USER MANUAL

Router Manager

Version 6.0 - January 2014

IP.AirEdit

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Table of Contents

What's New?

In the user manual, the icon NEW ! has been added on the left margin to highlight information on new and updated features.

The sections updated to reflect the new and modified features on Router Manager from IPAirEdit6.0 (compared to IPAirEdit 5.98) are listed below.

Use of a video router in Ingest Recovery mode

A video router can be used with IPAirEdit to increase the number of incoming feeds manageable by EVS server recorder channels.

- See section "Product Overview" on page 1.
- See section "Typical Workflow " on page 1.
- See section "Introduction" on page 11.
- See section "Program Configuration Panel" on page 12.
- See section "How to Configure a Program for Ingest" on page 13.
- See section "Auxiliary Live Sources for Ingest" on page 19.
- See section "Overview of the Router Manager Window" on page 26.
- See section "Switching the Active Sources" on page 29.

Program Configuration Panel

The Program Configuration panel display and the way to configure programs has changed.

- See section "Program Configuration Panel" on page 12.
- See section "How to Configure a Program for Playout" on page 16.

Setting Display

The General setting has been moved to the main Router Manager Configuration window (List of devices).

- See section "Overview of the Router Manager Configuration Window" on page 7.

1. Introduction

1.1. Product Overview

The Router Manager is a module used in association with the IPAirEdit application. See the IPAirEdit user manual for more information on IPAirEdit.

The Router Manager aims at controlling the video router (through the router controller) used on an IPAirEdit workflow that provides redundancy.

The Router Manager module has been designed to control specifically the Miranda router by sending commands to the Miranda NV9000 router controllers.

NEW ! Depending on the configuration of the installation, the Router Manager can be configured in Playout mode or in Ingest / Recovery mode.

1.2. Typical Workflow

NEW ! Illustration - Ingest / Recovery Mode

The following diagram shows the part of an IPAirEdit setup dedicated to the router management in Ingest / Recovery mode, and how the different sources and destinations are configured for each content control channel.

In this workflow, the video router increases the number of sources which can be input into a server destination.

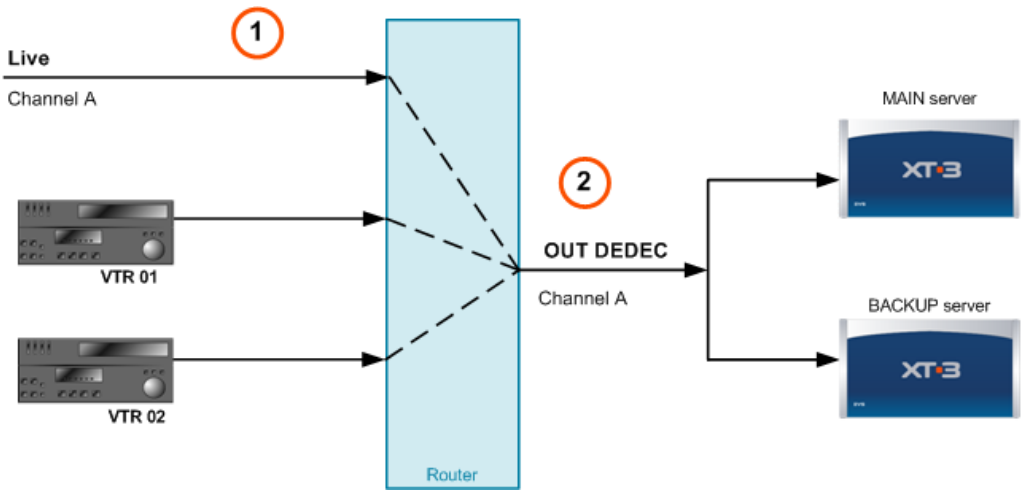
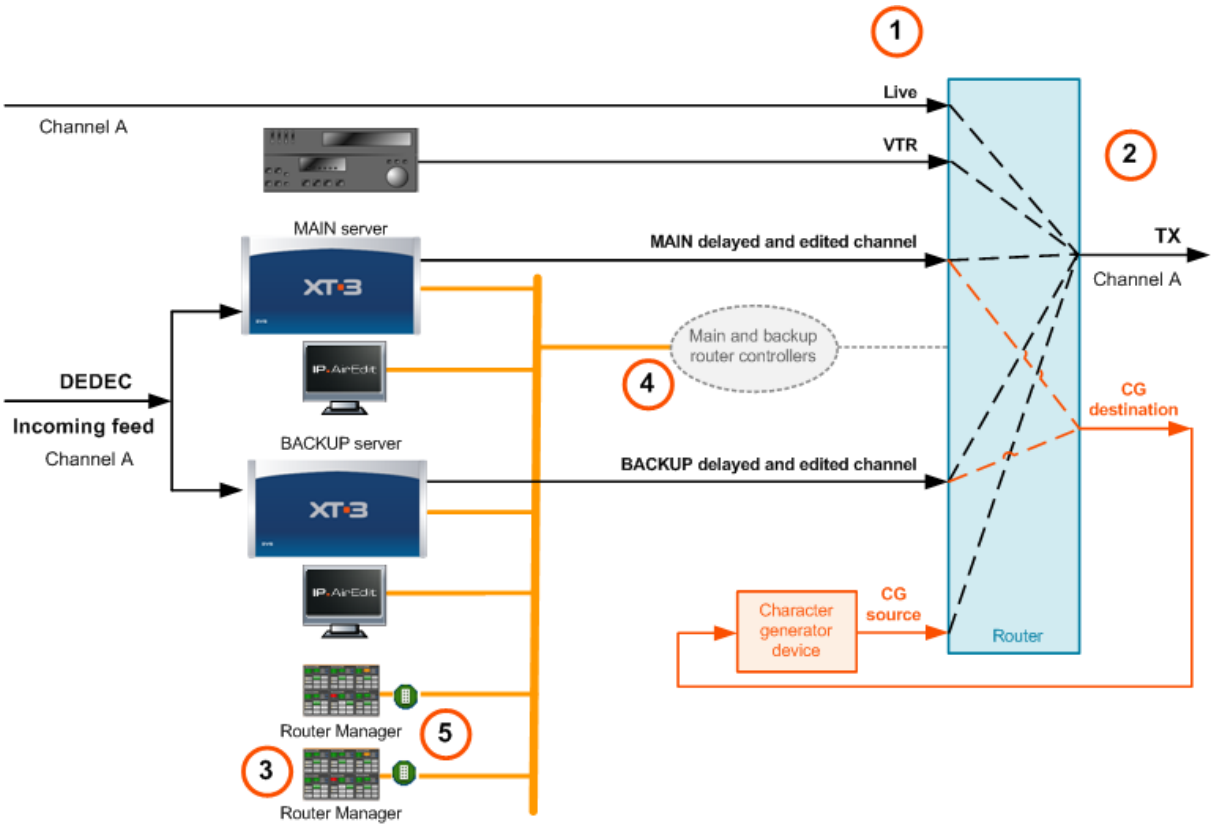


Illustration - Playout Mode

The following diagram shows the part of an IPAirEdit setup dedicated to the router management in Playout mode, and how the different sources and destinations are configured for each content control channel. The various devices and the communication processes are described below.

In this workflow, the video router increases the number of sources which can be routed to the transmission channel (TX channel).



Sources (1) and Destinations (2) on the Video Router

Source and destination channels are configured on the ports of the video router as follows.

