DM-NVX-D30/E30(C)

DM NVX® 4K60 4:4:4 HDR Network AV Decoder

Web Interface Configuration Guide

Crestron Electronics, Inc.

Original Instructions
The U.S. English version of this document is the original instructions.
All other languages are a translation of the original instructions.

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Introduction

The DM-NVX-D30/E30(C) is a reliable compact decoder that supports HDR10 and HDCP 2.2 and transports 4K60 4:4:4 video over standard Gigabit Ethernet with no perceptible latency or loss of quality.

Web Interface Overview

The web interface of the DM-NVX-D30/E30(C) allows you to view status information for the DM-NVX-D30/E30(C) and configure its network and device settings.

Access the Web Interface

The web interface is accessed from a web browser. The following table lists various operating systems and the corresponding supported web browsers.

Operating System and Supported Web Browsers

OPERATING SYSTEM	SUPPORTED WEB BROWSERS
Windows® operating system	Chrome™ web browser, version 31 and later Firefox® web browser, version 31 and later Microsoft Edge® web browser
macOS® operating system	Safari® web browser, version 6 and later Chrome™ web browser, version 31 and later Firefox® web browser, version 31 and later

To access the user interface, do either of the following:

- Open it directly in a web browser.
- Open a web browser from within the Crestron Toolbox™ application.

Access Web Interface with a Web Browser

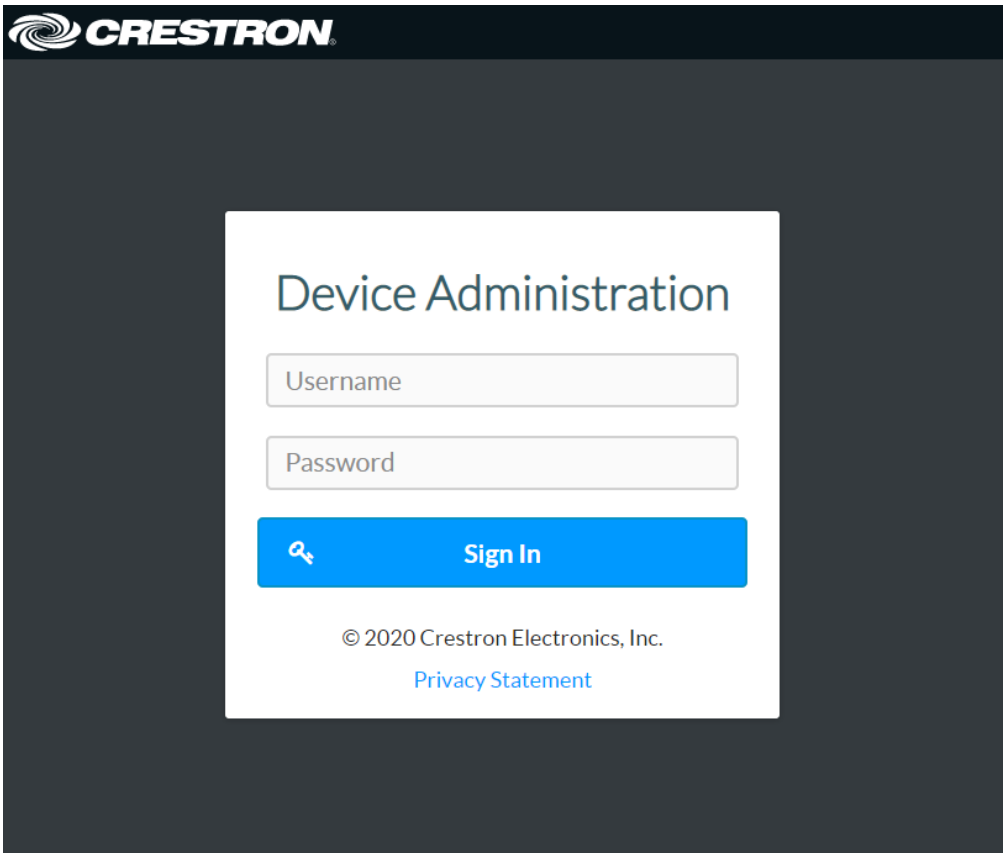
1. Enter the IP address of the DM-NVX-D30/E30(C) into a web browser.

   NOTE: To obtain the IP address, press the **Setup** button on the front panel of the DMF-CI-8 chassis of the DM-NVX-D30/E30(C). The IP address will appear on a display connected to the HDMI® output.

2. Enter your credentials in the **Device Administration** dialog (note that the user name and password are case sensitive). The default user name is *admin*, and the default password is *admin*.

   NOTE: For enhanced security, it is recommended that the default password be changed.

   Device Administration Login Page



3. Click **Sign In**.

Access Web Interface With Crestron Toolbox™ Software

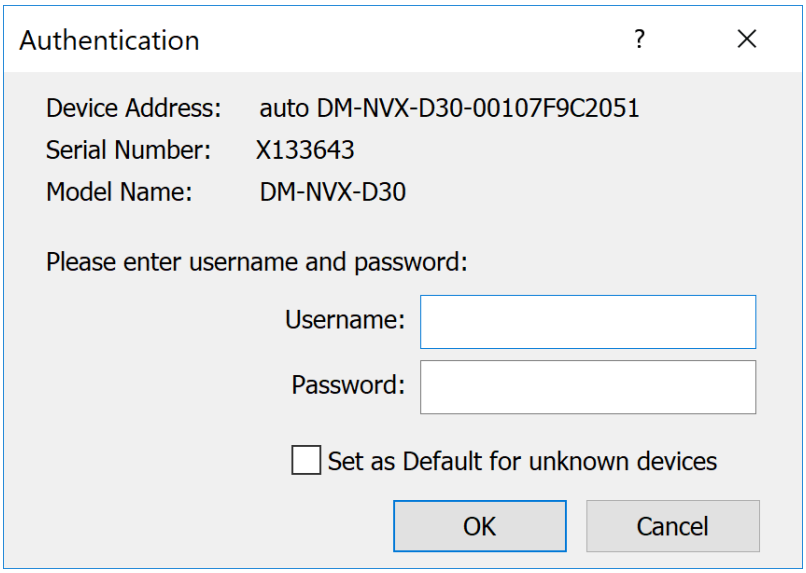
To access the user interface by opening a web browser within the Crestron Toolbox™ application, do the following:

1. Open the Crestron Toolbox™ application.
2. From the **Tools** menu, select **Device Discovery Tool**. You can also access the Device Discovery Tool by clicking the Device Discovery Tool button in the Crestron Toolbox toolbar. The DM-NVX-D30/E30(C) is discovered and is listed in the device list on the left side of the screen. The associated host name, IP address, and firmware version are also displayed.

   NOTE: If there is security software running on the computer, a security alert might be displayed when the Crestron Toolbox application attempts to connect to the network. Make sure to allow the connection, so that the Device Discovery Tool can be used.

3. In the Device Discovery Tool list, double-click your DM-NVX-D30/E30(C) device.
4. Enter your credentials in the **Authentication** dialog that opens, and then click **Log In**.

   Authentication Dialog Box



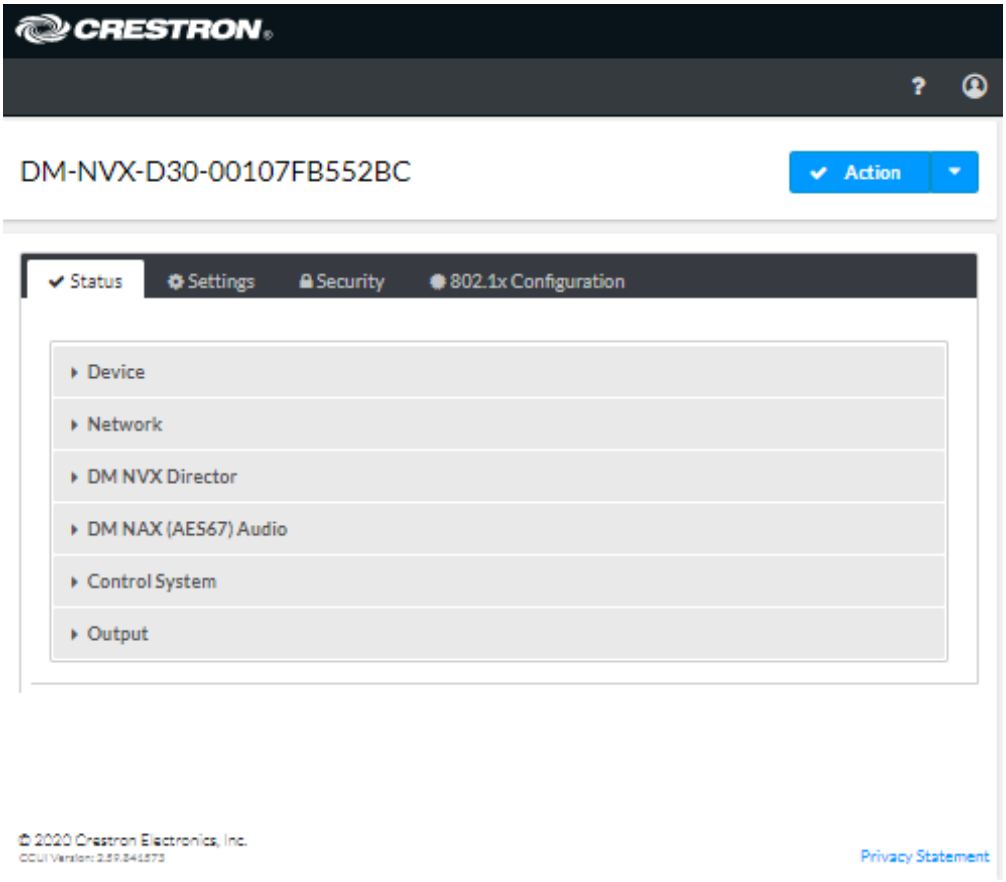
5. Click the **Web Configuration** button in the Configuration page displayed on the left side of the Device Discovery Tool.

