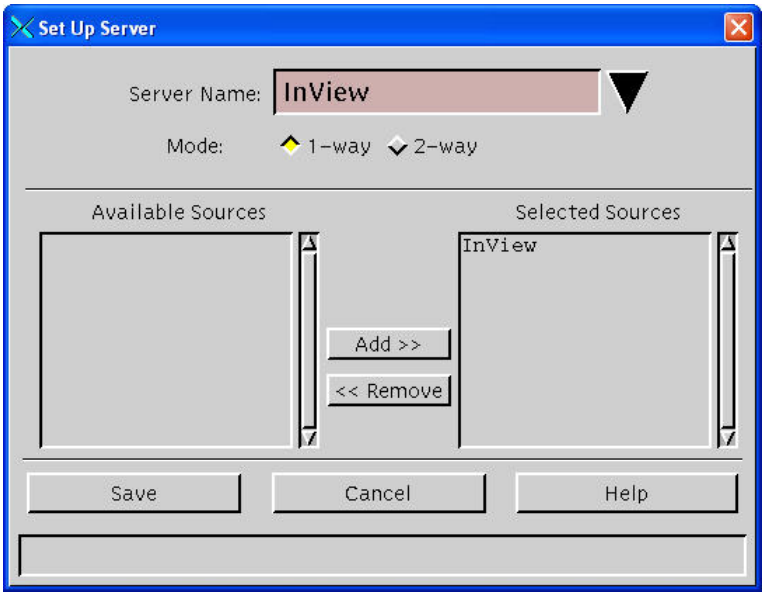
This section describes how to register the InView server with the InView client. When a server registers with a client, the BFS regularly broadcasts data held on the server to the access network. The BFS sends this data on data carousels to all DHCTs in the system. However, DHCTs retrieve information carried on data carousels for only the applications they are authorized to receive.

Creating the Client InView Server

1 From the Application Interface Modules, click **BFS Client**. The Broadcast File Server List opens.



2 Click **File** and select **New Server**. The Set Up Server window opens.



3 From the Server Name field, select **InView**.

4 From the Mode field, select **1-way**.

5 From the Available Sources list, select **InView** and then click **Add**. The InView source is moved to the Selected Sources list.

6 Click **Save** to register the InView server in the DNCS. The Set Up Server window closes.

7 Repeat steps 2–6 to create the out-of-band client InView server. Please note the following modifications:

   a From the Server Name field, select **InView-oob**.

   b From the Available Sources list, select **InView-oob**.

8 Keep the Broadcast File Server list open.

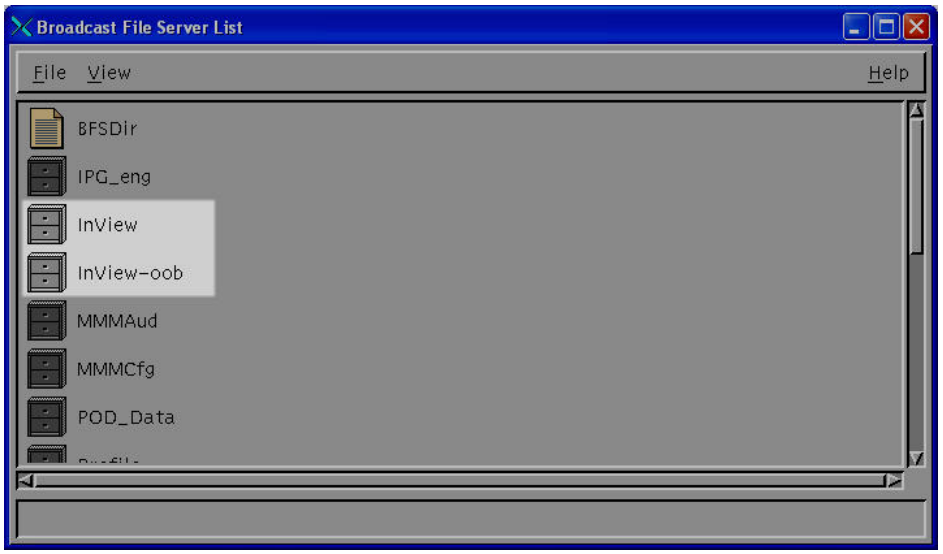
Link the InView Files to the InView Server

Overview

After you have registered the InView server with the InView client, you are ready to add the InView links to the appropriate directory.