NEW ! In Ingest / Recovery Mode

The A/V content which can be routed to router IN ports and configured as sources in the router database are:

- the live channel
- the A/V content from different VTR devices

The router output is connected to a single destination, called DEDEC in the Router Manager Configuration window, which is itself routed to the main and backup servers.

In Playout Mode

The A/V content which can be routed to router IN ports and configured as sources in the router database are:

- the delayed and edited channels (PGM1) of the main and backup EVS servers.
- the live channel to broadcast
- the A/V content from a VTR device
- several CG channels delivered by a character generator device.

The router output is connected to a single destination, called DEDEC in the Router Manager Configuration window, which is itself routed to the main and backup servers.

The router destinations can be

- the TX channels
- the CG destinations, which are then sent to the inputs of CG devices, as the operator should have the possibility to add graphics to each play channel (main and backup) of each channel to broadcast.

Router Manager (3)

The Router Manager is a module of IPAirEdit that has to be installed on one or more IPDirector workstations. It allows controlling which transmission signal the router will send.

The Router Manager cannot start if the Router Manager service is not running on the same workstation.

Router Controllers Controlled through GigE Network (4)

The Router Manager does not control the router directly, but throughout two router controllers (one for main and one for backup) connected to the setup via the GigE network.

The Router Manager module therefore acts as a control panel of the router controllers, allowing users to take the control of the video router through the router controllers.

Router Manager Service (5)

The Router Manager service  is launched on the IPDirector workstations where the Router Manager application will be started.

When an operator executes a failover from the AirEdit module, or switches the active source from the Router Manager, IPAirEdit uses the Router Manager service to exchange commands and requests with the couple of router controllers.

In a workflow with redundancy, it is recommended to start the Router Manager service and the Router Manager on two IPDirector workstations running the IPAirEdit applications. Both Router Manager services will send the same commands. If one fails, the second one is the backup.

1.3. Prerequisites

Before you can use IPAirEdit Router Manager, you need to perform the following installation and configuration tasks.

Installing and Configuring the IPAirEdit Redundant Setup

1. Installing the IPAirEdit application on the main and backup IPDirector workstations and define the workstations as master candidates.
2. Configuring the redundancy on IPAirEdit setup.

   See the IPAirEdit configuration guide for full details on IPAirEdit configuration. Refer to the EVS Project Manager.

Organizing the Connections Between the Router and the IPAirEdit Setup

1. Setting up the physical connections between the EVS servers and the router.
2. Configuring the Router Manager service in the Remote Installer and in the router controllers.
3. Installing the XSecure licenses for the Router Manager and Router Manager Configuration modules.

1.4. Initializing the Router Manager

To initialize the Router Manager, proceed as follows:

1. From the Windows task bar, right-click the Router Manager service icon  , and click **Start Service** from the contextual menu. When the Router Manager service is started and ready, the icon turns green  .
2. Launch IPAirEdit.

Note
You cannot open IPAirEdit if you have configured more programs than the license allows it to. Should the number of configured programs exceeds what is allowed, you will be requested to remove the exceeding programs from the configuration. See section "Exceeded License Window" on page 5 for more information.

At this stage, the Router Manager and Router Manager Configuration icons are available in the main application bar, and you can access each module by clicking the corresponding icon.

Note
To open the Router Manager Configuration module, the user must have administrator rights.

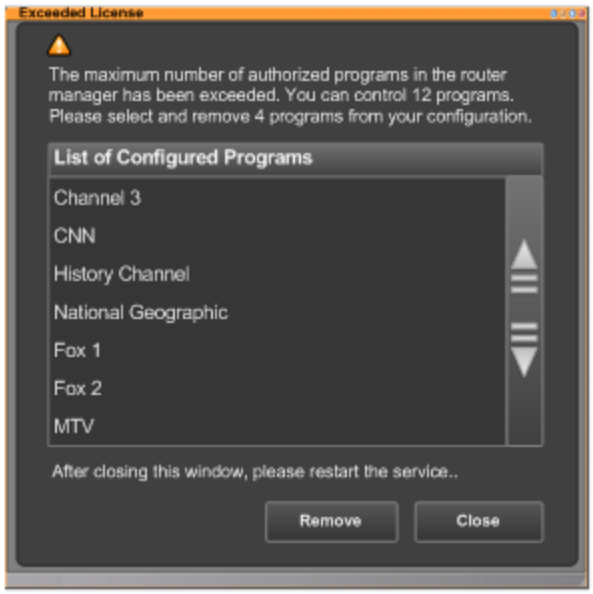
3. Before you can actually use the Router Manager, you still have to configure the programs you want to monitor and control on the router. This part of the configuration is performed in the Router Manager Configuration module, and is described in section "Configuration" on page 7.

1.5. Exceeded License Window

Introduction

You cannot open IPAirEdit if you have configured more programs than the license allows it to.

When you open the IPAirEdit application, and if the Router Manager service is started, the system controls whether the number of configured programs exceeds the number of authorized programs. If the number of authorized programs has been exceeded, a warning window opens and you are requested to remove programs from the configuration.



How to Remove Programs from the Configuration?

To remove programs from the Exceeded License window, proceed as follows:

1. From the list of configured programs, click the program to be removed from the configuration. Use **CTRL + click** to select multiple programs at the same time.
2. Click the **Remove** button. The selected programs are removed and the number of exceeding programs is re-computed.

   OR

   Click the **Close** button. The window will only close if you have removed at least the requested number of programs from the configuration.
3. Restart the Router Manager service by right-clicking the **Router Manager service** icon in the Windows task bar, and by clicking **Restart Service** from the contextual menu.

2. Configuration

2.1. Introduction

Purpose

NEW ! The Router Manager Configuration module allows you to define whether a program will be configured for Ingest, for Playout, or both, to associate different sources and a destination to a program, to configure the VTR sources that are available on each program, as well as each couple of CG sources and destinations that will be associated to a specific program in the configuration.

Opening the Router Manager Configuration Module

To open the Router Manager Configuration module, click the 

icon in the main application bar.

The Router Manager Configuration window opens.

Note
To open the Router Manager Configuration module, the user must have administrator rights.