Status

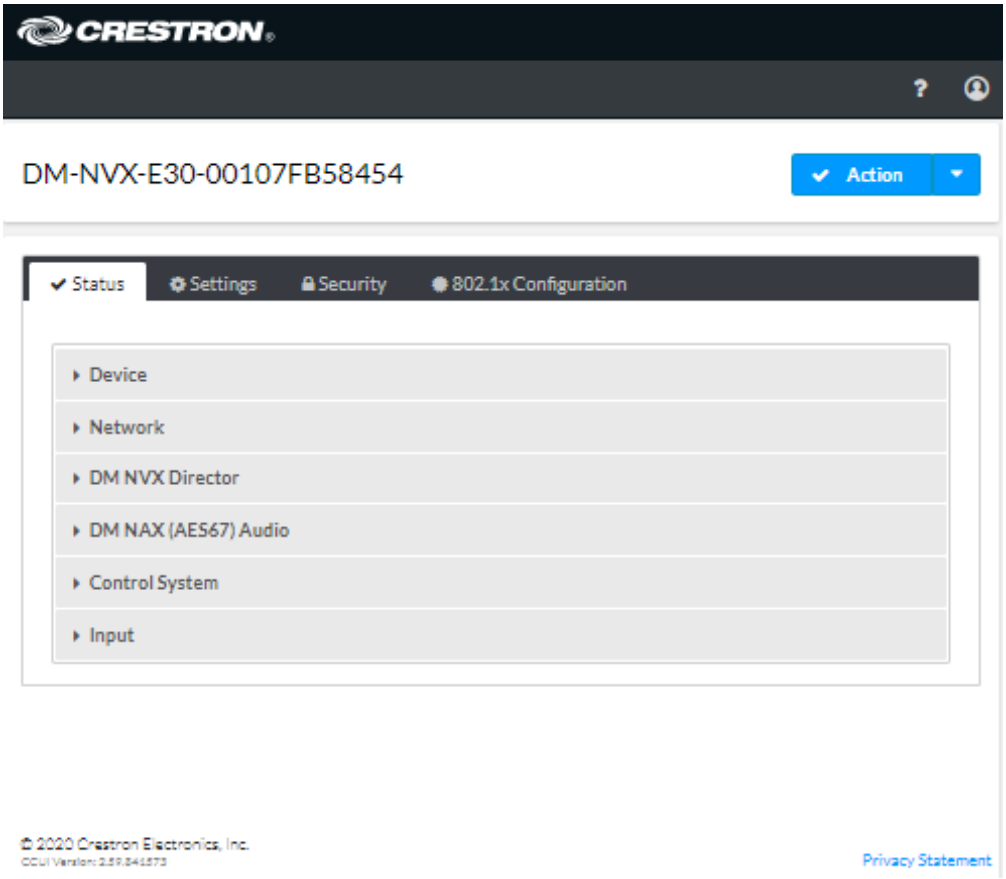
The Status page is the first page that is displayed when opening the web interface of the DM-NVX-D30/E30(C). It displays general information about the DM-NVX-D30/E30(C) (such as model name, serial number, and firmware version), current network settings (such as host name and IP address, etc.), as well as information about the connection to the control system.

The Status page can be accessed at any time by clicking the **Status** tab in the navigation bar of the web user interface of the DM-NVX-D30/E30(C).

DM-NVX-D30 Status Page



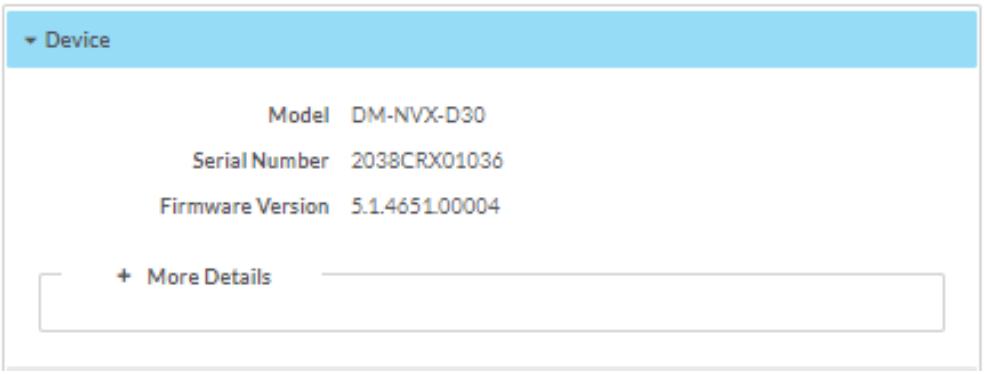
DM-NVX-E30 Status Page



Device

Displays the **Model**, **Serial Number**, and **Firmware Version** of the DM-NVX-D30/E30(C).

Status Page - Device



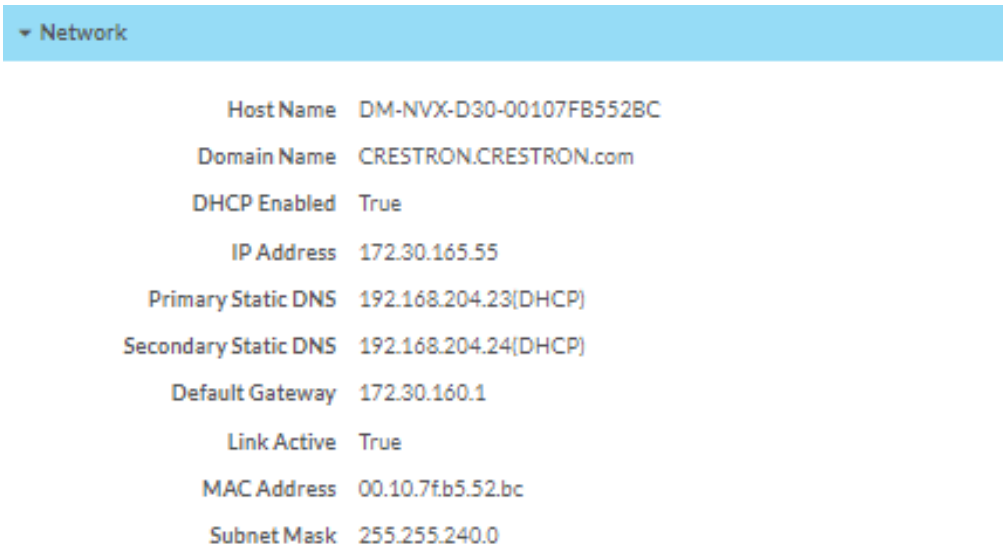
Click on **+ More Details** to see additional information about the DM-NVX-D30/E30(C).

Network

Displays the **Host Name**, **Domain Name**, **DHCP Enabled**, **IP Address**, **DNS Servers**, **Default Gateway**, **Link Active**, **Mac Address**, and **Subnet Mask** of the DM-NVX-D30/E30(C).

NOTE: By default, the host name of DM-NVX-D30/E30(C) consists of the model name followed by the MAC address of the device. For example, DM-NVX-D30/E30(C)- .

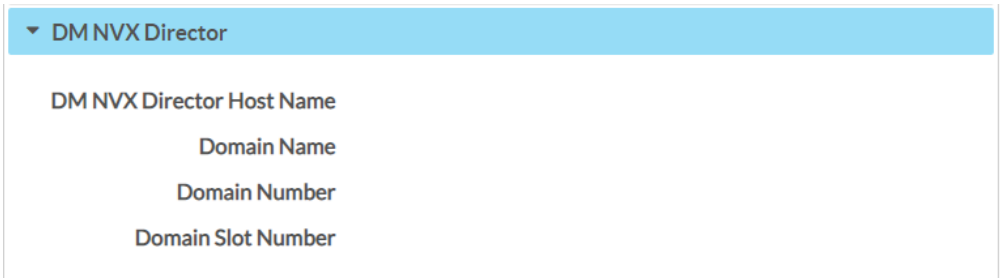
Status Page - Network



DM NVX Director

Displays the settings of the DM NVX Director® virtual switching appliance. Note that the fields below will not be populated when using XiO-Director v 1.0.

Status Page - DM NVX Director

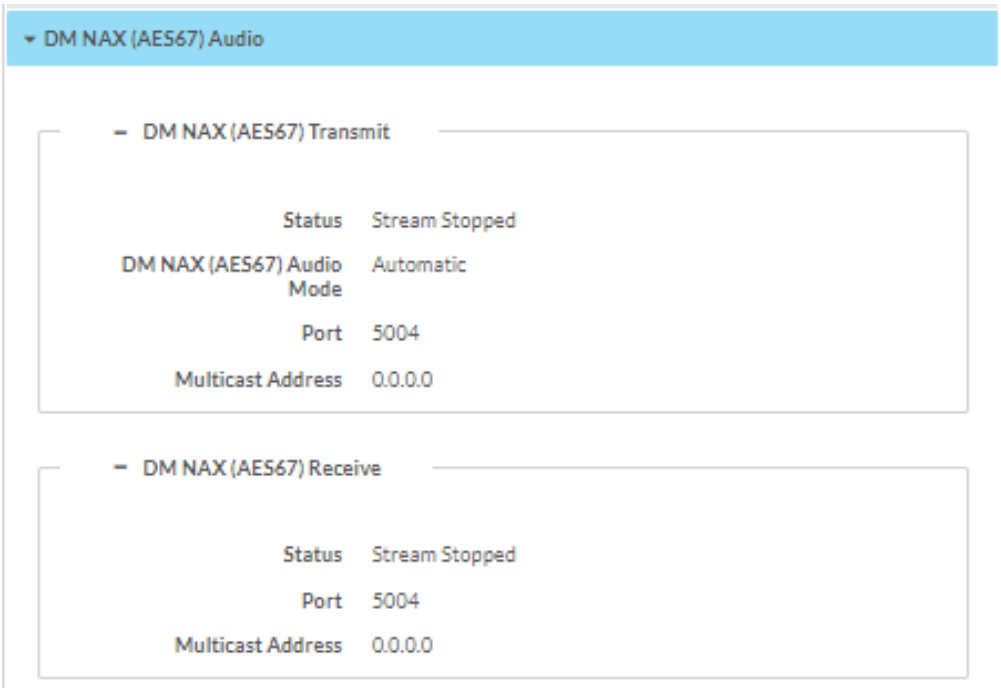


- **DM NVX Director HostName:** Displays the host name of the DM-NVX-Director.
- **Domain Name:** Displays the domain name of the DM-NVX-Director.
- **Domain Number:** Displays the domain number of the DM-NVX-Director.
- **Domain Slot Number:** Displays the domain slot number of the DM-NVX-Director.

DM NAX (AES67) Audio

Displays the following DM NAX™ audio information for both **DM NAX (AES67) Transmit** and **DM NAX (AES67) Receive** audio channels.

Status Page - DM NAX (AES67) Audio

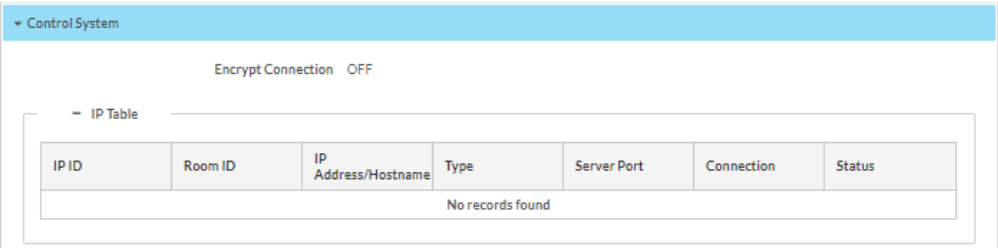


- **Status:** Displays the status of the stream.
- **DM NAX (AES67) Audio Mode:** Will display under either DM NAX (AES67) Transmit or DM NAX (AES67) Receive depending on the mode set. By default, the mode is set to **Automatic** which will add +1 to the outgoing video stream multicast address. For example, if the Video multicast address is 239.8.0.0, the DM NAX (AES67) Multicast address will be 239.8.0.1. The mode can also be set to **Manual** (which will allow setting the multicast address in the field below) or **Disabled**.
- **Multicast Address:** Sets the multicast address. This is only available when **Mode** is set to **Manual**.
- **Port:** Sets the port number. Available when **Mode** is set to **Manual**.