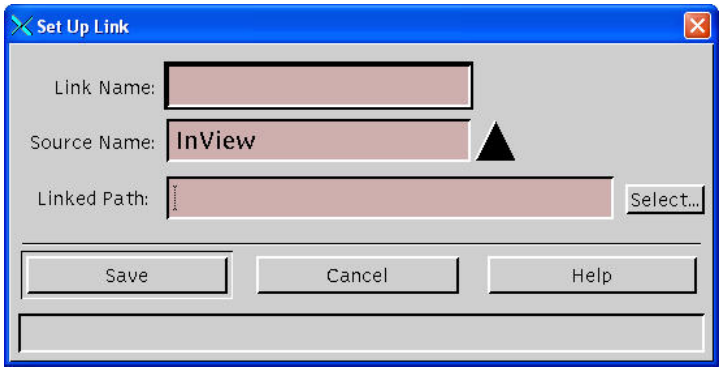
Linking InView Files to the InView Server

1 From the Broadcast File Server List window, click **View** and select **Refresh**. The window updates and lists the InView and InView-oob servers.

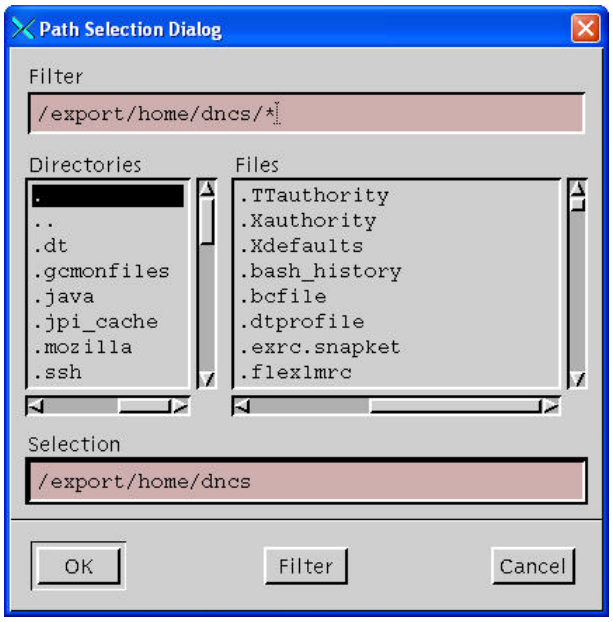


2 Select **InView**, click **File** and then select **New Link**. The Set Up Link window opens.

Note: InView should appear in the Source Name field. If it does not, click the arrow next to this field and select InView.



3 Click **Select** next to the Linked Path field. The Path Selection Dialog window opens.



4 From the Filter field, type **/export/home/dncs/apps/InView** and then click **Filter**. The Path Selection Dialog window updates to show the files in this directory.

5 Select the **Inview.ptv** file and click **OK.** The Path Selection Dialog window closes and the system updates the Linked Path field with the path to the selected file.

6 From the Link Name field, type **InView.ptv**.

Note: This field is case sensitive and must exactly match the file name.

7 Click **Save**. The Set Up Link window closes.

8 In the Broadcast File Server List window, double-click the **InView** file cabinet to see the link you just added.

9 Are you using HTML Engine version 3.8?

- If **yes**, it is not necessary to install the htmlinst.ptv file
- If **no**, repeat steps 2–8 to install the htmlinst.ptv file using the InView source. You will select the source in steps 3 and 4.

10 From the Broadcast File Server List window, double-click the **InView** icon. The InView icon expands to show the individual files contained within the InView server.

11 Examine the Broadcast File Server List window.

12 Does the InView.ptv file appear?

- If **yes**, go to step 13.
- If **no**, call Cisco Services before proceeding.

13 From the Broadcast File Server list, select the **InView-oob** server.

14 Click **File** and select **New Link**. The Set Up Link window opens.

15 Click the arrow next to the Source Name field and select **InView-oob**.

16 Click **Select** next to the Linked Path field. The Path Selection Dialog window opens.

17 From the Filter field, type **/export/home/dncs/apps/InView** and then click **Filter**. The Path Selection Dialog window updates to show the files in this directory.

18 Select the **inview.cfg** file and click **OK**.

Note: If you have named the configuration file something other than inview.cfg, select that file.

19 From the Link Name field, type **inview.cfg** (or the file name of your configuration file) and then click **Save**.

20 Repeat steps 12–19 for each configuration file used for each service being configure (for example, you may opt to use invod.cfg as the configuration file for the channel application service).

Note: See ***Edit the System Files*** (on page 8) for information about creating a new config file for a new service.

21 Click **View** and select **Refresh** to verify that the config file is visible in the InView-oob server.

22 From the Broadcast File Server List window, click **File** and select **Close**.

Verify the Number of Sessions After Adding an Inband Source

Overview

This section describes how you can ensure that the new inband source was successfully added to your system.

Verifying the Number of Sessions on the QAM

1. Facing the front of the QAM modulator, press the **OPTIONS** button to cycle through the QAM menu screens until you see the **Session Count** screen.

   Example: The following diagram shows an example of the Session Count screen.

2. Record the number of sessions in the space provided.

   Total Session Count: _____

3. Did the session count increase appropriately from the value you recorded in ***Verifying the Number of Sessions on the QAM*** (on page 19)?