2.2. Router Manager Configuration Window

2.2.1. Overview of the Router Manager Configuration Window

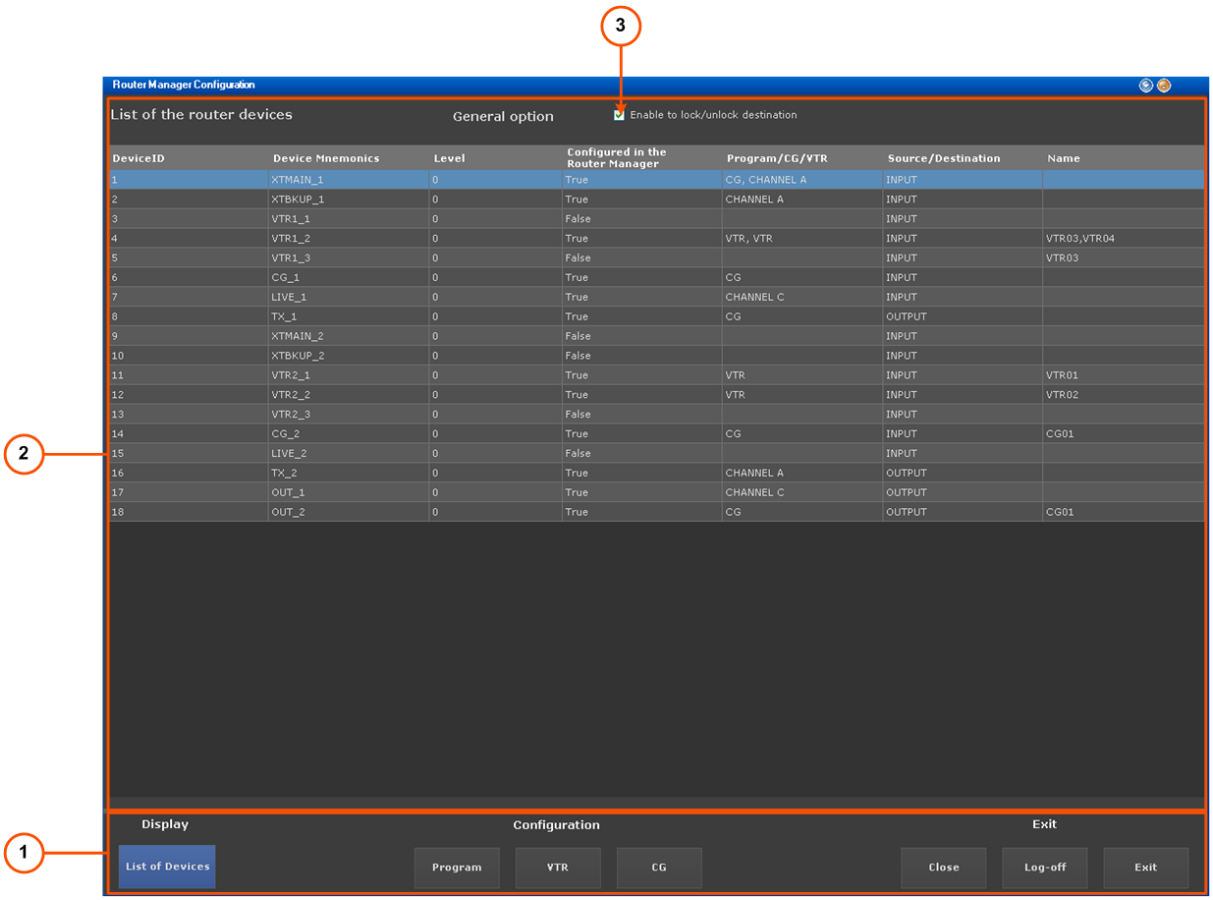
Description

All the configuration operations are performed from this window. The lower pane always remains the same, while the upper pane can display different views according to the selection made in the toolbar.

At window opening, the upper pane shows the list of router devices.

Illustration

The Router Manager Configuration window contains the areas highlighted on the screenshot below:



Area Description

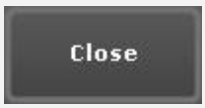
The table below describes the various parts of the Router Manager Configuration window:

Area		Description
1.	Toolbar	The toolbar provides 3 categories of buttons: • **Display**: to display the list of router devices • **Configuration**: to open the Program, VTR and CG configuration panels • **Exit**: to exit the window See section "Router Manager Configuration Toolbar" on page 9.
2.	List of router devices	This area shows the list of all devices defined in the router database.See section "List of Router Devices" on page 10. It is displayed in the upper pane at opening of the window, or by clicking the **List of Devices** button. By clicking one of the **Configuration** buttons from the toolbar, this area displays panels used to configure the Program, VTR or CG. See sections "Program Configuration Panel" on page 12, "VTR Configuration Panel" on page 20, and "CG Configuration Panel" on page 23.
NEW ! 3.	General option	This option is used to make the **Lock/Unlock Destination** button available to users in the Router Manager module. This is a general setting applied to all programs.

2.2.2. Router Manager Configuration Toolbar

The Router Manager Configuration toolbar features the following buttons, and allows the following actions. This toolbar remains available in all Configuration panels.

Button	Action
	Displays the list of router devices. See section "List of Router Devices" on page 10.
	Displays the Program Configuration panel. See section "Program Configuration Panel" on page 12.
	Displays the VTR Configuration panel. See section "VTR Configuration Panel" on page 20.
	Displays the CG configuration panel. See section "CG Configuration Panel" on page 23.

Button	Action
	Closes the Router Manager Configuration window.
	Logs off the current user from the main application, and returns to the login window.
	Exits the main application.

2.2.3. List of Router Devices

Introduction

The list of router devices is displayed by default when you open the Router Manager Configuration window. When a configuration panel is open, you can come back to the list of router devices by clicking the **List of Devices** button in the toolbar at the bottom of the window.

The list of router devices displays the devices configured in the router database, and related information.

Description

List of router devices

DeviceId	Device Mnemonics	Level	Configured in the router manager	Program/CG/VTR	Source/Destination	Name
1	VTR1	0	True	VTR	INPUT	
2	VTR2	0	True	VTR	INPUT	VTR02
3	CRS1	0	True	CRS/TS	INPUT	
4	TS1	0	True	CRS/TS	INPUT	
5	CG1 OUT	0	True	CG	INPUT	CG_BDI
7	P2-LIVE	0	True	MDB_TV	INPUT	
8	P2-MAIN	0	True	MDB_TV	INPUT	
9	P2-BACK	0	True	MDB_TV	INPUT	
10	P3-LIVE	0	True	BDI TV1	INPUT	
11	P3-MAIN	0	True	BDI TV1	INPUT	
12	P3-BACK	0	True	BDI TV1	INPUT	
13	OUT1	0	True	MDB_TV	OUTPUT	
14	OUT2	0	False		OUTPUT	
15	OUT3	0	True	BDI TV1	OUTPUT	
16	OUT4	0	True	XT3_TL1	OUTPUT	
17	OUT5	0	False		OUTPUT	
18	OUT12	0	False		OUTPUT	
20	OUT14	0	False		OUTPUT	
21	OUT9	0	True	CG	OUTPUT	CG03
22	OUT8	0	True	CG	OUTPUT	CG_BDI
23	OUT7	0	True	CG	OUTPUT	CG02
24	OUT6	0	True	CG	OUTPUT	CG01
25	P4-LIVE1	0	True	XT3_TL1	INPUT	
26	P4-MAIN1	0	True	XT3_TL1	INPUT	
27	P4-BACK1	0	True	XT3_TL1	INPUT	
28	OUT11	0	False		OUTPUT	
29	P4-LIVE2	0	False		INPUT	
30	P4-MAIN2	0	False		INPUT	
31	P4-BACK2	0	False		INPUT	
32	CG2 OUT	0	True	CG	INPUT	CG03
33	CG2 IN	0	True	CG	INPUT	CG02
34	CG1 IN	0	True	CG	INPUT	CG01
35	OUT13	0	False		OUTPUT	
36	OUT16	0	False		OUTPUT	

The list of router devices contains several data presented in columns. The table below describe each of these columns:

Column	Description
DeviceID	Device ID.
Device Mnemonics	Name of the device as configured in the router database.
Level	Device level. The devices are defined as sending and receiving signals on certain levels. A level is typically SD, HD, analog video, AES, analog audio, or machine control. The level is always set to 0 (HD).
Configured in the Router Manager	Status about whether the given device has been configured or not in the Router Manager Configuration window. The possible values are **True** or **False**.
Program/CG/VTR	If the device corresponds to a program, the name of the program will be displayed. If the device does not correspond to a program, the device category is displayed: **CG**, **CRS/TS**, or **VTR**.
Source/Destination	Type of connection to the router. The device can be configured either as a source (**INPUT**) or as a destination (**OUTPUT**) of the router.
Name	Name of the button associated to the source device, as it will be displayed in the Router Manager.