Control System

Displays the following connection information.

Status Page - Control System

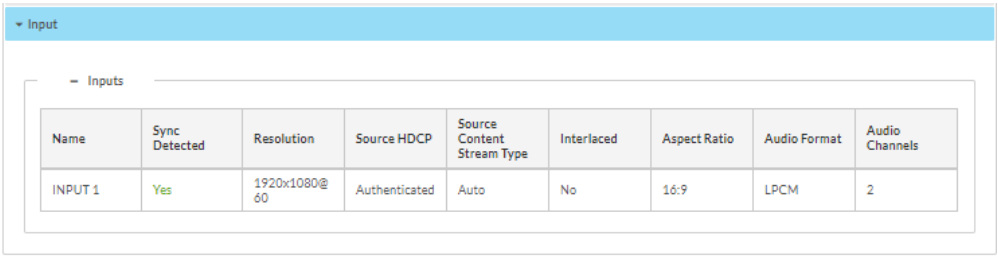


- **Encrypt Connection:** Displays **ON** if the connection is encrypted or **OFF** if it is not.
- **IP ID:** Displays the IP ID of DM-NVX-D30/E30(C).
- **Room ID:** Displays the Room ID of the control system.
- **IP Address/Hostname:** Displays the IP address and Hostname of the control system.
- **Type:** Always set to **Peer**.
- **Server Port:** Displays the server port. The default port is set to **41794**.
- **Connection:** Always displays **Gway**.
- **Status:** The status will be either **OFFLINE** or **ONLINE**.

Input (DM-NVX-E30 Only)

Displays the following input information.

Status Page - Input

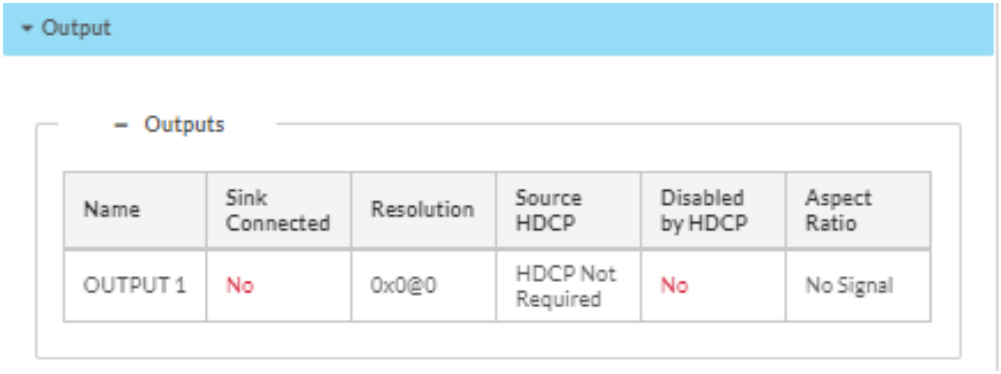


- **Name:** Displays the name of the input.
- **Sync Detected:** Displays whether sync is detected (**Yes**) or not (**No**).
- **Resolution:** Displays the resolution.
- **Source HDCP:** Displays the status of the source HDCP.
- **Source Content Stream Type:** Displays the stream type of the source content.
- **Interlaced:** Displays whether the stream is interlaced (**Yes**) or not (**No**).
- **Aspect Ratio:** Displays the aspect ratio.
- **Audio Format:** Displays the audio format.
- **Audio Channels:** Displays the number of audio channels.

Output (DM-NVX-D30 Only)

Displays the following output information.

Status Page - Output



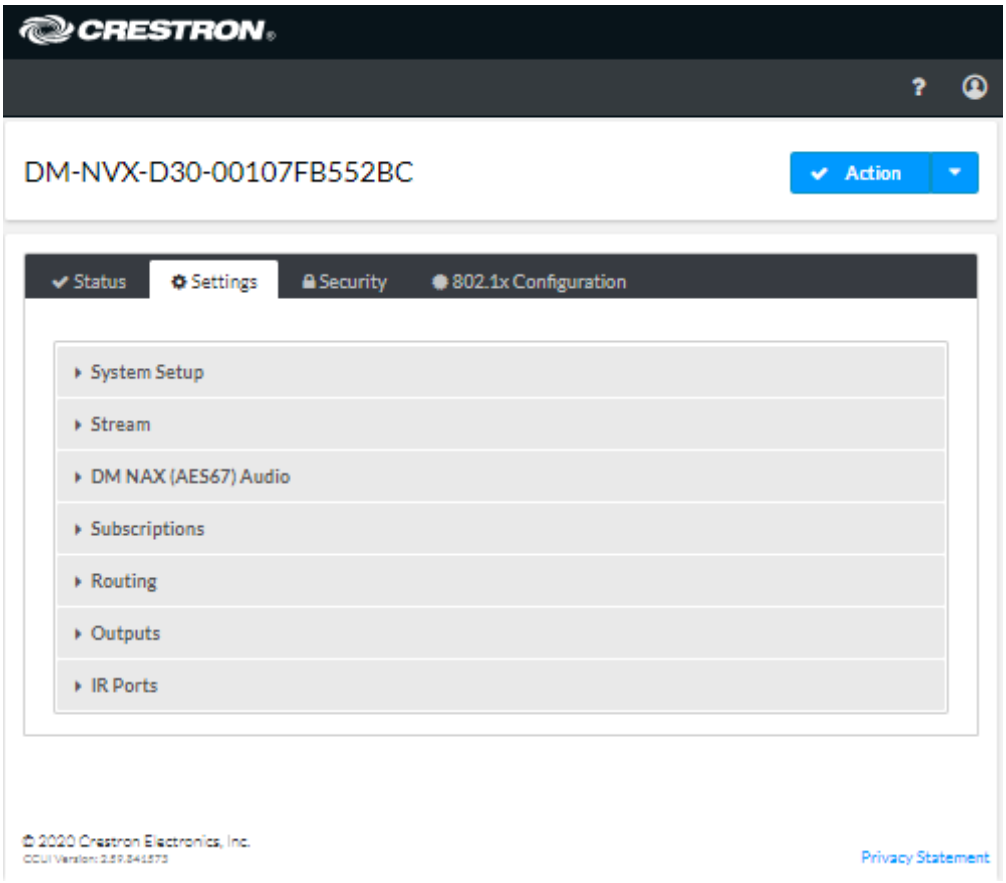
- **Name:** Displays the name of the output.
- **Sink Connected:** Displays whether a sink is connected (**Yes**) or not (**No**).
- **Resolution:** Displays the resolution.
- **Source HDCP:** Displays the status of the source HDCP.
- **Disabled by HDCP:** Displays whether the source is disabled by HDCP (**Yes**) or not (**No**).
- **Aspect Ratio:** Displays the aspect ratio.

Settings

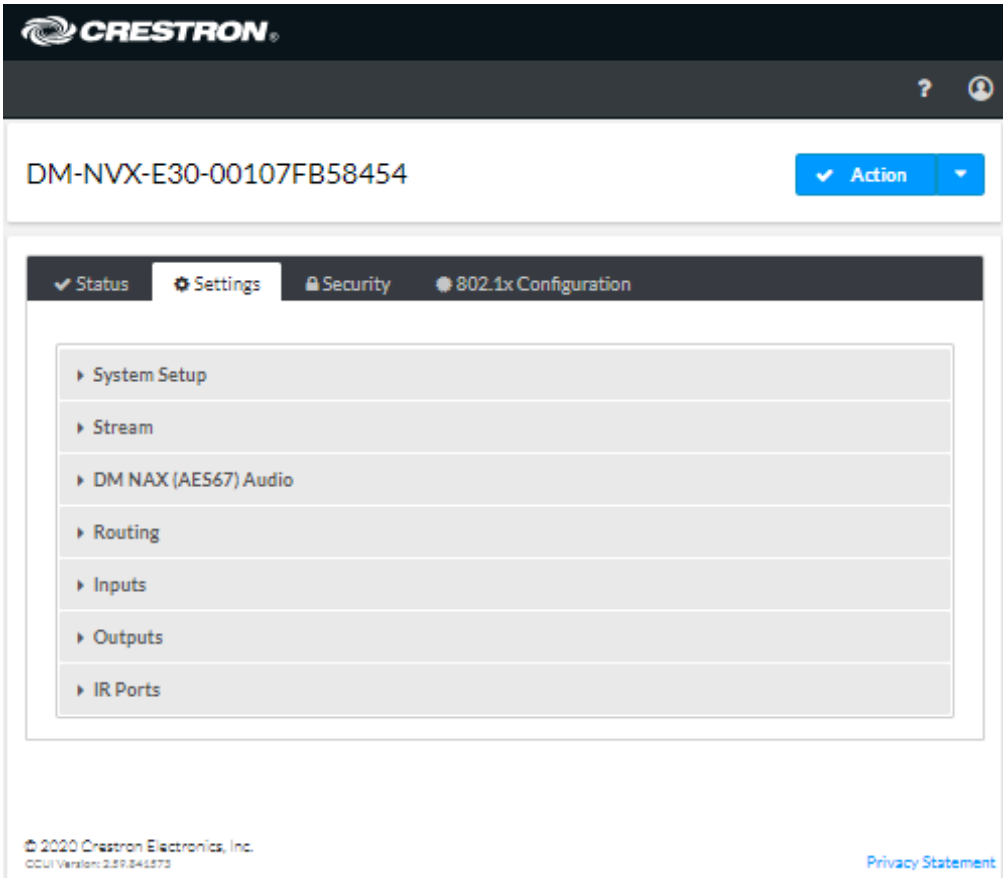
The Settings page is used to configure the DM-NVX-D30/E30(C).

The Settings page can be accessed at any time by clicking the **Settings** tab in the navigation bar of the web user interface of the DM-NVX-D30/E30(C).

