Configuring the AXIS® Q7401 Video Encoder for Multicast Playback Using SAFARI Montage® Selective Video Streaming

PLEASE NOTE BEFORE BEGINNING: These instructions supplement the manufacturer's installation guide and describe the configuration of the AXIS Q7401 Video Encoder for multicast playback using SAFARI Montage Selective Video Streaming.

Requirements:

- AXIS Q7401 Video Encoder

- IP address of the AXIS Q7401 Video Encoder

- SAFARI Montage Media Player, available through SAFARI Montage by selecting
  Help -> **Browser and Plug-in Downloads** -> **SAFARI Montage Media Player**

AXIS Installation and Configuration:

1. Install and configure the AXIS Q7401 Video Encoder in accordance with the manufacturer's installation guide. The AXIS Q7401 Installation Guide is available in the box with the encoder or via download at the AXIS Communication's website.

   There are two utilities provided by AXIS Communication that can be used to access and configure your encoder. These utilities are the **AXIS IP Utility** and **AXIS Camera Management**. These utilities are located on the CD that accompanied your encoder or can be downloaded from the AXIS Communication's website. Either utility will locate any AXIS encoders on your network and allow you to configure them in accordance with your networking infrastructure. Refer to pages 7 and 8 of the AXIS Q7401 Installation Guide for details on using these utilities.

   Note: The AXIS Q7401 is set to DHCP from the factory. If your network does not have DHCP, the encoder will use **109.168.0.90** as the default address.

2. Install the SAFARI Montage Media Player and set as the default player used in SAFARI Montage.

3. Navigate to the web management interface of the AXIS Q7401 by using a web browser and the unit's IP address.

   Note: Microsoft® Internet Explorer® users. When accessing the encoder for the first time, you will be required to install three add-ons, the **AXIS Media Control**, **H.264 Decoder** and **AAC Decoder**. These three add-ons must be installed to all workstations that will be using Microsoft Internet Explorer to access and view streaming media from the encoder. The only way to install these three add-ons is to access the encoder's web management interface from each workstation.

4. Select **Setup** from the top right-hand of the screen.

   Note: The username and password created during the initial setup of the AXIS Encoder will be required.

5. Expand the **Basic Setup** section of the left-hand navigation.

6. Select option **1. Users** and configure the following:

   User Settings

   - Enable (check) **Enable anonymous viewer login** and click on the **Save** button.

7. Select option **3. Date & Time**, set the date and time settings for the unit, and click on the **Save** button.

8. Select option **4. Video Stream**, configure the following settings and click on the **Save** button for each tab.

   Note: The settings below are recommended values that may be adjusted, based on local requirements.

   Image Tab

   - *Resolution*: **4CIF (704 x 480)**
   - *Compression*: between **20** and **30**

Configuring the AXIS Q7401 Video Encoder for Multicast Playback
Using SAFARI Montage Selective Video Streaming (C5621 – 02/2012)

SAFARI MONTAGE

Page 2

Audio Tab

- *Enable Audio:* **Checked**

H.264 Tab

- *Use:* **Constant bit rate**
- *Target bit rate:* **3000 kbit/s**

9. Select option **5. Audio Settings**, configure the following settings and click on the **Save** button.

> ***Audio Channels***
>
> - *Audio mode:* **Half duplex**
>
> ***Audio Input***
>
> - Source: **Line**
> - Input Gain: **12 dB** (adjust based on source and volume needs)
> - Encoding: **AAC** (this setting is required for multicast support with SAFARI Montage Selective Video Streaming)

10. Expand the **Live View Config** section of the left-hand navigation.
11. Configure the following settings in **Live View Layout**, and click on the **Save** button.

   Stream Profile
   - *Stream profile:* **H.264**

   Default Viewer
   - *Windows Internet Explorer:* **AMC (ActiveX)**
   - *Other Browsers:* **QuickTime**

   Viewer Settings
   - *Enable H.264 decoder installation* **(Checked)**

Configuring the AXIS Q7401 Video Encoder for Multicast Playback
Using SAFARI Montage Selective Video Streaming (C5621 – 02/2012)

SAFARI MONTAGE

Page 4

12. Expand the **System Options** section of the left-hand navigation, select **Network** -> **TCP/IP** -> **Advanced**, configure the following settings and click on the **Save** button.

> *RTSP*
>
> - *Enable RTSP server:* **Checked**
> - *RTSP port:* **554**

13. Expand the **System Options** section of the left-hand navigation, select **Network** -> **RTP** in the left-hand navigation, configure the following settings and click on the **Save** button.

   Port Range
   - *Start port:* **50000**
   - *End port:* **50999**

   Multicast
   - *Video address: <Multicast Address>* (as determined by your network administrator)
   - *Video port:* **50000**
   - *Audio address: <Multicast Address>* (enter as determined by your network administrator)
   - *Audio port:* **50002**

14. Click on **Live View**, located in the top right-hand of the screen, to confirm the video stream from the encoder.

Configuring the AXIS Q7401 Video Encoder for Multicast Playback
Using SAFARI Montage Selective Video Streaming (C5621 – 02/2012)

Page 6

Configuring a Multicast Stream in SAFARI Montage:

1. Log in to SAFARI Montage as an administrator.
2. Select the **Admin** tab in the header.
3. Select **Selective Video Streaming** -> **Video Streaming** from the left-hand navigation.
4. Select **New Stream** at the top of the stream list and configure the following settings:

Setting Name	Setting
Video Stream Name	Enter an appropriate name for the video stream
Active Stream	Checked
Reservations	Checked or unchecked as required
School News	Checked or unchecked as required
School	Select a school to associate with the video stream; typically the school responsible for controlling
URL	Enter the URL for the video stream, using the following syntax **For Unicast:** rtsp://*<ip address of AXIS encoder>*/axis-media/media.amp **For Multicast:** axrtpm://*<ip address of AXIS encoder>*/axis-media/media.amp?codec=h264 **Note:** Enter the IP address of the AXIS encoder, not the multicast address.
Type	Select the type of stream from the AXIS encoder (Video or Motion JPEG)
Source	Select the video stream's source (DTV, Internet, Cameras or DVD)
Bitrate (*Optional*)	Enter value in Kb or Mb
Description (*Optional*)	Enter a description for the video stream
Controlled Devices (*Optional*) **Note:** This option only appears when editing a stream and is not available during **New Stream** setup.	Select a Pathways SM controllable device; this will allow the user to control the source device, e.g., a PTZ camera or DTV tuner, for the video stream through the associated Pathways SM virtual remote control. **Note:** Applies only to systems with the Pathways SM Module.
Assign to (*Optional*)	Select School Groups or Individual Schools that will have access to view the video stream. **Note:** The school set in the **School** setting above will always be selected.

5. Click on the **Save Changes** button.

6. Navigate to **Admin -> Selective Video Streaming -> Video Streaming** and confirm that the stream plays back correctly.

Support:

For assistance with SAFARI Montage or SAFARI Montage Selective Video Streaming, please contact SAFARI Montage Technical Support by calling (800) 782-7230 or by visiting http://www.safarimontage.com/support.

Configuring the AXIS Q7401 Video Encoder for Multicast Playback
Using SAFARI Montage Selective Video Streaming (C5621 – 02/2012)

SAFARI MONTAGE

Page 8