2.3. Configuring Programs

2.3.1. Introduction

This chapter explains how to configure the sources and destinations of a program connected to the router for the Router Manager module.

You perform such a configuration in the Program Configuration panel. See section "Program Configuration Panel" on page 12 for more information on the areas in the Program Configuration panel.

NEW ! A program can be configured for Playout, for Ingest / Recovery, or both.

Once configured, the program will automatically be available in the Router Manager, with the underlying connections to the right devices.

For each program to configure for Playout, you need to specify at least three devices:

- A source device for the main program, that is the delayed and edited channel/output from the main EVS server.
- A source device for the backup program, that is the delayed and edited channel/output from the backup EVS server.
- A destination device, that is the transmission channel.

Configuring a destination device for the live program, that is the incoming program feed, is optional.

Note
If the router destination has not been locked, when an AirEdit operator clicks the **FAIL OVER** button, the system performs the failover and switches automatically the active sources. The displays in the Router Manager interface are updated accordingly. The new sources sent to TX and to the CG destination should have been configured before the failover operation so that they correspond to the currently active server output.

2.3.2. Program Configuration Panel

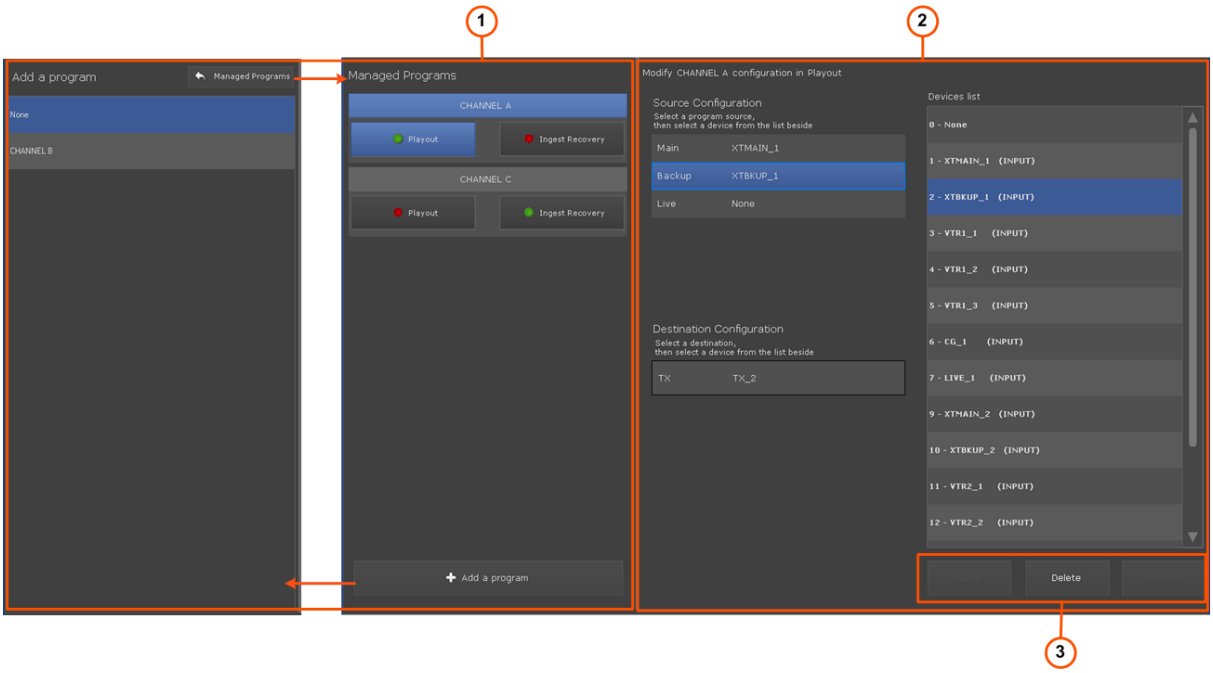
Description

NEW ! The Program Configuration panel allows users to specify whether a program is configured in Ingest/Recovery mode, in Playout mode or both, and to specify which devices associated to the router are the router sources and destination.

The Program Configuration panel is available by clicking the **Program** button from the Router Manager Configuration toolbar.

NEW ! Illustration

The Program Configuration panel contains the areas highlighted on the screenshot below:



Area Description

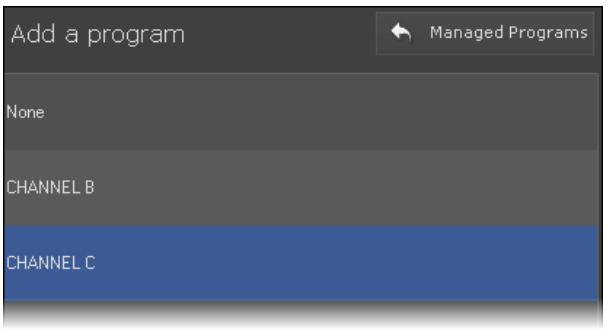
The table below describes the various parts of the Program Configuration panel:

Area		Description
1.	Lists of Programs	This area can display two different views: • **Add a Program**: shows the list of programs created in the Program Manager but not yet configured for the Router Manager. This is the view shown when no program has been configured for the Router Manager yet. • **Managed Programs**: shows the list of programs configured for the Router Manager. A green bullet icon features their configuration mode. The program configuration is done or modified from this view. From both views, a button is available to switch to the other view. This is a **Managed Programs** button in the Add a Program view, or a **Add a Program** button in the Managed Programs view.
2.	Configuration area	This area is used to configure a program selected in the Managed Programs list. It contains the list of source types (a), the list of destination types (b) and the list of available devices (c). It displays the settings of the configured program currently selected.
3.	Program configuration toolbar	This toolbar allows you to save or delete the current configuration, or to cancel any modification.

2.3.3. How to Configure a Program for Ingest

NEW ! To configure a program for the first time, proceed as follows:

1. Select the program from the Add a Program pane.



The left pane of the Router Manager Configuration window switches to the Managed Programs pane.

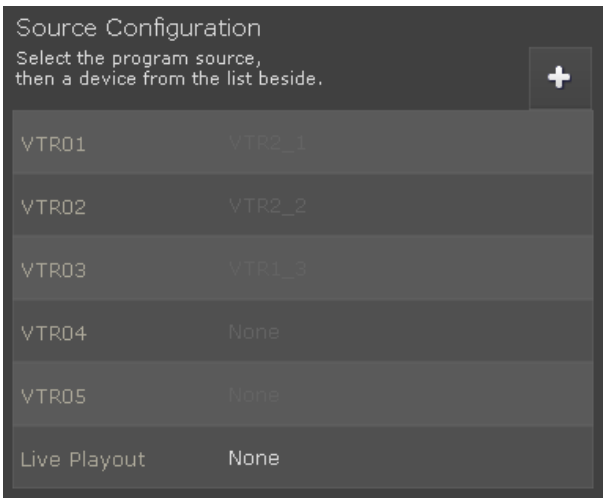
The program button is highlighted.

2. Click the **Ingest Recovery** button.

   The **Ingest Recovery** button is highlighted. The bullet icons are both red as the program has not yet been configured in one mode or the other.