DM-NVX-D30 Settings Page



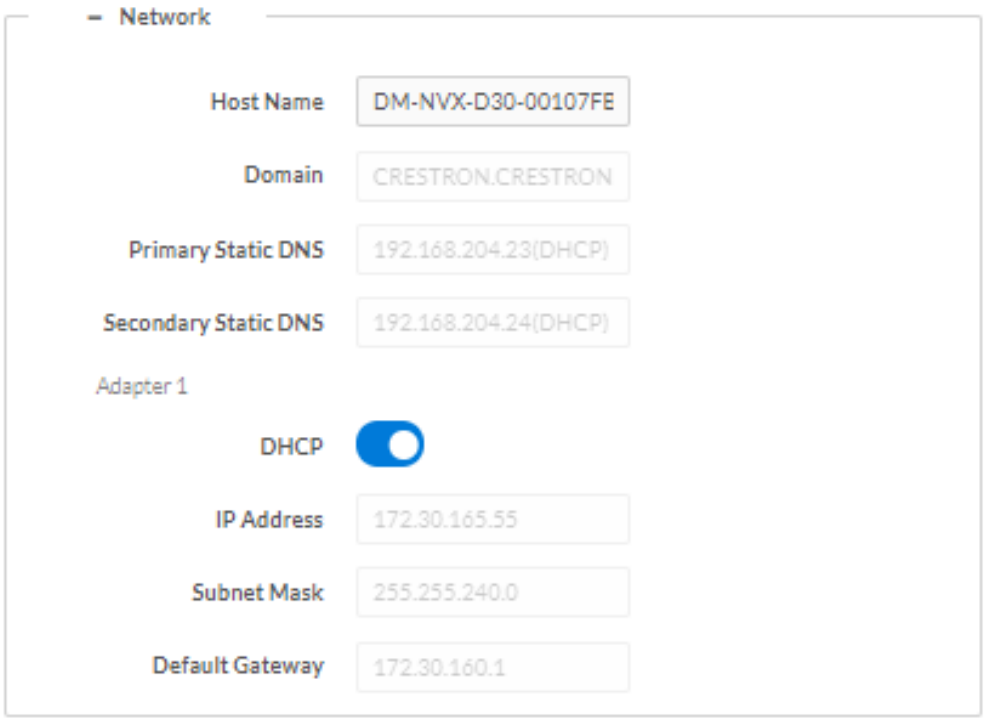
DM-NVX-E30 Settings Page



System Setup

The System Setup settings allow you to configure the following system settings for the DM-NVX-D30/E30(C).

Settings Page - Network

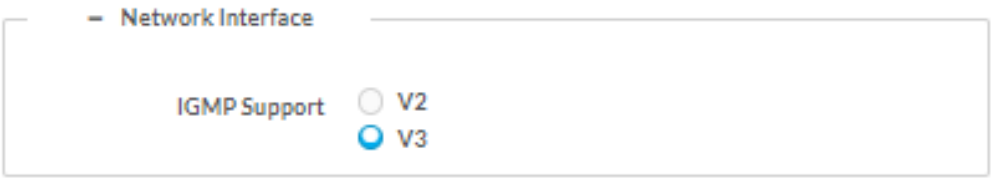


The Network settings allow you to configure the **Host Name**, **Domain Name**, and **DNS Servers** of the DM-NVX-D30/E30(C).

NOTE: By default, the host name of DM-NVX-D30/E30(C) consists of the model name followed by the MAC address of the device. For example, DM-NVX-D30/E30(C)-00107F7C6544.

Adapter 1: Enable or disable **DHCP**. The **IP Address**, **Subnet Mask**, **Default Gateway**, **Link Active**, and **Mac Address** of the DM-NVX-D30/E30(C) are also displayed.

Settings Page - Network Interface

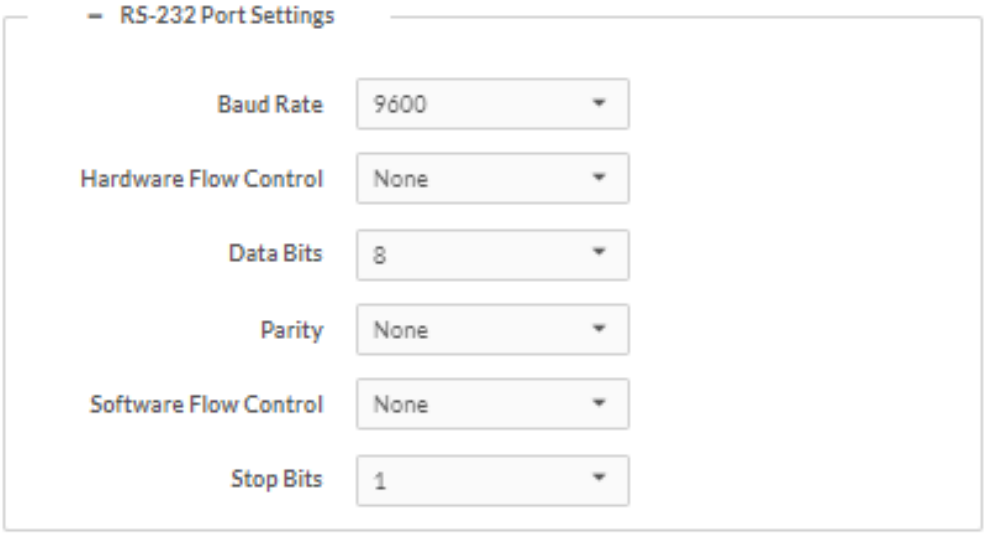


Network Interface: Select either **V2** or **V3** for **IGMP Support**.

Settings Page - Cloud Settings

Cloud Configuration Service Connection: Toggle the switch to enable or disable **Cloud Configuration Service Connection**.

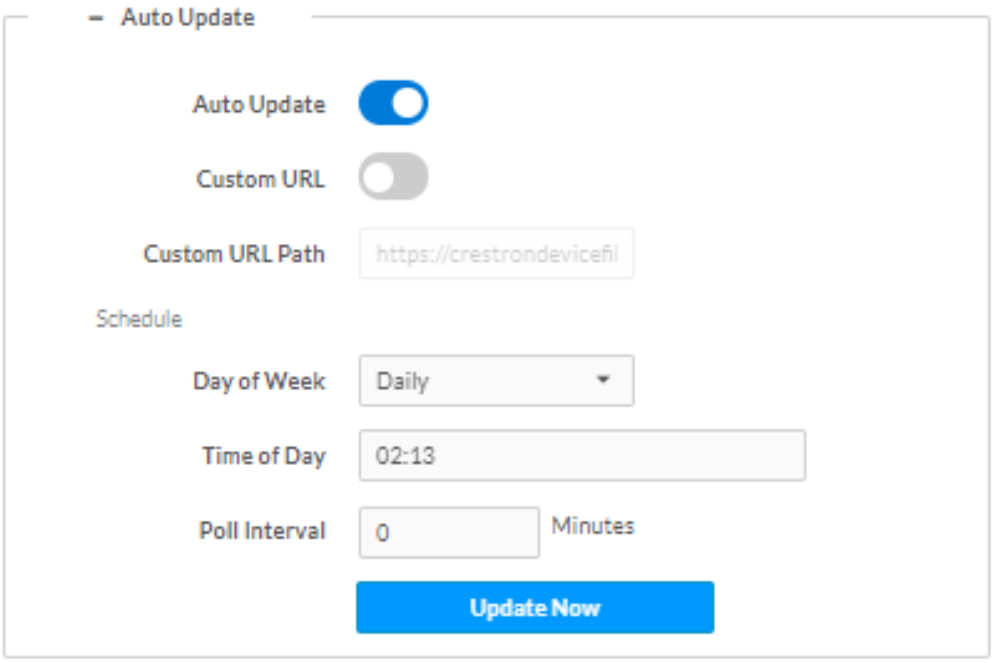
Settings Page - RS-232 Port Settings



Configure the RS-232 port settings of the DM-NVX-D30/E30(C) in the **RS-232 Port Settings** section of the screen.

- **Baud Rate:** Select the baud rate from the drop-down menu.
- **Hardware Flow Control:** Select the hardware flow control from the drop-down menu.
- **Data Bits:** Select the data bits from the drop-down menu.
- **Parity:** Select the parity from the drop-down menu.
- **Software Flow Control:** Select the software flow control from the drop-down menu.
- **Stop Bits:** Select the stop bits from the drop-down menu.

Settings Page - Auto Update



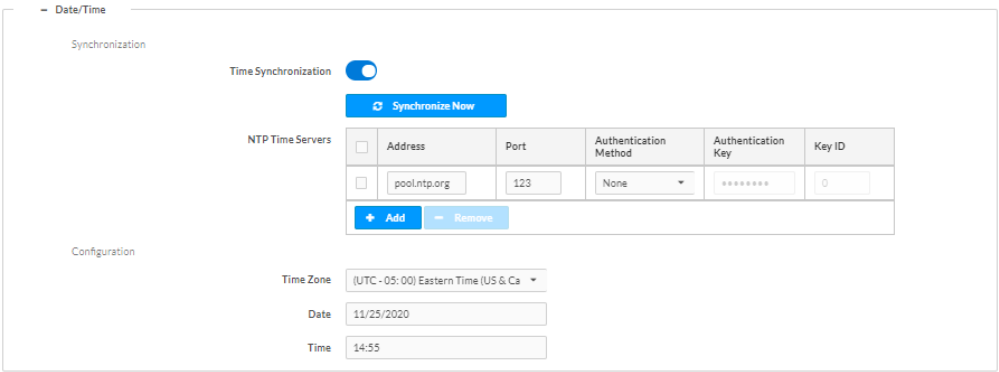
To automatically update the controls provided on the web interface of DM-NVX-D30/E30(C), do the following:

1. Move the **Auto Update** slider to the enabled position. By default, the auto update functionality is set to enabled.
2. Enter a path to the update cloud in the **Custom URL Path** field.

   If you wish to schedule auto update to occur on certain days of the week, click the **Day of Week** drop-down and select the desired option (available options are as follows: Daily, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday) and then enter time of the day when the auto update will start in the **Time of Day** field.

   If you wish to specify polling interval, enter a value in the **Poll Interval** field. Click the **Update Now** button to force an update immediately.

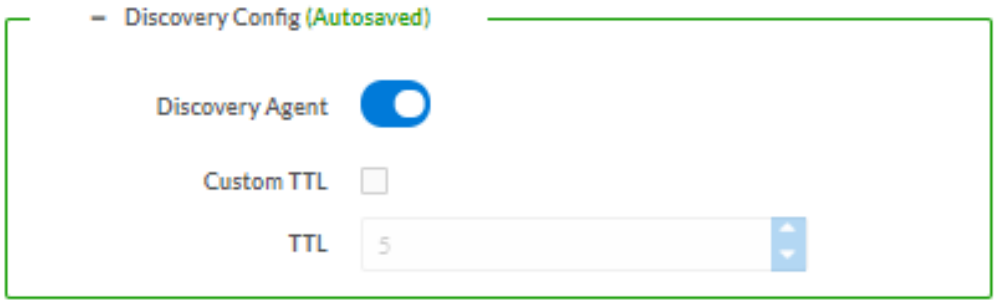
Settings Page - Date/Time



Configure the date and time settings of the DM-NVX-D30/E30(C) in the **Configure Date/Time** section of the screen.