   - If **yes**, go to ***Create an InView Package*** (on page 39).
   - If **no**, go to step 4.

4. From the DNCS Administrative Console, click the **System Provisioning** tab and then click **Source**.
5. Select the InView source you created, click **File** and select **Source Definitions**.
6. Select the digital source definition, and select **Open**. The Set Up Digital Source Definitions window opens.
7. Is the session active?

   - If **yes**, call Cisco Services.
   - If **no**, click **Teardown Session** to tear down and rebuild the session.

8. Wait a few moments until the sessions are rebuilt.
9. Facing the front of the QAM modulator, press the **OPTIONS** button to cycle through the QAM menu screens until you see the Session Count screen.
10. If the session count *did not* increment appropriately, call Cisco Services.

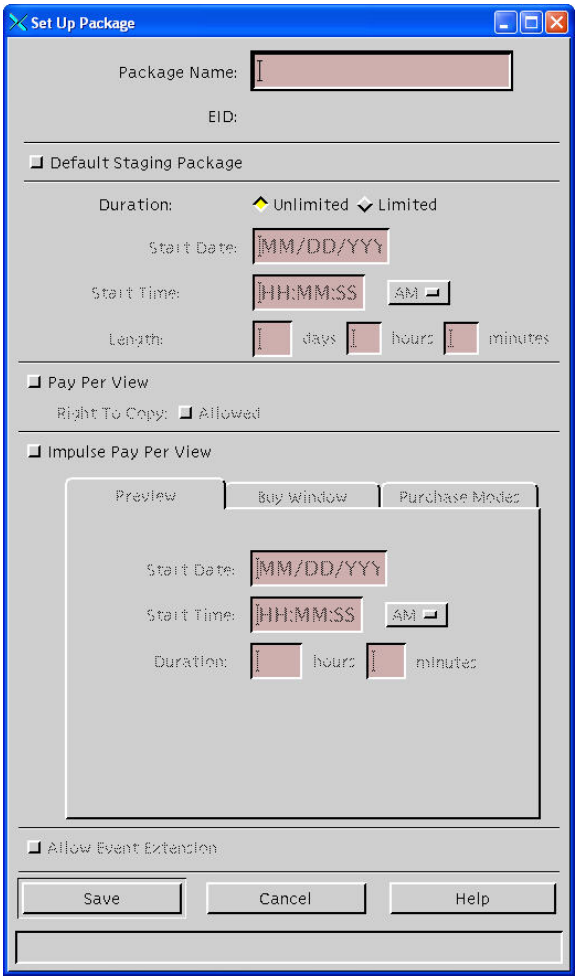
Create an InView Package

Overview

Packages allow you to deliver secure InView services to the appropriate subscribers and to control who can view a service. Complete the following steps to create a new package for the InView application.

Creating the InView Package

1. From the DNCS Administrative Console, click the **DNCS** tab and then click **System Provisioning**.
2. Click **Package**. The Package List window opens.
3. From the File menu, click **New**. The Set Up Package window opens.



4. From the Package Name field, type **InView**.
5. Click **Save** to save the InView package. The Set Up Package window closes.

Determine the InView Package EID

Overview

Every package that you define on the DNCS includes a unique Entitlement Identifier (EID). The DNCS stores this EID as a hexadecimal number. In this procedure, you will locate the EID of the InView package and convert it to a decimal representation. You will use the decimal representation of the EID in a later procedure in this chapter.

Definition: A hexadecimal number is a base-16 number, which contrasts to the base-10 numbers with which you are most familiar. Hexadecimal representation uses 16 unique symbols: the numbers 0–9 and the letters A–F (or a–f).

For your convenience, the following chart lists the hexadecimal representation of the decimal numbers.

HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC
0	0	20	32	40	64	60	96	80	128	a0	160	c0	192	e0	224
1	1	21	33	41	65	61	97	81	129	a1	161	c1	193	e1	225
2	2	22	34	42	66	62	98	82	130	a2	162	c2	194	e2	226
3	3	23	35	43	67	63	99	83	131	a3	163	c3	195	e3	227
4	4	24	36	44	68	64	100	84	132	a4	164	c4	196	e4	228
5	5	25	37	45	69	65	101	85	133	a5	165	c5	197	e5	229
6	6	26	38	46	70	66	102	86	134	a6	166	c6	198	e6	230
7	7	27	39	47	71	67	103	87	135	a7	167	c7	199	e7	231
8	8	28	40	48	72	68	104	88	136	a8	168	c8	200	e8	232
9	9	29	41	49	73	69	105	89	137	a9	169	c9	201	e9	233
a	10	2a	42	4a	74	6a	106	8a	138	aa	170	ca	202	ea	234
b	11	2b	43	4b	75	6b	107	8b	139	ab	171	cb	203	eb	235
c	12	2c	44	4c	76	6c	108	8c	140	ac	172	cc	204	ec	236
d	13	2d	45	4d	77	6d	109	8d	141	ad	173	cd	205	ed	237
e	14	2e	46	4e	78	6e	110	8e	142	ae	174	ce	206	ee	238
f	15	2f	47	4f	79	6f	111	8f	143	af	175	cf	207	ef	239
10	16	30	48	50	80	70	112	90	144	b0	176	d0	208	f0	240
11	17	31	49	51	81	71	113	91	145	b1	177	d1	209	f1	241
12	18	32	50	52	82	72	114	92	146	b2	178	d2	210	f2	242
13	19	33	51	53	83	73	115	93	147	b3	179	d3	211	f3	243
14	20	34	52	54	84	74	116	94	148	b4	180	d4	212	f4	244
15	21	35	53	55	85	75	117	95	149	b5	181	d5	213	f5	245
16	22	36	54	56	86	76	118	96	150	b6	182	d6	214	f6	246
17	23	37	55	57	87	77	119	97	151	b7	183	d7	215	f7	247
18	24	38	56	58	88	78	120	98	152	b8	184	d8	216	f8	248
19	25	39	57	59	89	79	121	99	153	b9	185	d9	217	f9	249
1a	26	3a	58	5a	90	7a	122	9a	154	ba	186	da	218	fa	250
1b	27	3b	59	5b	91	7b	123	9b	155	bb	187	db	219	fb	251
1c	28	3c	60	5c	92	7c	124	9c	156	bc	188	dc	220	fc	252
1d	29	3d	61	5d	93	7d	125	9d	157	bd	189	dd	221	fd	253
1e	30	3e	62	5e	94	7e	126	9e	158	be	190	de	222	fe	254
1f	31	3f	63	5f	95	7f	127	9f	159	bf	191	df	223	ff	255

T12289

Determining the Package EID

Determine the EID you will use to authorize DHCTs for the InView package.

1. On the Package List window, highlight the **InView** package.
2. Click **File** and select **Open.** The Set Up Package window opens.
3. Use your hexadecimal-to-decimal conversion chart to convert the hexadecimal representation of the EID to decimal representation, and then write the decimal representation in the space provided here. You will use the decimal representation of the EID later. _____

   Example: If the hexadecimal representation of the EID is 1b, the decimal representation is 27.
4. Click **Cancel** to close the Set Up Package window.
5. In the Package List window, click **File** and select **Close.**

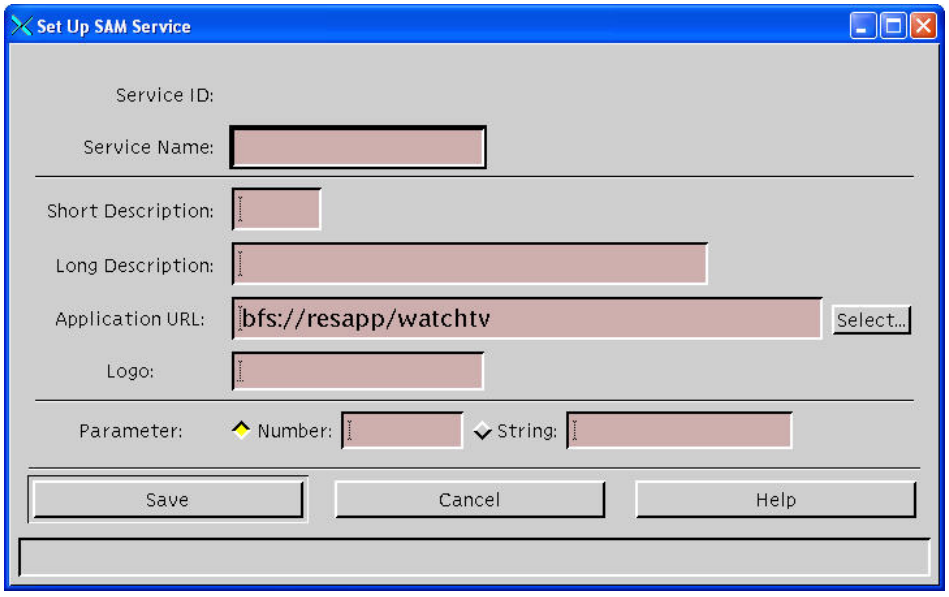
Create a SAM Service

Overview

This section provides the procedures for creating a Service Application Manager (SAM) Service for the InView package.

Creating a SAM Service for the InView Package

1. From the DNCS Administrative Console, click the **Application Interface Modules** tab and then click **SAM Service**. The SAM Service List window opens.
2. Click **File** and select **New**. The Set Up SAM Service window opens.