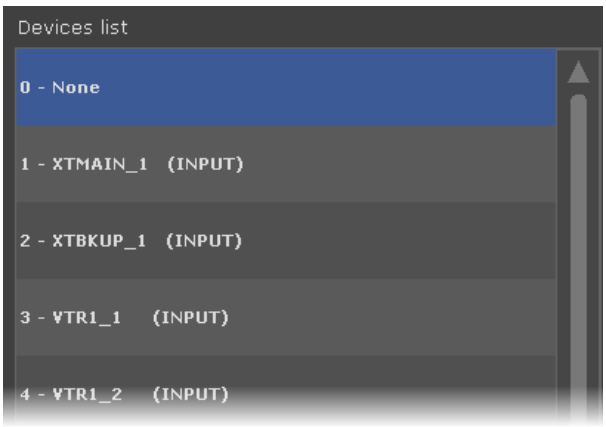
To assign a live train as source type: proceed with steps 3 and 4, otherwise go to step 5.

3. In the Source Configuration area, select **Live** or add an auxiliary source as explained in section "Auxiliary Live Sources for Ingest" on page 19.



Note
VTR sources cannot be selected here as they cannot be associated to a specific program. If required, users will be able to select them from the Router Manager window.

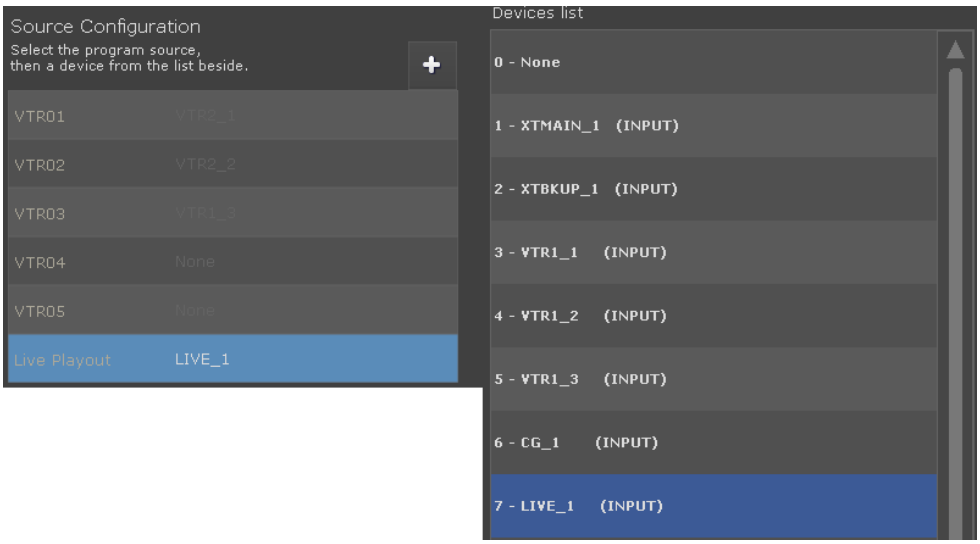
   The list of available devices is displayed in the Devices list on the right of the window.



Note
A source can be assigned several times.

4. In the Devices list, select the device to be used as the selected source (VTR or Live) for the program being configured.

   The selected device is associated to the selected source in the Source Configuration area.



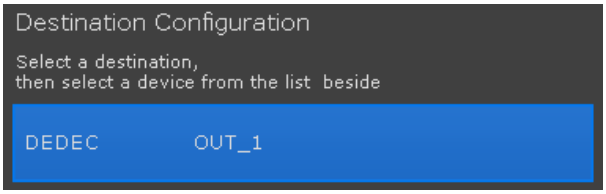
5. In the Destination Configuration area, select a destination type: **DEDEC** is the only option.

   The list of devices is displayed in the Devices list on the right of the window.

Note
A destination can only be assigned once.

6. In the Devices list, select the device to be used as XXX for the program being configured. Devices displayed in italicized and grayed text are not available.

   The selected device is associated to the selected destination in the Source Configuration area.



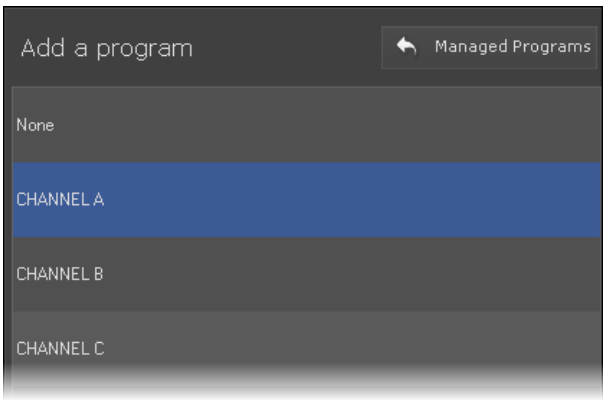
7. Click the **Save** button.

   A green icon is displayed on the **Ingest Recovery** button of the configured program in the Managed Programs pane.

2.3.4. How to Configure a Program for Playout

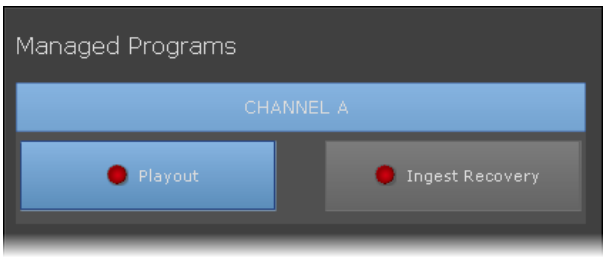
NEW ! To configure a program for playout, proceed as follows:

1. Select the program from the Add a Program pane.



   The left pane of the Router Manager Configuration window switches to the Managed Programs pane.

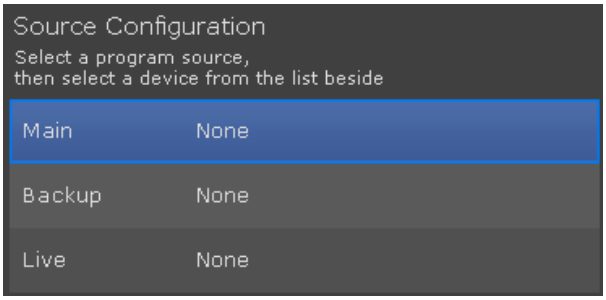
   The program button is highlighted.



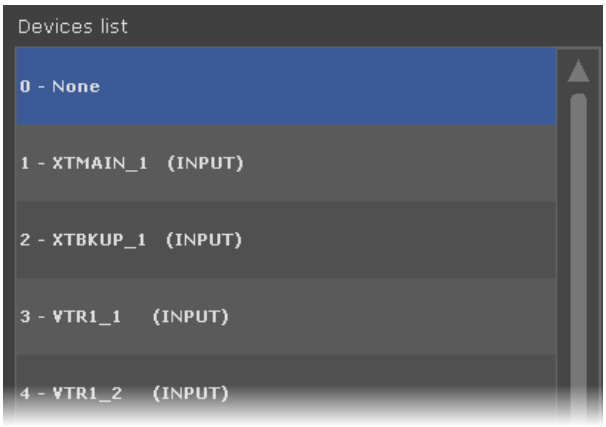
2. Click the **Playout** button.

   By default, the Playout mode is already selected and the **Playout** button is highlighted. The bullet icons are both red as the program has not yet been configured in one mode or the other.