1. Move the **Time Synchronization** slider to the desired position to specify whether time synchronization will be enabled or disabled. By default, time synchronization is enabled.
2. In the **Time Server** field, enter the URL of the NTP or SNTP server.
3. Click **Synchronize Now** to perform time synchronization between the device's internal clock and the time server.
4. Click on the **Time Zone** drop-down to select the applicable time zone.
5. In the **Time (24hr Format)** field, enter current time in 24-hour format.
6. In the **Date** field, enter the current date.

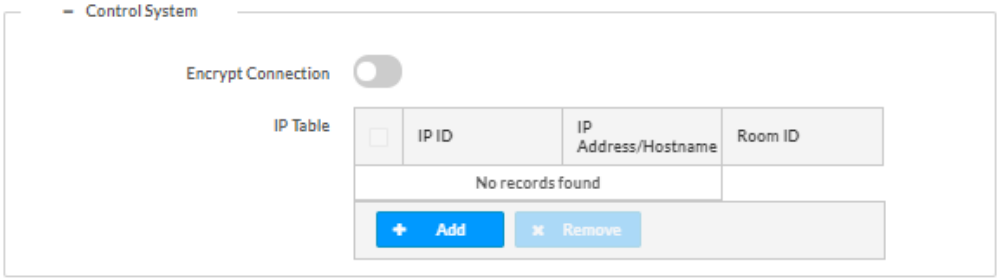
Settings Page - Discovery Config



Move the **Discovery Agent** slider to enabled or disabled to specify if the DM-NVX-D30/E30(C) is discoverable or not. When Discovery Agent is enabled, the DM-NVX-D30/E30(C) is displayed in the **Available Streams** list of other receivers.

If you would like to use a custom TTL value, select the **Custom TTL** option and then enter the value in the **TTL** field.

Settings Page - Control System



1. Toggle **Encrypt Connection** to specify whether to use encryption. By default, **Encrypt Connection** is disabled.

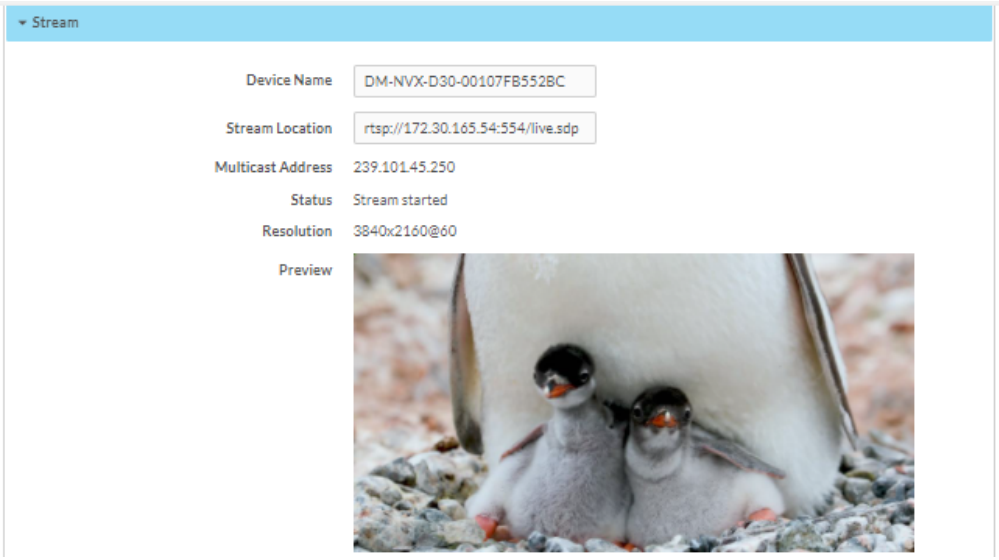
   Note that when encryption is enabled, the **Control System Username** and **Control System Password** fields are displayed to provide login information.
2. Enter the Room ID in the **Room ID** field.
3. Select the IP ID of the DM-NVX-D30/E30(C) in the **IP ID** drop-down list. Valid values range

from 03 to FE in hexadecimal notation.

4. Enter the IP address or hostname of the control system in the **IP Address/Hostname** field.

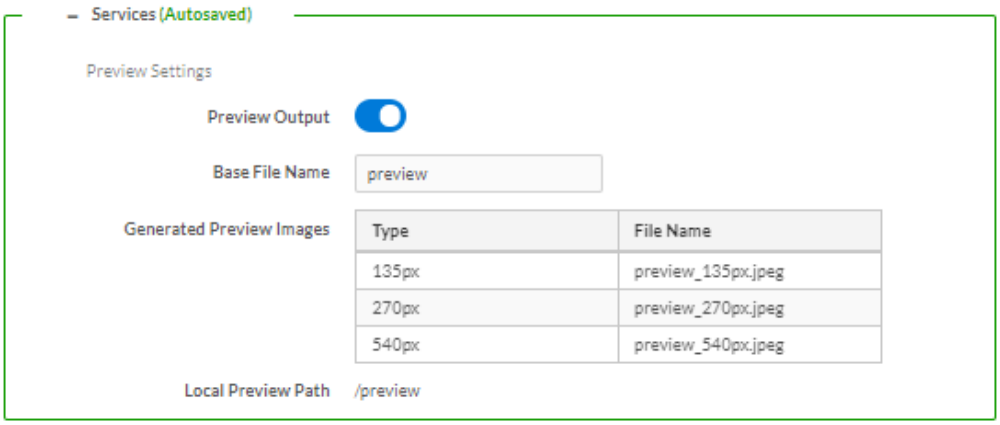
Stream

Settings Page - Stream



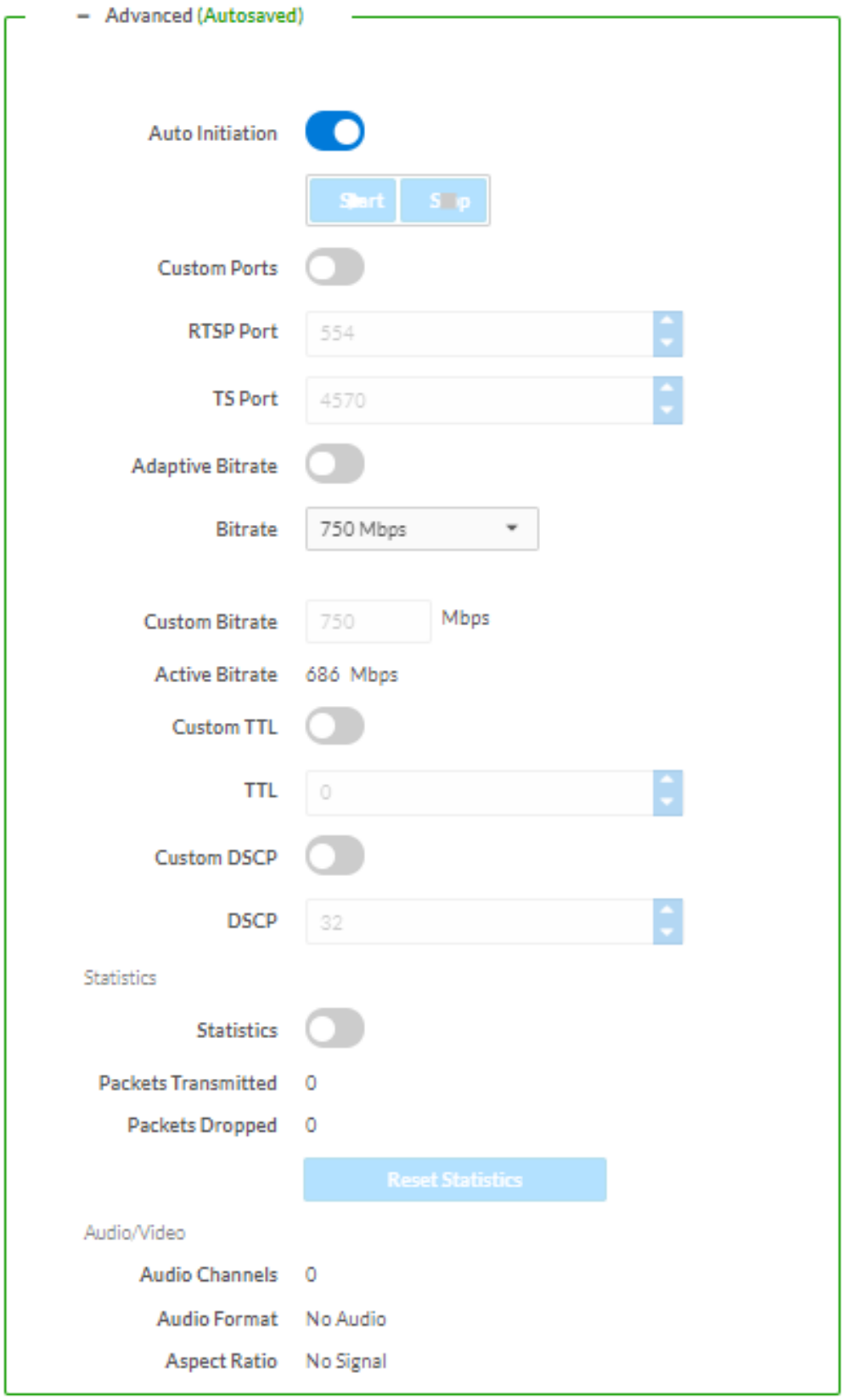
- **Device Name:** Displays the name of the DM-NVX-D30/E30(C).
- **Stream Location:** Displays the location of the stream.
- **Multicast Address:** Displays the multicast address.
- **Status:** Displays the status of the device, for example, 'Stream stopped', 'Stream started', 'Connecting', etc.
- **Resolution:** Displays the resolution of an incoming stream.
- **Preview:** Displays a preview thumbnail of the stream.

Settings Page - Services



- **Preview Output:** Toggle to control whether the preview output is enabled or disabled.
- **Base File Name:** Enter the desired base file name. This will become the prefix of the generated preview images.
- **Generated Preview Images:** Displays the **Type** and **File Name** of the generated preview images. The file names are made up of the prefix entered in **Base File Name**, an underscore, and the size of the image in pixels.
- **Local Preview Path:** Displays the **Local Preview Path**.

Settings Page - Advanced



- **Auto Initiation:** Move the **Auto Initiation** slider to the desired position (enabled or disabled) to specify whether the stream will automatically start when the correct parameters are set. By default, **Automatic Initiation** is enabled.

  Press the **Start** or **Stop** button to start or stop a stream if **Automatic Initiation** is disabled. Note that when **Automatic Initiation** is disabled, the device will not attempt to start a stream until the **Start** button is pressed.

