Trinity Feature: Data Channel Configuration

Reference Guide Appendix

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Part Number: **07MTRINH110-APD, Rev. C**
Revised: **February 24, 2012**

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Appendix Data Channel Configuration

Chapter contents

Overview

This chapter describes how to configure H.110 data channels.

For some TrinityAE models, the H.110 ports act as WAN ports running bridged or routed point-to-point protocol (PPP) connections over HDLC to remote devices. This chapter explains how to create H.110 data channels that may be used to transport PPP packets.

> **Note** The menu, commands, and features for your model may vary slightly from what is shown in this manual. Some models may not include all of the features mentioned. Refer to the model's *User Manual*, available online at **www.patton.com/manuals**, to see which features are available.

Configuration Overview

To configure data channels, follow these steps:

1. **Create the H.110 Data Channel**
2. **Create H.110 Maps on the Data Channel**

On the 6081RC, the HDLC interface(s) transmit and receive over the H.110 bus. The H.110 bus consists of 32 streams, each with 128 uni-directional timeslots. Each timeslot is uni-directional (transmit only or receive only). Each HDLC interface must have H.110 timeslots mapped to transmit to and to receive from before it can pass data.

To configure H.110 data channels through the WMI,
see the section "Web Management Interface (WMI)" on page 5.

To configure H.110 data channels through the CLI,
see the section "" on page 7.

Web Management Interface (WMI)

To access the H.110 Data Channel Management page, click on **Interface Configuration > Data Channels** from the main menu on the left of the screen.

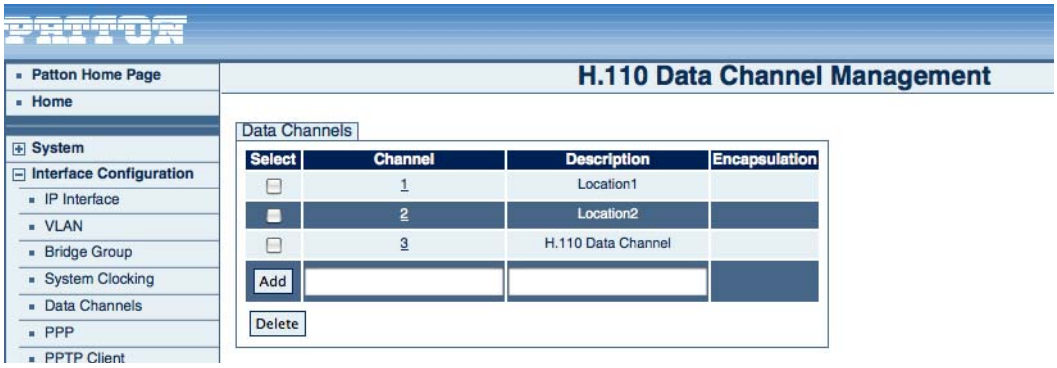

Figure 1. H.110 Data Channel Management main page

Add/Delete Data Channels

To add a data channel:

1. Enter a number in the **Channel** field of the **Data Channels** table. This number is used to identify the channel.
2. Enter a description (optional) (such as a location or other characteristic) in the **Description** field. If no description is specified, the system will use the default description (**H.110 Data Channel)**.
3. Click **Add**.

To delete a data channel:

1. Click the **Select** checkbox for the channel in the **Data Channels** table. (An H.110 data channel cannot be deleted while it is bound to a PPP interface).
2. Click **Delete.**

Configure Data Channels

To change the name of an H.110 data channel or add/delete H.110 maps, click on the channel number in the Data Channels table on the H.110 Data Channel Management main page.

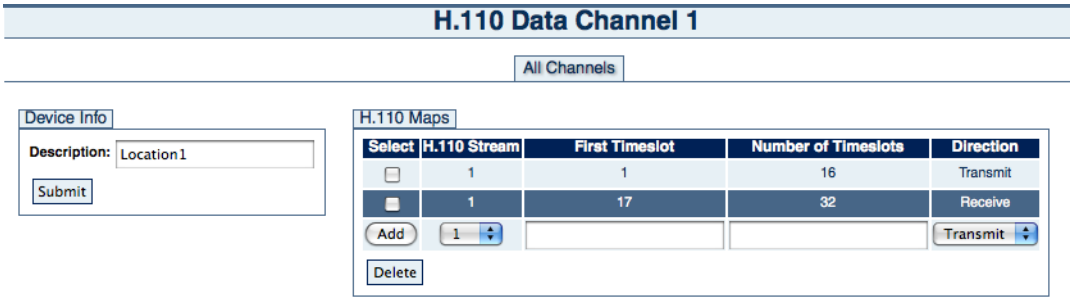

Figure 2. Add/Delete H.110 Maps

To configure H.110 maps, enter information for the following fields:

- **H.110 Stream:** Must be a number in the range 1-32.
- **First Timeslot:** Must be a number in the range 1-128.
- **Number of Timeslots:** Must be a number in the range 1-128.
- **Direction:** Select Transmit or Receive from the drop-down menu.