3. In the Source Configuration area, select a source type, for example **Main** (or **Backup** or **Live**).



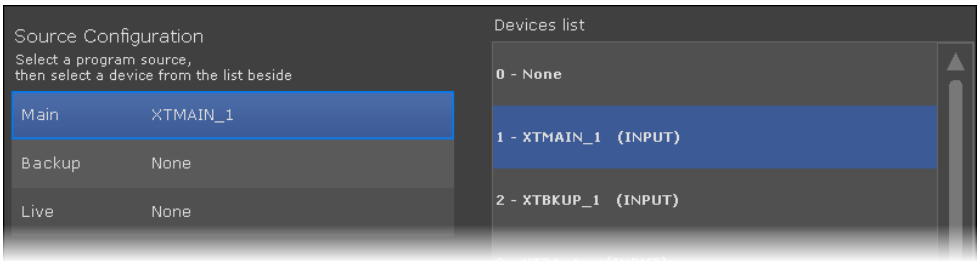
The list of available devices is displayed in the Devices list on the right of the window.



Note
A source can be assigned several times.

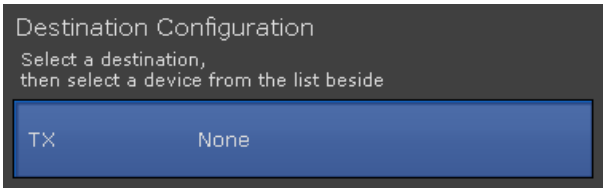
4. In the Devices list, select the device to be used as the selected source (main server, backup server, or live) for the program being configured.

   The selected device is associated to the selected source in the Source Configuration area.



5. Repeat steps 3 and 4 for the **Backup** source type.
6. (optional) Repeat steps 3 and 4 for the **Live** source type.

7. In the Destination Configuration area, select a destination type: **TX** is the only option.



The list of devices is displayed in the Devices list on the right of the window.

Note
A destination can only be assigned once.

8. In the Devices list, select the device to be connected to the transmission channel for the program being configured. Devices displayed in italicized and grayed text are not available.

   The selected device is associated to the selected destination in the Source Configuration area.

9. Click the **Save** button.

   A green icon is displayed on the **Playout** button of the configured program in the Managed Programs pane.

2.3.5. Auxiliary Live Sources for Ingest

NEW! Adding an Auxiliary Source for Ingest

To add an auxiliary source to the list of sources for Ingest, click the  button from the top of the Source Configuration area.

The new source is named **Live - Aux nr**

It is automatically selected and the list of devices is displayed on the right.

Renaming an Auxiliary Source

To rename an auxiliary source, click in the source name field and modify the name.

Removing an Auxiliary Source

To remove an auxiliary source from the list of sources, click the  button next to the source name.

2.4. Configuring VTRs

2.4.1. Introduction

This chapter explains how to configure a new VTR source or to edit an existing VTR configuration.

You perform such a configuration in the VTR Configuration panel. See section "VTR Configuration Panel" on page 20 for more information on the areas in the VTR Configuration panel.

NEW! The configured VTR devices will be available as sources for Playout mode and for Ingest / Recovery mode from the Router Manager window.

2.4.2. VTR Configuration Panel

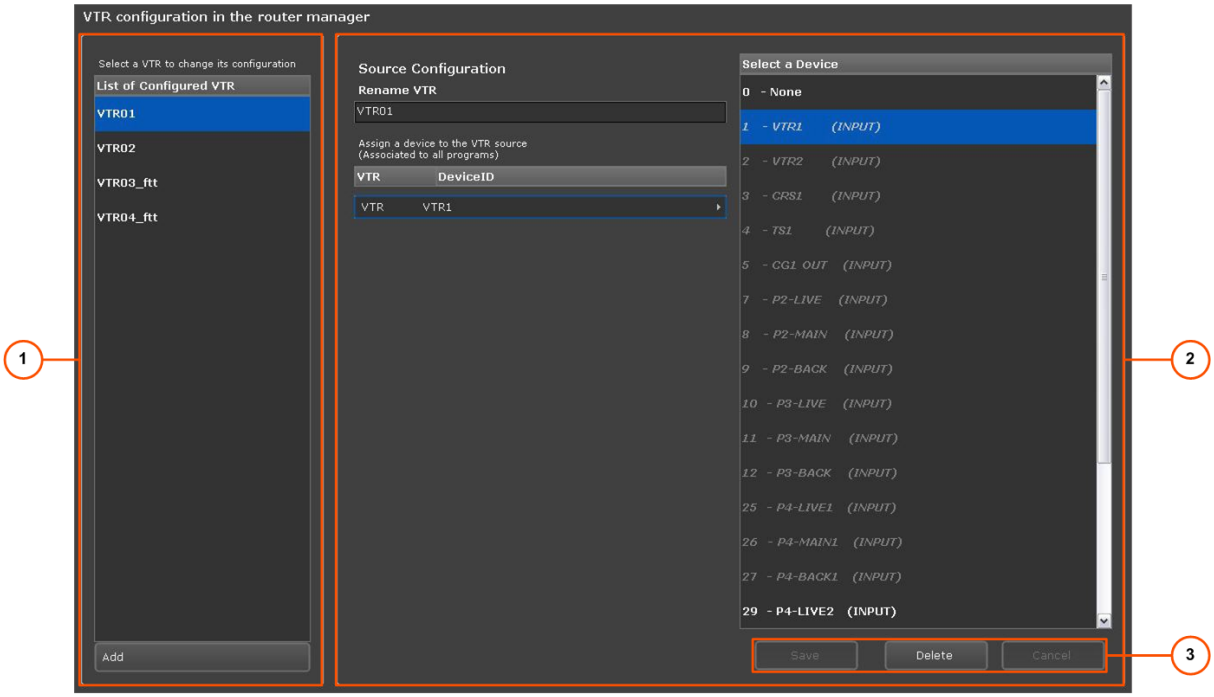
Introduction

The VTR Configuration panel allows you to specify the source devices to be defined as VTRs in the Router Manager.

The VTR Configuration panel is available by clicking the **VTR** button from the Router Manager Configuration toolbar.

Illustration

The VTR Configuration panel contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the VTR Configuration panel:

Area		Description
1.	List of configured VTRs	This list displays all VTRs that have been configured within the Router Manager. The **Add** button at the bottom of the area allows users to configure a new VTR.
2.	VTR configuration area	This area allows users to assign a VTR device to a VTR name in the Router Manager, and, if requested, to rename a VTR.
3.	VTR configuration toolbar	This toolbar allows you to save or delete the current configuration, or to cancel any modification.

2.4.3. How to Configure a VTR

To configure a VTR, proceed as follows:

1. To edit an existing VTR configuration:
   - select the VTR number from the list of configured VTRs.

     The VTR settings are displayed in the VTR Configuration area.

   OR

   To configure a new VTR:
   - click the **Add** button at the bottom of the list of configured VTRs.

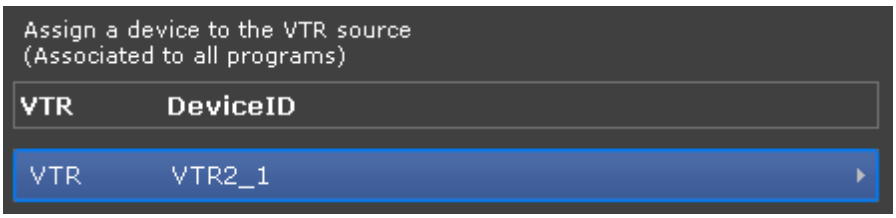
     A VTR number is added to the list, and empty settings are displayed in the VTR Configuration area.
2. (optional) To rename a VTR, modify the name in the **Rename VTR** field, as you want it to be displayed in the Router Manager operating window.
3. To assign a VTR device to the VTR number, click the VTR row in the Source Configuration area.