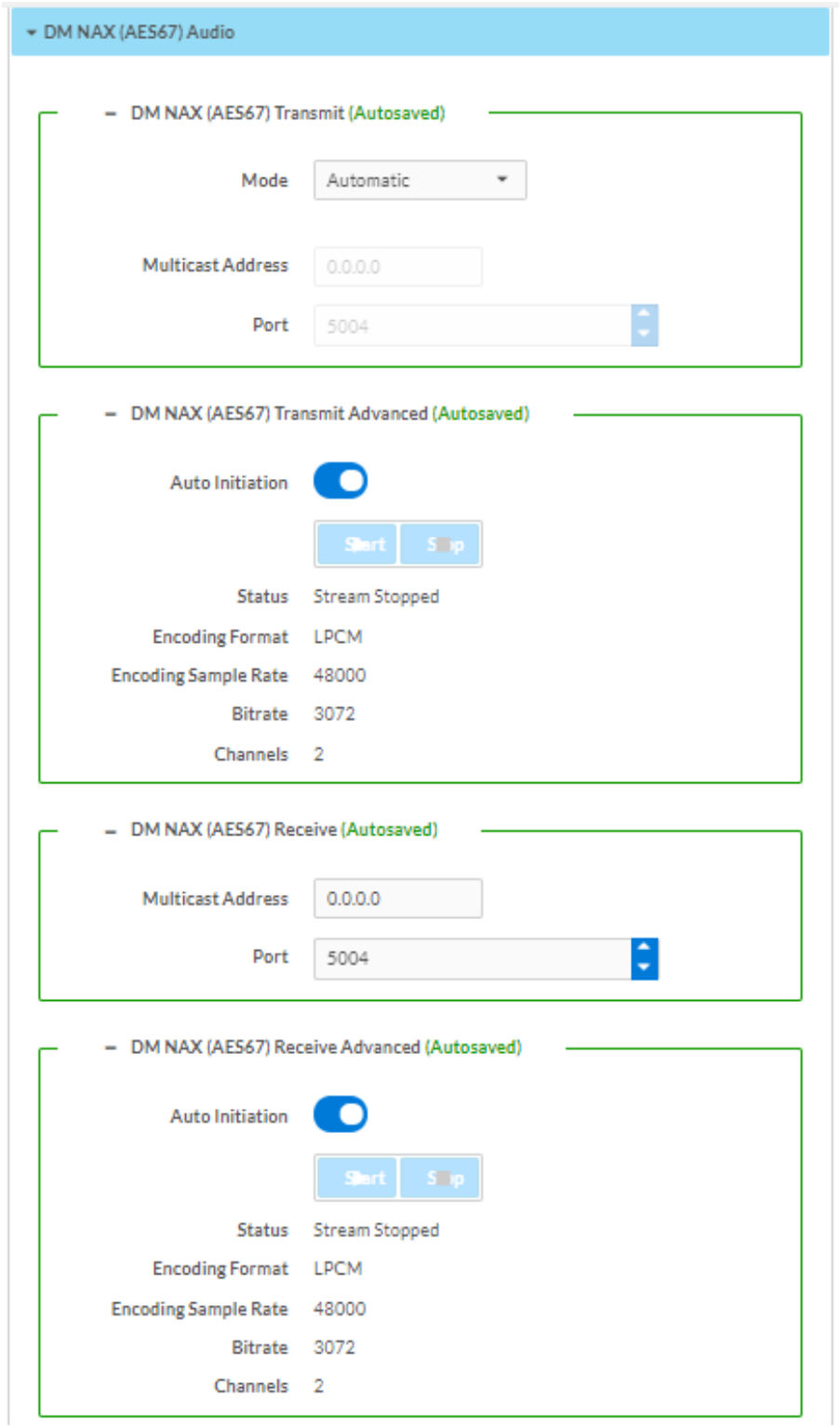
- **Custom Ports:** Toggle the **Custom Ports** switch to enable the option to specify a custom RTSP or TS port. Crestron recommends using a custom port value greater than 10000.
- **RTSP Port:** Enter a custom TCP port number for the RTSP server of the primary audio/video stream (Transmitter mode only).

  Valid values range from 1 to 65535. By default, the RTSP Port of the DM-NVX-D30/E30(C) is set to port 554.

- **TS Port:** Enter a custom UDP port at which both audio and video are transmitted. The value must be an even number. An odd value will be rejected by the device. By default, the TS Port is set to 4570. Valid values range from 1 to 65530.
- **Adaptive Bitrate:** (Only applicable in Transmitter Mode) Select this option to have the device adapt the bitrate automatically based on the resolution of the stream. If this is selected, the bitrate cannot be manually selected with the **Bitrate** option below.
- **Bitrate:** (Only applicable in Transmitter Mode). Select a bitrate from the **Bitrate** drop-down list to set the bitrate of the transmitted stream in Mbps. Crestron recommends using the default value.
- Select **Custom** in the **Bitrate** drop-down list and type a custom value (in Mbps) in the **Custom Bitrate** field below.
- **Active Bitrate:** Displays the current bitrate of the stream.
- (Only applicable in Transmitter Mode) Toggle the **Custom TTL** switch to enable the option to enter a custom TTL (Time-to-Live) value in the **TTL** field. TTL values can range from 1 to 255.
- (Only applicable in Transmitter Mode) Toggle the **Custom DSCP** switch to enable the option to enter a custom value in the **DSCP** field. DSCP values can range from 1 to 63.
- **Statistics:** Toggle **Statistics** to enabled in order to view **Packets Transmitted** and **Packets Dropped**. Click **Reset Statistics** to reset this information.
- **Audio/Video:** Displays information for **Audio Channels**, **Audio Format**, and **Audio Ratio**.

DM NAX (AES67) Audio

Settings Page - DM NAX (AES67) Audio



DM NAX (AES67) Transmit

- **Mode:** By default, the mode is set to **Automatic** which will add +1 to the outgoing video stream multicast address. For example, if the Video multicast address is 239.8.0.0, the DM NAX (AES67) Multicast address will be 239.8.0.1. The mode can also be set to **Manual** (which will allow setting the multicast address in the field below) or **Disabled**.
- **Multicast Address:** Sets the multicast address. This is only available when **Mode** is set to **Manual**.
- **Port:** Sets the port number. Available when **Mode** is set to **Manual**.

DM NAX (AES67) Receive

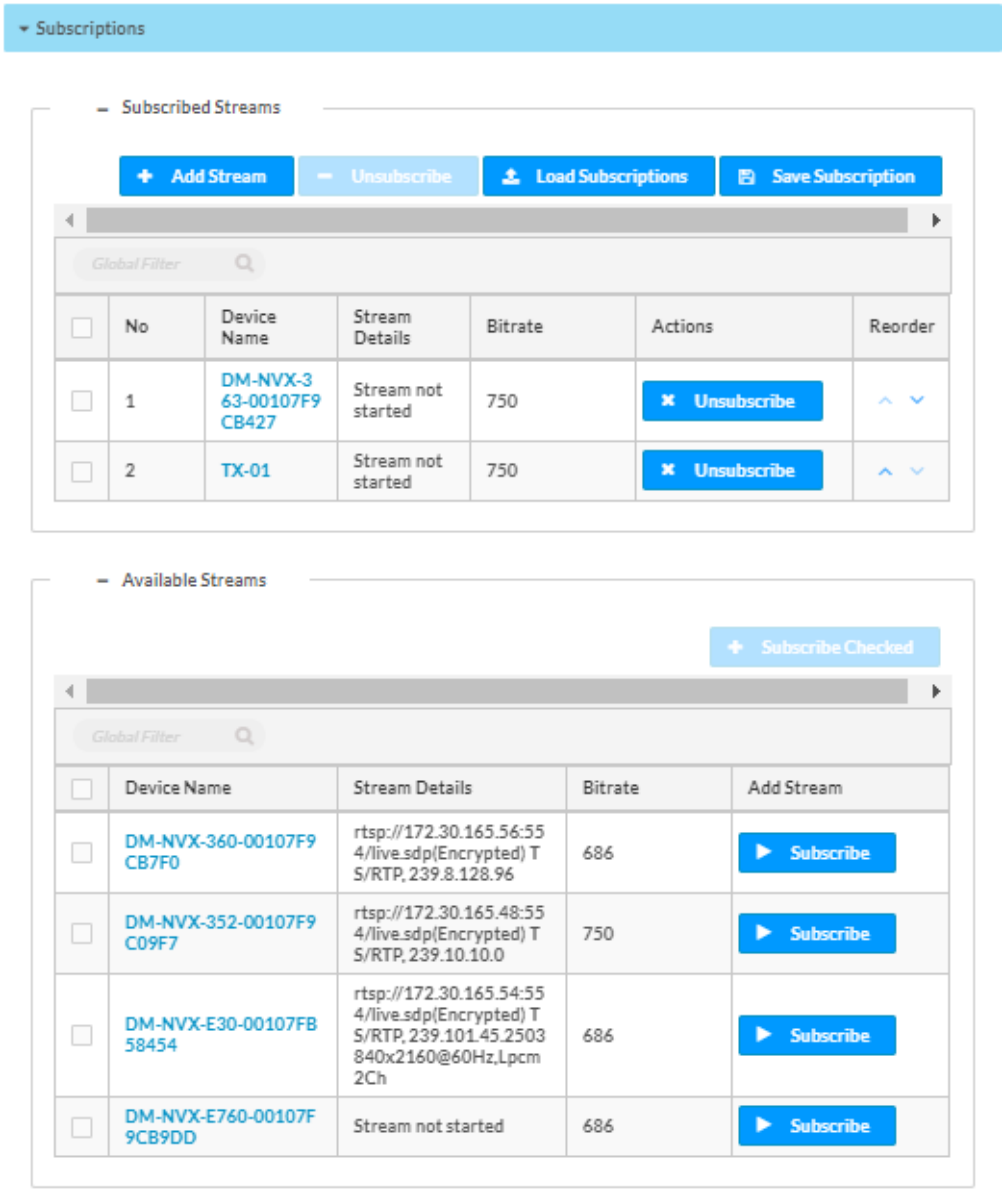
- **Multicast Address:** Sets the multicast address.
- **Port:** Sets the port number.

Under both **DM NAX (AES67) Transmit Advanced** and **DM NAX (AES67) Receive Advanced** are the following options:

- **Auto Initiation:** Toggle **Auto Initiation** to either enable or disable it. If disabled, the **Start** and **Stop** buttons become available for use.
- **Status:** Displays the status of the stream.
- **Encoding Format:** Displays the encoding format of the stream.
- **Encoding Sample Rate:** Displays the encoding sample rate of the stream.
- **Bitrate:** Displays the bitrate of the stream.
- **Channels:** Displays the number of channels.