3 Enter values in the following fields:

- **Service Name**: The service name can be the same as the name used for the short description. Read about the Short Description field before completing this field.
- **Short Description**: This field identifies how the service is to be launched. Type one of the following descriptions in the Short Description field to indicate how you want subscribers to launch the InView main menu of InView service:
  - **_KEYA**: launches the InView main menu when the A key on the remote control is pressed.
  - **_KEYB** : launches the InView main menu when the B key on the remote control is pressed.

    Note: The _KEYA and _KEYB are reserved system words that instruct SARA to activate the application when the subscriber presses the A or B key on the remote control.
  - The short description can be anything (for example, InVue) if InView services are to be accessible from the Services Portal.
  - The short description can be anything (for example, INVOD) if an InView service is to be accessible from a specific channel.

4 In the Long Description field, type a string description of the service being offered.

5 In the Application URL field, type the following URL:
bfs://InView/InView.ptv; EID=[rep of EID]; parameter=String; trans=[t or f]; version=[rep of Version]

Notes:

- Replace [rep of EID] in this entry with the decimal representation of the hexadecimal InView EID that you recorded in step 3 of the ***Determining the Package EID*** (on page 41), earlier in this chapter.
- Replace trans=[t or f] with one on the following trans parameter values to determine whether channel changes will exit the application:
  - **trans=t**: causes the application to exit when a channel change occurs.
  - **trans=f**: allows the TV channel to be changed while keeping the application active.

    Note: The trans parameter only works with overlay services (the InView service is launched on top of a Channel Based InView service). The channel-based application will not respond to this parameter.
- Replace [rep of Version] in this entry with the version of the InView application.

6 In the Logo field, type **0** to indicate that no logo is needed.

7 In the Parameter section, select **String**.

8 In the String field, type **CFG=bfs:///InView-oob/inview.cfg**.

Notes:

- Different configuration files may be used for the services being configured as previously detailed. Type the appropriate file path in the String field if the file is other than inview.config.
- If you want to expose the conditional access system to the content, you may add the information to the String field. The name of the conditional access system can vary as appropriate, but it should be a name which will be recognized by the content.

  Example: CFG=bfs://InView-oob/inview.cfg&CA=PowerKey&EC=1

9 Click **Save**. The Set Up SAM Service window closes and the SAM Service List updates with the new SAM Service added to the list.

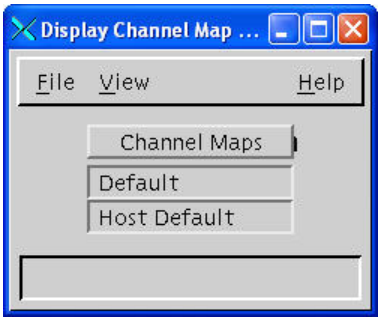
Map a Service to a Channel

Overview

Mapping a service to a channel allows you to add the service to a channel map so that your subscribers can access it by tuning to a particular channel. This section provides the procedures for mapping the InView service to a specific channel.

Mapping a Service to Channel

1. From the DNCS Administrative Console, click the Application Interface Modules tab and then click **Channel Maps**. The Display Channel Map window opens.



2. Double-click **Default**. The Set Up Display Channel Map window opens for the default channel map.
3. Scroll though the **Available Services** field until you see the InView service, and then click to select that service.
4. Scroll through the Channel Slot fields until you see the channel to which you want to assign the InView service.

   Note: This will be the channel on which the InView application is launched.
5. Click **Add**. The service name moves from the Available Services field to the Channel Slot field.
6. Click **Save**.

Authorize DHCTs for the InView Service

Billing System Authorizes DHCTs

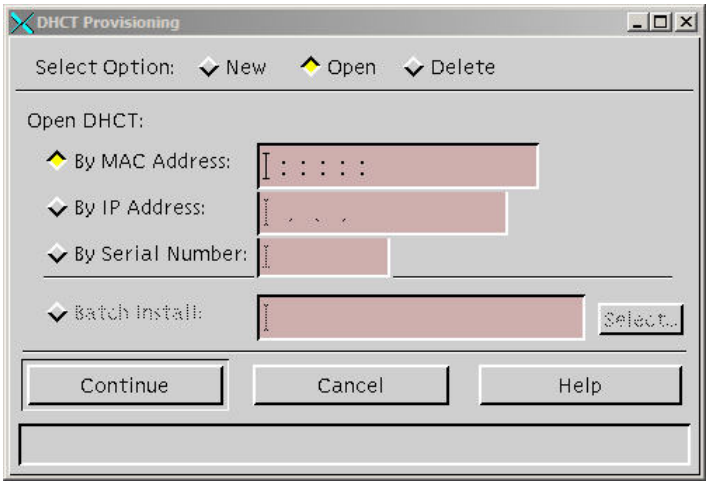
Your billing system normally authorizes DHCTs for all services, including the InView application described in this configuration guide. While you can authorize DHCTs for the InView service directly from the DNCS, your billing system handles the procedure more quickly and efficiently. Coordinate the authorization of DHCTs for the InView service with your billing system vendor.