   The list of devices defined as a source in the router database is displayed in the Devices list on the right of the window.

4. In the Devices list, select the VTR device to be used as the selected source for the VTR being configured.

   The selected VTR device is associated to the selected source in the Source Configuration area.



5. Click the **Save** button.

2.5. Configuring CGs

2.5.1. Introduction

This chapter explains how to configure the sources and destinations for the CG of a given program for the Router Manager module, and to modify the parameters for the Special CGs.

You perform such a configuration in the CG Configuration panel.See section "CG Configuration Panel" on page 23 for more information on the areas in the CG Configuration panel.

You can configure two types of CG:

The Special CGs consist of a fixed predefined text that can be sent on air in specific cases (for example technical problem, temporary program disruption, ...). They are the same for all programs.

The standard CGs are program-specific. For a given program, you need to specify two device connections:

- **CG source:** this is a router source device (the source represents the connection from the CG device to the router).

  This is the program main or backup source including the graphics that is sent back to the router.

- **CG destination:** this is a router destination device (the destination represents the connection from the router into the CG device.

  This is the program main or backup source that is sent out of the router to the CG device. The program main or backup source is automatically selected as a source for the CG destination when the user performs a failover from the AirEdit Edition panel or from the Router Manager interface.

Note
If the router destination has not been locked, when an AirEdit operator clicks the **FAIL OVER** button, the system performs the failover and switches automatically the active sources. The displays in the Router Manager interface are updated accordingly. The new sources sent to TX and to the CG destination should have been configured before the failover operation so that they correspond to the currently active server output.

2.5.2. CG Configuration Panel

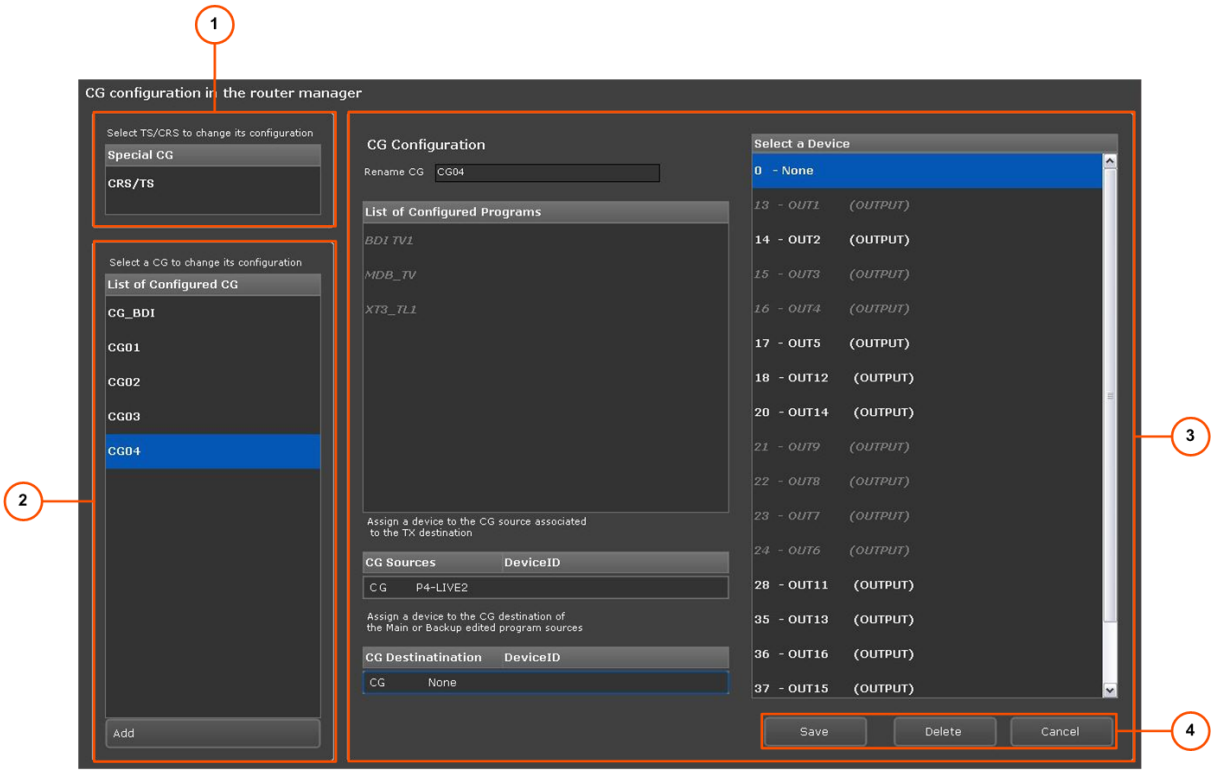
Introduction

The CG Configuration panel allows you to specify the source devices to be defined as CGs in the Router Manager.

The CG Configuration panel is available by clicking the **CG** button from the Router Manager Configuration toolbar.

Illustration

The CG Configuration panel contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the CG Configuration panel:

Area		Description
1.	List of Special CGs	This area allows to display the Special CG Configuration area, in order to configure the CRS/TS.
2.	List of configured CGs	This list displays all CGs that have been configured within the Router Manager. The **Add** button at the bottom of the area allows users to configure a new CG.
3.	Configuration area	This area can display two different views depending on the CG/Special CG selected on the left pane: • The **Special CG Configuration** area is displayed when a Special CG is selected in the List of configured Special CGs. It allows users to assign another source device to a specific type of CG (CRS or TS) available in the Router Manager. • The **CG Configuration** area is displayed when a CG is selected in the List of configured CGs. It is used to specify the source and destination connections to the CG device for a given program.
4.	CG Configuration toolbar	This toolbar allows you to save or delete the current configuration, or to cancel any modification.

2.5.3. How to Configure a CG

To configure a CG, proceed as follows:

1. To edit an existing CG configuration,
   - select it from the list of configured CGs.

     The CG settings are displayed in the CG Configuration area.

   OR

   To configure a new CG,
   - click the **Add** button at the bottom of the list of configured CGs.

     A CG number is added to the list, and empty settings are displayed in the CG Configuration area.
2. (optional) To rename a CG, modify the name in the **Rename CG** field, as you want it to be displayed in the Router Manager operating window.
3. From the list of configured programs, click the program to associate to the CG configuration. This is the list of programs configured for Playout.

4. Click the CG row below the **CG Source** label.

   The list of devices defined as a source in the router database is displayed in the Devices list on the right of the window.

5. In the Devices list, select the CG device to be used as the selected source for the CG being configured.

   The selected device is associated to the selected CG source in the CG Configuration area.

6. Click the CG row below the **CG Destination** label.
7. In the Devices list, select the device to be used as the selected destination for the CG being configured.

   The selected device is associated to the selected CG destination in the CG Configuration area.

8. Click the **Save** button.

Tip
When you need to use a CG device with another program, you do not need to remove the current configuration and add a new CG for this program. You can change the program associated to the configured CG.

2.5.4. How to Configure a Special CG

To configure a Special CG, proceed as follows:

1. Select the Special CG line from the list of configured Special CG.

   The Special CG settings are displayed in the Special CG Configuration area.

2. Click the CRS row.

   The list of devices defined as a source in the router database is displayed in the Devices list on the right of the window.