> **Note** An H.110 data channel cannot be configured while it is bound to a PPP interface.

Manage Data Channels and PPP Interfaces

To manage data channels and PPP interfaces, click on **PPP** in the main navigation menu on the left side of the screen. Then, select the PPP interface to manage. H.110 data channels display as PPP devices. Any H.110 data channel created through the Data Channel page displays on the PPP interface management page as **h110-chan<*x*>**.

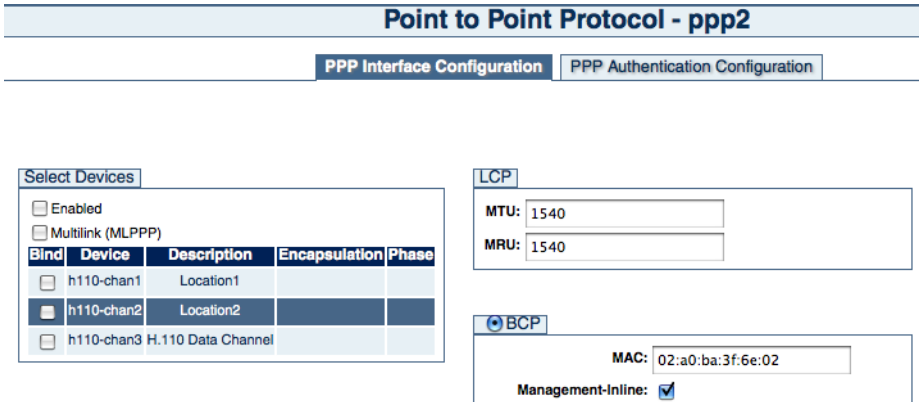

Figure 3. Data Channels and PPP

To bind a H.110 data channel to a PPP interface:

1. On the PPP interface page, select the **Enabled** checkbox in the **Select Devices** section.
2. If you want to bind multiple channels, select the **Multilink (MLPPP)** checkbox.
3. Select the **Bind** checkbox for the desired H.110 channel(s).
4. Click **Update** to enable your changes.

To unbind a H.110 data channel from a PPP interface:

1. On the PPP interface page, deselect the **Enabled** checkbox in the **Select Devices** section.
2. Deselect the **Bind** checkbox for the desired H.110 channel(s).
3. Click **Update** to enable your changes.

> **Note** For more detailed information on PPP, refer to the *PPP Configuration* chapter in the *TrinityAE Administrator's Reference Guide* (available online at **www.patton.com/manuals/Trinity-arg.pdf**).

Command Line Interface (CLI)

H.110 Data Channel Configuration Commands

Table 1. Steps for Creating/Configuring H.110 Channels - CLI

	Command	Explanation
1.	**Trinity# configure controller h110**	Enter the Configuration Mode.
2.	**Trinity[h110]# [no] channel <id>**	**<id>** can be either **h110<*number*>** or just a number. This creates interface **h110<*number*>** and enters the H.110 Channel Configuration Mode. The **no** form of this command deletes the device. A channel cannot be deleted while it is bound to a PPP interface.
3.	**Trinity[h110-chan*x*]# [no] {tx|rx} stream <stream> timeslots <firstts> count <numts>**	Maps H.110 timeslots to the data channel. **<stream>** must be 1-32, **<firstts>** must be 1-128, and **<numts>** must be 1-128. The **no** form of this command deletes an existing mapping. A device's H.110 mappings cannot be modified while it is bound to a PPP interface.
4.	**Trinity[h110-chan*x*]# show**	Shows the configuration of the H.110 channel.

Note <**firstts**> represents the first timeslot.
<**numts**> represents the number of timeslots.

Example: Trinity[h110-chan2]# show:

```
Direction  Stream  Timeslot  Length
---------  ------  --------  ------
Tx              2         1      31
Rx              2        33      31
```

H.110 Data Channel Debugging Commands

Table 2. H.110 Channel Debugging - CLI

Command	Explanation
Trinity# debug controller h110 {channel|clocking [<id>] [priority {emerg|alert|crit|err|warn|notice|info|debug}] }	Debug H.110 channel. If no H.110 channel id is specified, then the entire H.110 channel subsystem is debugged. A priority may be specified, emerg being the least verbose, and debug being the most. If no priority is specified, err is used.
Trinity# no debug all	Turn off all debugging.