Authorizing DHCTs in a Test Environment

You may wish to use the DNCS to authorize a few test DHCTs in your lab for a non-encrypted service. Limit your use of the DNCS to authorize DHCTs for services to a local test environment only. Use your billing system to authorize DHCTs for services, including the InView application described in this configuration guide.

To use the DNCS to authorize DHCTs for testing an InView service, complete the following steps.

1 From the DNCS Administrative Console, click the **Element Provisioning** tab and then click **DHCT**. The DHCT Provisioning window opens.



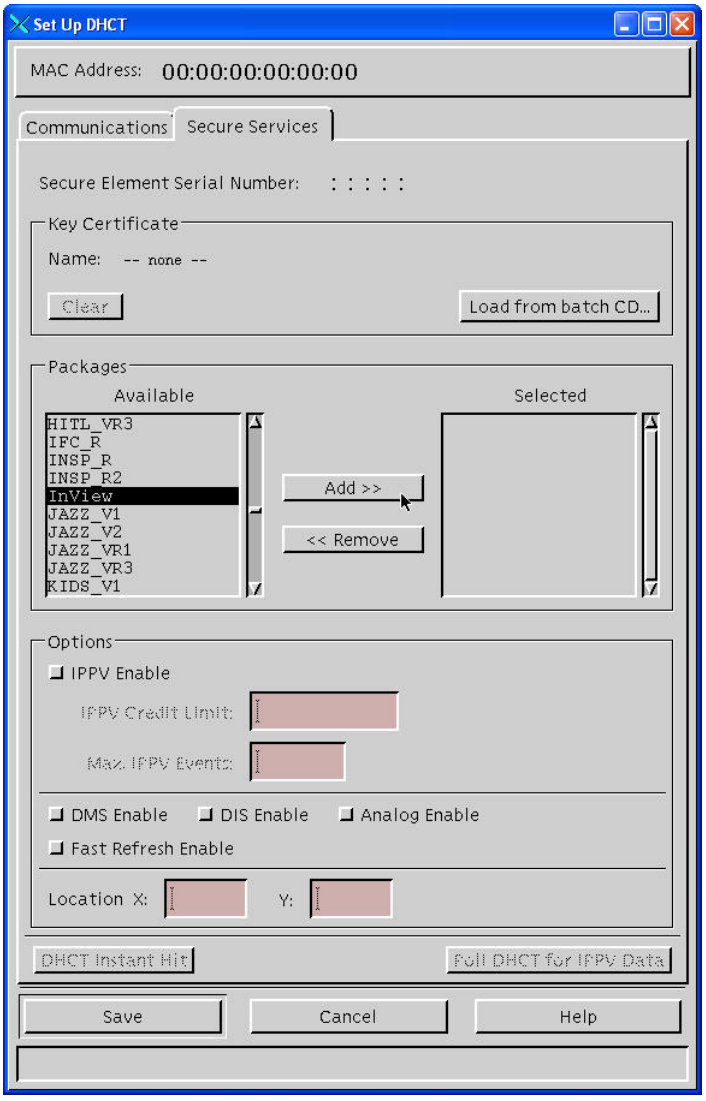
2 Choose one of the following options from the **Select Option** section:

- To provision a new DHCT with the InView application, click **New**.
- To provision an existing DHCT with the InView application, click **Open**.

3 Click **By MAC Address**.

4 In the **By MAC Address** field, type the MAC address for the DHCT you want to provision.

5 Click **Continue**. The Set Up DHCT window opens.



6 Click the **Secure Services** tab. The Secure Services tab of the Set Up DHCT window opens, which displays available and selected packages.

7 In the Available column of the Packages section, select **InView**, and then click **Add**. The InView application moves from the Available column to the Selected column.

8 Click **Save**. The system updates the DHCT with the InView application and the Cancel button changes to a Close button.

9 Click **Close**.

10 Repeat steps 2–9 for each DHCT you want to provision to test with the InView application.

11 From the DHCT Provisioning window, click **Cancel**.

4

Configure a New InView Service

This chapter describes how to configure *additional* InView services on the DNCS. An InView service is HTML content that subscribers can access on their TV.

Note: For the purpose of providing an example, this chapter will set up a new InView service called *development*.

In This Chapter

Before You Begin

Before configuring a new InView service, we recommend that system operators or application developers install the application files into a subdirectory of the /export/home/dncs/apps directory. For details, go to ***Install Application Files in a Subdirectory*** (on page 4).