3. In the Devices list, select the device to be used as the selected source for the CRS being configured.

   The selected device is associated to the selected CRS source in the Special CG Configuration area.

4. Click the TS row.

   The list of devices defined as a source in the router database is displayed in the Devices list on the right of the window.

5. In the Devices list, select the device to be used as the selected source for the TS being configured.
6. Click the **Save** button.

3. Operation

3.1. Overview of the Router Manager Window

Purpose

The Router Manager window allows users to monitor up to six different program routes, and to switch manually the router sources.

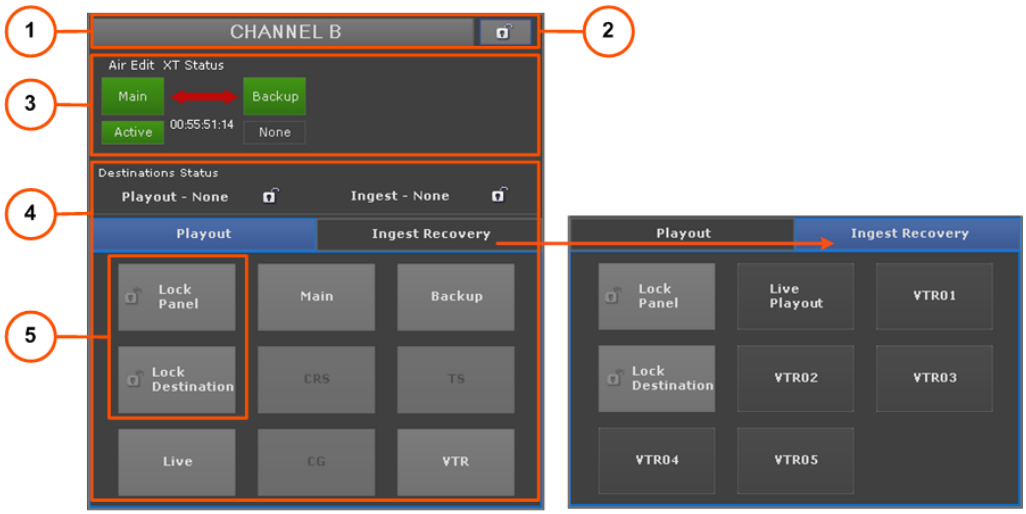
Prior to using the Router Manager, you have to configure the programs you want to monitor in the Router Manager. The configuration is performed in the Router Manager Configuration module. See section "Configuration" on page 7.

To open the Router Manager window, click the 

button from the main application bar. Two Router Manager windows can be opened at the same time, allowing to monitor twelve program routes.

NEW ! Illustration

The Router Manager window is divided into 6 panels. Each panel is dedicated to one program. The screenshot below features a single panel, as all fields or buttons have the same purpose or meaning in all panels, even if they are configured specifically to the program.



Area Description

Area/Field		Description
1.	Program Name field	This filed displays the name of the program to route. Clicking the program name allows users to select the program to be displayed in the panel.
2.	Lock button	This button allows users to lock the program selection, and prevent accidental change of the selected program. See section "Locking/Unlocking Sensitive Areas" on page 28.
3.	Main and Backup Server Status area	This area displays the statuses of the main and backup EVS servers, as well as their synchronization status. See the IPAirEdit User Manual for detailed information about the possible displays.
NEW ! 4.	Router Switch Manager panel	This area contains 2 tabs and displays the one or those corresponding to the mode used to configure the selected program: Playout and/or Ingest Recovery. In Playout mode, this area is used to switch manually the router source to: • the main server, • the backup server, • the live event, • the VTR, • the CG, • the CRS, • the TS. In Ingest Recovery mode, this area is used to switch manually the router source to: • Live Playout, • a VTR device. See section "Switching the Active Sources" on page 29. This panel can be locked/unlocked.
5.	Lock zone	This zone provides two toggle buttons: • **Lock Panel**: to lock/unlock the router switch manager panel of the Router Manager module. This prevents an operator from any handling mistake (especially when using the application through a touch screen). • **Lock Destination**: to lock/unlock the destination on the third-party router. This prevents an operator from accidentally taking a source to a particular destination. See section "Locking/Unlocking Sensitive Areas" on page 28.

Button Formats and Color Codes

The buttons allowing to select a source for the router can have the following formats:

Button Format	Meaning
Blue	The status is ok and the selected source is the active one.
Light gray	The status is ok and the selected source is not the active one.
Red	The status is not ok.
Dimmed	The source is not configured.

3.2. Locking/Unlocking Sensitive Areas

Introduction

To prevent any handling mistake (especially when using the application through a touch screen), some sensitive areas of the window can be locked out.

How to Lock/Unlock the Channel/Program Name Selection?

Toggle the **Lock/Unlock** button from the program/channel name area.

When locked, the display is as follows:

How to Lock/Unlock the Panel?

Toggle the **Lock Panel** button from the router switch manager panel.

When locked, the display is as follows:

How to Lock/Unlock the Channel/Program Destination?

Toggle the **Lock Destination** button from the router switch manager panel.

When locked, the display is as follows:

The user can lock/unlock the destination throughout a third-party control panel, or directly on the NV9000. The status of the **Lock Destination** button will be updated accordingly.

Note
The destination can be locked from the router switch manager panel
- if the panel itself is not locked, and
- if the setting has been enabled in the Program Configuration panel of the Router Manager Configuration window. See section "Program Configuration Panel" on page 12.

3.3. Switching the Active Sources

NEW !

Introduction

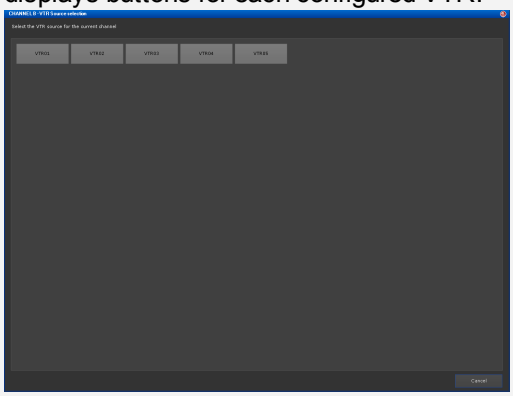
In the Router Manager, you can switch the source sent to the main and backup servers (in Ingest Recovery mode) or sent on air (in Playout mode) by clicking the button corresponding to the requested source in the Router Switch Manager area.

When you have selected the source to be sent to EVS servers (Ingest) or to go on air (Playout), the system sends a switch command to the router controller, and, if there is no source or destination issue, it switches the router position to send media to the EVS servers or to play on air the selected source.

Note
To switch manually the active sources, the Router Switch Manager panel must be unlocked.

How to Switch the Active Sources?

	Mode	To switch the active source to ...	Proceed as follows
NEW !	**Ingest**	the live input	Click the **Live PLayout** button.
NEW !	**Ingest**	a VTR device	Click one of the **VTR** button.

Mode	To switch the active source to ...	Proceed as follows
Playout	the main server	Click the **Main** button. If the main server is not active, the system prompts the user to perform a failover.
Playout	the backup server	Click the **Backup** button. If the backup server is not active, the system prompts the user to perform a failover.
Playout	the live input	Click the **Live** button.
Playout	CRS	Click the **CRS** button.
Playout	TS	Click the **TS** button.
Playout	CG	Click the **CG** button.
Playout	VTR	1. Click the **VTR** button. A VTR source selection window opens and displays buttons for each configured VTR:  2. Click the VTR source you want to switch to.

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