Subscriptions

Settings Page - Subscriptions



(Applicable to the DM-NVX-D30 device only)

When a DM-NVX receiver subscribes to a DM-NVX transmitter, Real Time Streaming Protocol (RTSP) negotiation begins between the DM-NVX receiver and the DM-NVX transmitter. When a stream is routed, the DM-NVX receiver performs the Internet Group Management Protocol (IGMP) join, which causes the receiver to join the multicast group of the transmitter. A maximum of 1000 transmitters can be subscribed to a single receiver.

The **Available Streams** table displays detailed stream information about all streams to which the DM-NVX receiver device can subscribe. There are several ways to subscribe to one or more streams.

- By adding a stream manually: Click the **+ Add Stream** button in the **Subscribed Streams** table, and then enter a stream name and URI in the corresponding fields.
- By selecting from the list of available streams:
  - Select a stream in the **Available Streams** table and click the corresponding **Subscribe** button.
  - Select one or more streams in the **Available Streams** table by checking the corresponding check box of the Device Name and then click the **+ Subscribe Checked** button.

The **Subscribed Streams** table displays detailed stream information about all current stream subscriptions.

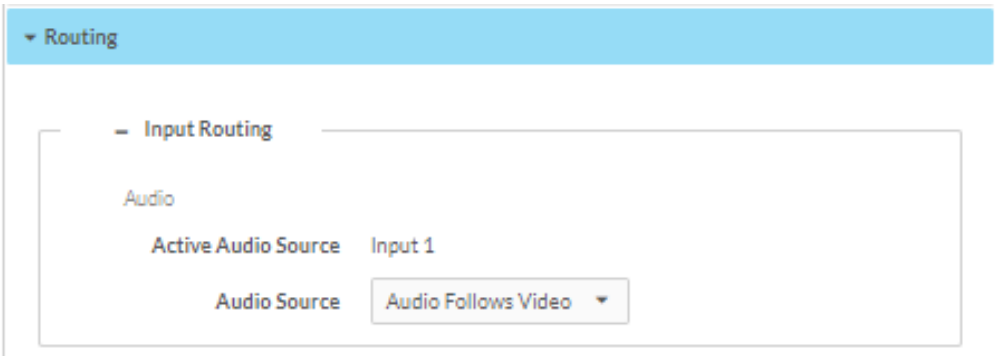
Click the **Unsubscribe** button to unsubscribe from a particular stream, or select several streams by checking the corresponding check box and then click the **Unsubscribe Checked** button.

Existing stream subscriptions can be saved (by clicking on the **Save Subscriptions** button) in a file named 'subscription.xml'. Note that when using firmware version 1.3388.00051 or earlier, the name of the file will be 'subscription.xiolist'.

Existing subscriptions can also be reloaded (by clicking on the **Load Subscriptions** button) if needed.

Routing

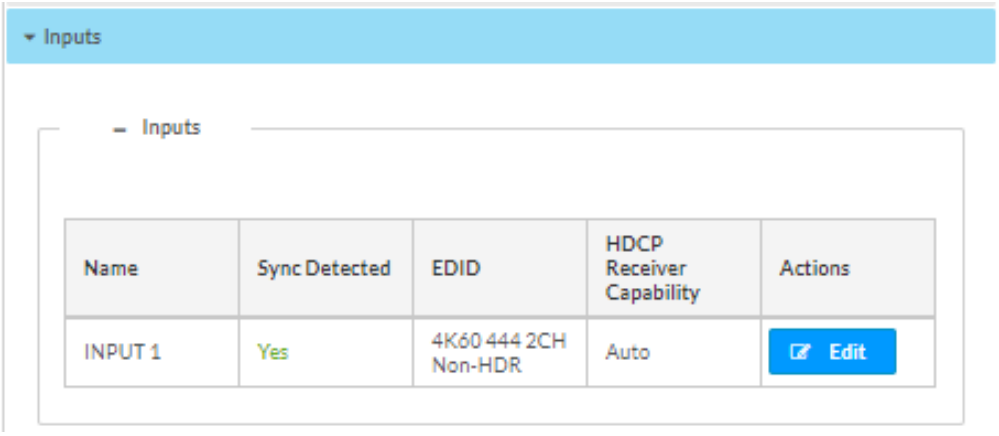
Settings Page - Routing



Select the desired audio source in the **Audio Source** drop-down list: **Audio Follows Video**, **Input 1**, or **DM NAX(AES67) Audio**.

Inputs

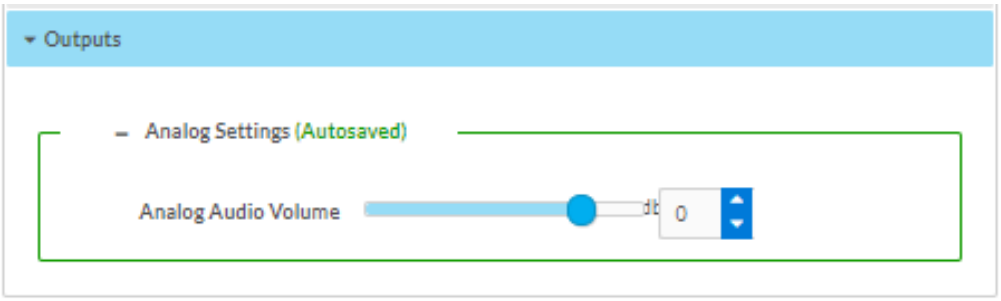
Settings Page - Inputs



Inputs displays information about **Name**, **Sync Detected**, **EDID**, and **HDCP Receiver Capability**. Additionally, under **Actions**, click **Edit** to configure the applicable input.

Outputs

Settings Page - Outputs



Select the desired **Analog Audio Volume** by using the slider or inputting a value.

IR Ports

Settings Page - IR Ports

The following IR settings are available for both Port 1 and Port 2:

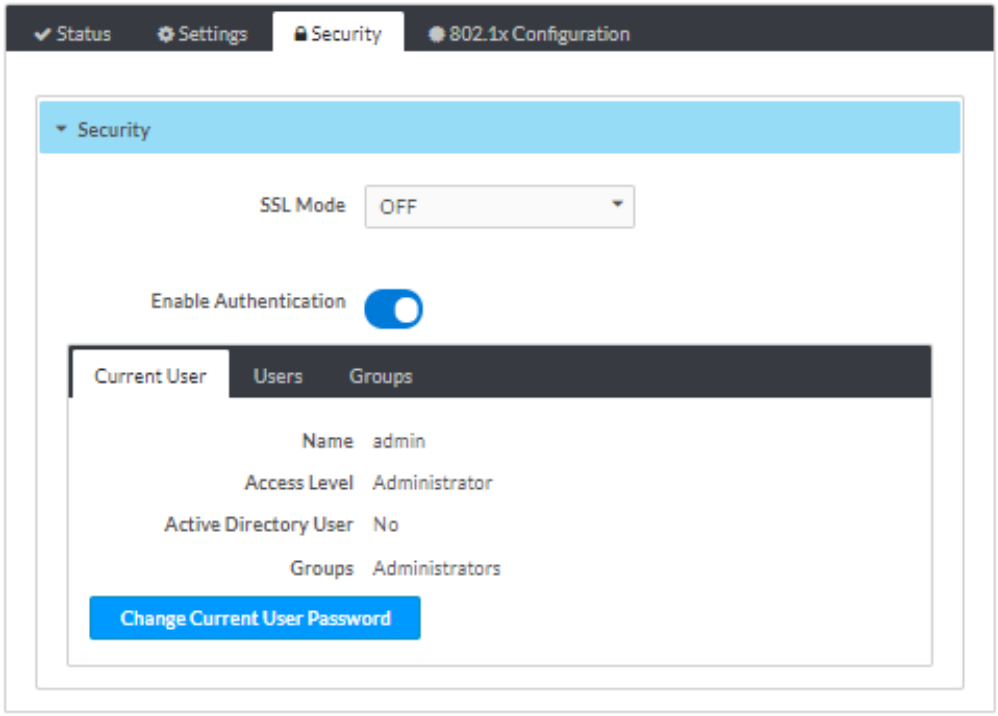
File Name: When an IR file is loaded using the **Load IR File** button, the name of the file will be displayed here. To delete this file, click **Delete IR File**.

Security

The Security page displays configuration settings related to security for the DM-NVX-D30/E30 (C). The SSL mode and authentication options can be configured on this page.

The Security page can be accessed by clicking the **Security** tab in the navigation bar of the web user interface of the DM-NVX-D30/E30(C).

DM-NVX-D30/E30(C) Security Page



Select **Encrypt and Validate**, **Encrypt**, or **OFF** in the **SSL Mode** drop-down to specify whether to use encryption. By default, **SSL Mode** is set to **OFF**.

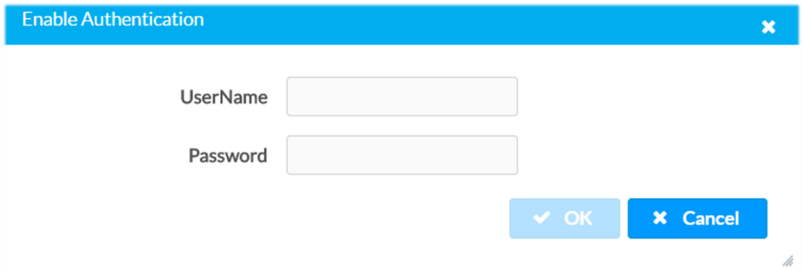
By default, the authentication mode is enabled.

Move the **Enable Authentication** slider to the desired position to specify whether authentication will be enabled or disabled.

NOTES:

- When authentication is enabled, you must create a local administrator account by creating a username and password. These credentials will be necessary to log in.
- When authentication is disabled, all existing users and groups will be deleted from the system.

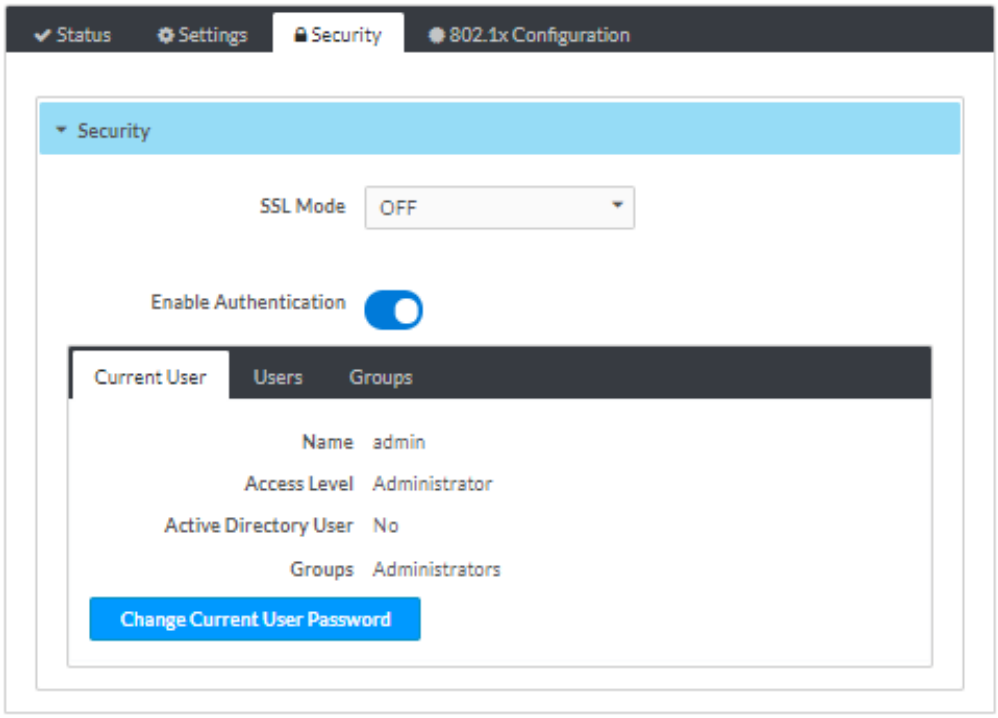
Enable Authentication Dialog Box



After enabling or disabling authentication, the current device session will end and you will be redirected to the login page. Enabling or disabling authentication does not affect existing user or group accounts on DM-NVX-D30/E30(C).