You must also decide how subscribers will access this new InView service. For details, go to one of the following sections:

- ***Accessing InView From the Services Portal Menu*** (on page 5)
- ***Accessing InView From the InView Main Menu*** (on page 5)
- ***Accessing InView From a Specific Channel*** (on page 5)

Edit the New Configuration File

Overview

After installing the *development* application files in a subdirectory on the DNCS, you will need to edit the configuration file (for example, inview.cfg). The parameters in the inview.cfg file enable system operators to decide how they want to configure the InView main menu on a per-service basis. The inview.cfg file is placed on the BFS for distribution to the InView client when needed. When you are creating a new service, you must copy and rename this file for the new service.

Creating a New Configuration File for a New InView Service

1. From the DNCS Administrative Console, click the **DNCS** tab and then click the **Utilities** tab.
2. Click **xterm**. An xterm window opens.
3. Type **cd /export/home/dncs/apps/InView/3.6** and press **Enter**.

   Note: This is the directory where the InView configuration file is located.
4. Type **cp inview.cfg [new name].cfg** and press **Enter**. This will copy the existing InView configuration file and rename it to the new name.

   Notes:

   - The name you enter for the new inview.cfg file must match the name you defined for the SAM Service definition.
   - For an example, we will use IVDev.cfg as the name of the new configuration file.
5. Open and edit the configuration file using a text editor.

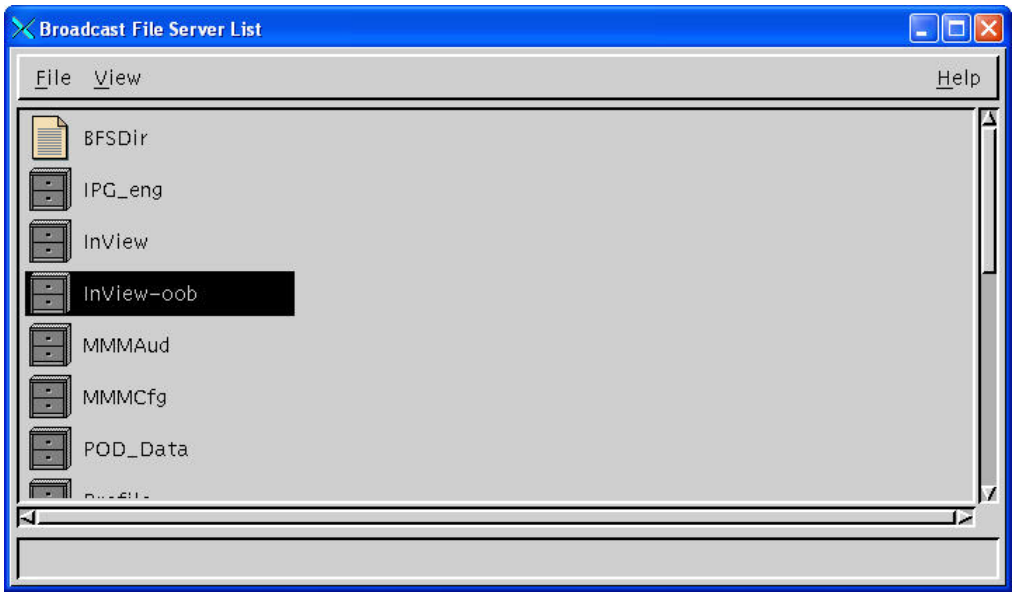
Modifying the Configuration File

The newly created configuration file, IVDev.cfg, must be modified so that the InView client will work correctly with the new service. Go to ***Edit the System Files*** (on page 8) for a list and a description of each required and optional parameter.

Linking the New Configuration File

To link the newly created InView configuration file to the InView server, complete the following steps.

1 From the DNCS Administrative Console, click the **Application Interface Modules** tab, and then click **BFS Client**. The Broadcast File Server List opens.



2 Select **InView-oob**.

3 Click **File** and select **New Link**.

4 From the Source Name field, click the down arrow and select **InView-oob**.

5 From the Linked Path field, click **Select**. The Path Selection Dialog window opens and is updated with the files from the /export/home/dncs/apps/InView/3.6 directory.

6 Select the **IVDev.cfg** configuration file and then click **OK**. The Path Selection Dialog window closes and the Linked Path field is updated with the path of the selected file.

7 Form the Linked Path column, select the **IVDev.cfg** portion of the entry.

8 Place your cursor in the Link Name text box and press the middle mouse button. The file name IVDev.cfg is pasted into the Link Name field.

9 Click **Save**. The Set Up Link window closes and the Broadcast File Server List window is updated to reflect the link you just added.

10 From the Broadcast File Server List window, double-click the **InView-oob** cabinet. The InView cabinet expands to show the individual files contained with the InView server.

11 Does the InView-oob cabinet contain the inview.cfg and the IVDev.cfg files?

- If **yes**, click **File** and select **Close**.
- If **no**, call Cisco Services.

Creating a New InView Service Package

1. From the DNCS Administrative Console, click the **DNCS** tab and then click the **System Provisioning** tab.
2. Click **Package**. The Package List window opens.
3. Click **File** and select **New**.
4. From the Package Name field, type a new service package name (for example, IVDev).
5. Click **Save**. The Set Up Package window closes and the Package List window is updated with the newly defined package.
6. Determine the new service EID as described in ***Determine the InView Package EID*** (on page 40) and enter the number here: _____
7. Authorize DHCTs for the new package. See ***Authorize DHCTs for the InView Service*** (on page 46) for details.

Creating a SAM Service for the New InView Service

To create a SAM service for the new package (for example, IVDev), complete the following steps:

1. From the DNCS Administrative Console, click the **Application Interface Modules** tab and then click **SAM Service.** The SAM Service List window opens.
2. Click **File** and select **New**. The Set Up SAM Service window opens.
3. Enter values in the following fields:
   - **Service Name**: The service name can be the same as the name used for the short description. Read about the Short Description field before completing this field.
   - **Short Description**: This field identifies how the service is to be launched. Type one of the following descriptions in the Short Description field to indicate how you want subscribers to launch the InView main menu for the new InView service:
     - **_KEYA**: launches the InView main menu when the A key on the remote control is pressed.
     - **_KEYB**: launches the InView main menu when the B key on the remote control is pressed.

       Note: The _KEYA and _KEYB are reserved system words that instruct SARA to activate the application when the subscriber presses the A or B key on the remote control.
     - The short description can be anything (for example InVue) if InView services are to be accessible from the Services Portal.
     - The short description can be anything (for example INVOD) if an InView service is to be accessible from a specific channel.
4. In the Long Description field, type a string description of the service being offered (for example, InView development service).

   Note: This description is used in the startup screens when the service is launched.
5. From the Logo field, type **0** to indicate that a logo is not needed.

6 Do you want to run the new InView service from sNFS (simple Network File System)?

- If **yes**, type the following URL in the Application URL field:
  snfs://InView/InView.ptv; EID=[rep of EID]; parameter=String; trans=[t or f]; version=[rep of Version]
- If **no**, type the following URL in the Application URL field:
  bfs://InView/InView.ptv; EID=[rep of EID]; parameter=String; trans=[t or f]; version=[rep of Version]

Notes:

- Replace [rep of EID] in the entry with the decimal representation of the hexadecimal InView EID that you recorded in step 6 of ***Creating a New InView Service Package*** (on page 54)
- Replace trans=[t or f] with one of the following trans parameter values to determine whether channel changes will exit the application:
  - **trans=t**: the application will exit when a channel change occurs
  - **trans=f**: the application will remain active when a channel change occurs

Important: The trans parameter only works with overlay services. The channel-based application will not respond to this parameter.

- Replace **[rep of Version]** with the version of the InView application

7 In the Parameter section, select **String**.

8 In step 6, did you choose to run the InView service from sNFS?

- If **yes**, type the following path in the String field:
  CFG=snfs://InView-oob/IVDev.cfg
- If **no**, type the following path in the String field:
  CFG=bfs://InView-oob/IVDev.cfg

Notes:

- This is the path of the newly created configuration file for the *development* service.
- If you want to expose the condition access system to the content, you may add the information to the String field. The name of the conditional access system can vary as appropriate, but it should be a name which will be recognized by the content.
  Examples:
  - CFG=snfs://InView-oob/IVDev.cfg &CA=PowerKey&EC=1
  - CFG=bfs://InView-oob/IVDev.cfg &CA=PowerKey&EC=1

9 Click **Save**. The Set Up SAM Service window closes and the SAM Service List updates with the new SAM Service.

Assign the New InView Service to a Hub

Overview

To enhance support for multiple conditional access systems, it may be desirable to assign the new InView service to a hub which corresponds to a specific conditional access system.

Assigning the New InView Service to a Hub

1. From the DNCS Administrative Console, click the **Application Interface Modules** tab and the click **Non-Channel Services**. The Non-Channel Services window opens.
2. From the Hubs section, select the hub for this service.
3. From the Actions for Selected Hub list on the left panel, click **Retrieve Selected Services List**.
4. From the Available Services list, select the appropriate service and click **Add**. The service is moved to the Selected Services list.
5. From the Actions for Selected Hub list on the left panel, click **Save Selected Services List**.
6. Click **Exit** to close the Non-Channel Services window.

5

Customer 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.

Access your company's extranet site to view or order additional technical publications. For accessing instructions, contact the representative who handles your account. Check your extranet site often as the information is updated frequently.

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

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

August 2012 Printed in USA

Part Number 4019969 Rev B