Once authentication is enabled, only users with administrator rights can disable it. When authentication is enabled, click the corresponding **Current User**, **Users** or **Groups** tabs to view, add, remove, and edit information local or Active Directory users and groups on DM-NVX-D30/E30(C) or to change password for the current user.

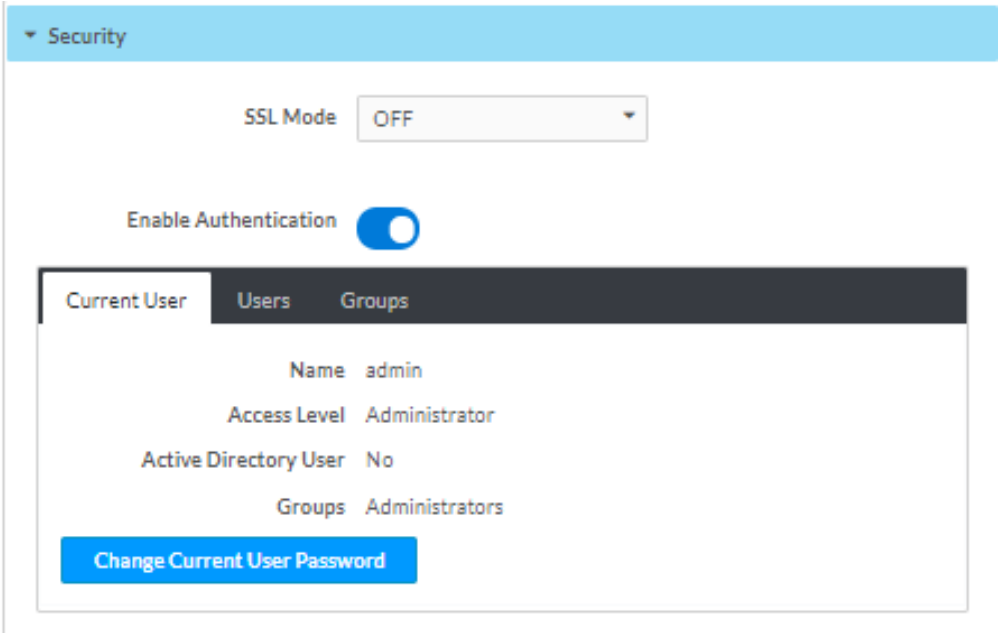
Security Page



Current User

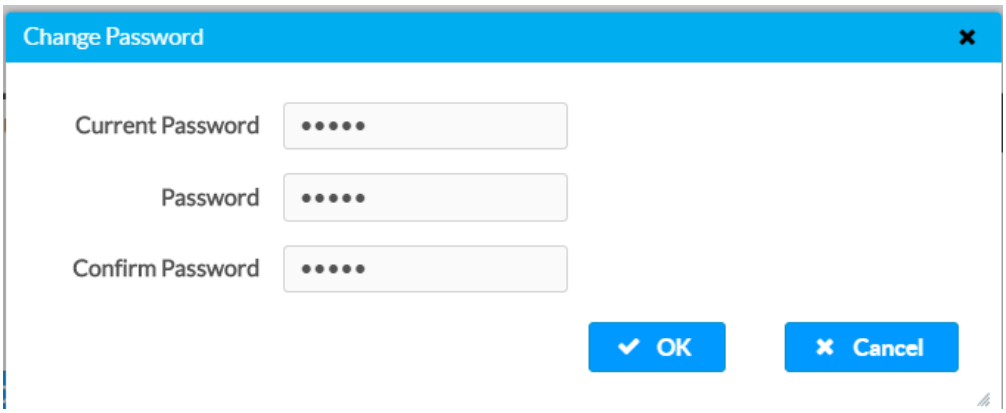
Click the **Current User** tab to view read-only information or to change the password for the current user.

Security Page - Current User



1. Click the **Change Current User Password** button to provide a new password for the current user.
2. In the **Change Password** dialog, enter the current password in the **Current Password** field, the new password in the **Password** field, then reenter the same new password in the **Confirm Password** field.

   Change Password Dialog Box

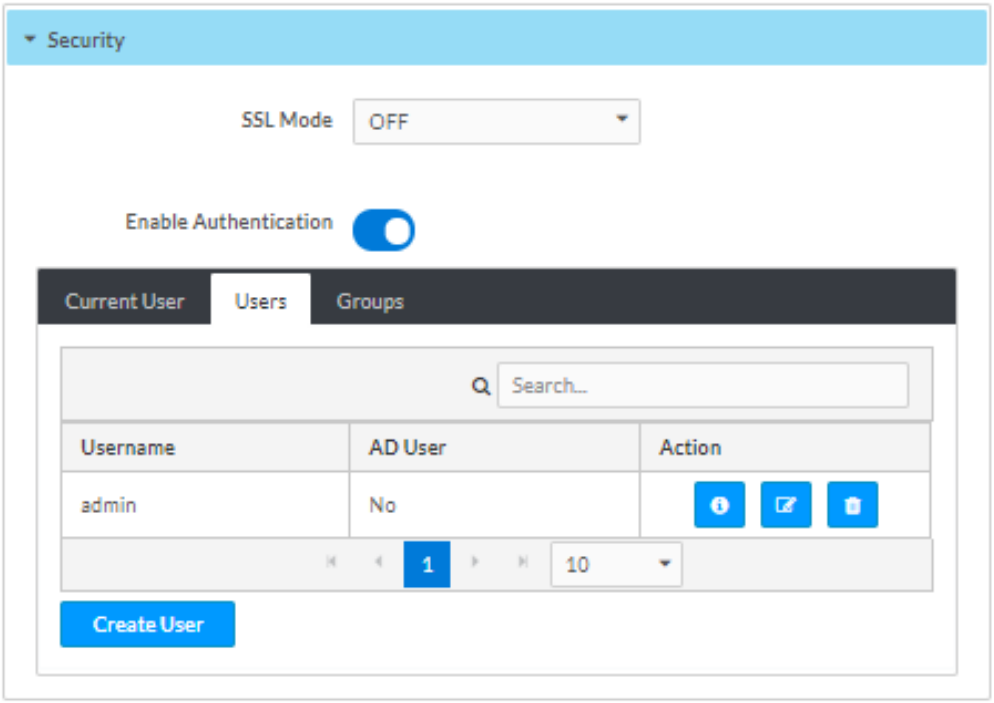


3. Click **OK** to save or click **Cancel** to cancel the changes.

Users

Click the **Users** tab to view and edit user settings. The **Users** tab can be used to add or remove local and Active Directory users, and preview information about users.

Security Page - Users



Use the **Search Users** field to enter search term(s) and display groups that match the search criteria.

If users listed in the **Users** table span across multiple pages, navigate through the list of users by clicking a page number or by using the left or right arrows at the bottom of the **Users** pane to move forward or backward through the pages.

Each page can be set to display 5, 10, or 20 users by using the drop-down menu to the right of the navigation arrows.

Information about existing users is displayed in table format and the following details are provided for each user.

- **Username:** Displays the name of the user.
- **AD User:** Displays whether the user requires authentication using Active Directory® credential management.

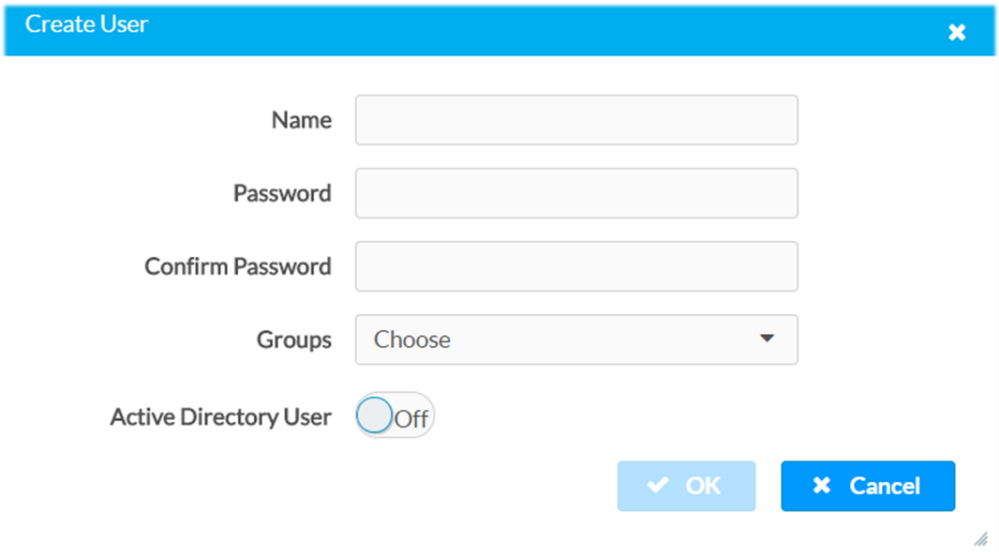
Click the corresponding button in the **Actions** column to view detailed user information or to delete the user .

To create a new user, click the **Create User** button.

Create New Local User

1. Click the **Create User** button in the User tab.
2. In the **Create User** dialog enter the following.

   Create User Dialog Box



   - Enter a user name in the **Name** field. A valid user name can consist of alphanumeric characters (letters a-z, A-Z, numbers 0-9) and the underscore "_" character.
   - Enter a password in the **Password** field; reenter the same password in the **Confirm Password** field.
   - Assign the access level by selecting one or more groups from the **Groups** drop-down list.
   - Make sure that the **Active Directory User** slider is set to **Off**.
3. Click **OK** to save. Click **Cancel** to cancel the changes.

Add Active Directory User

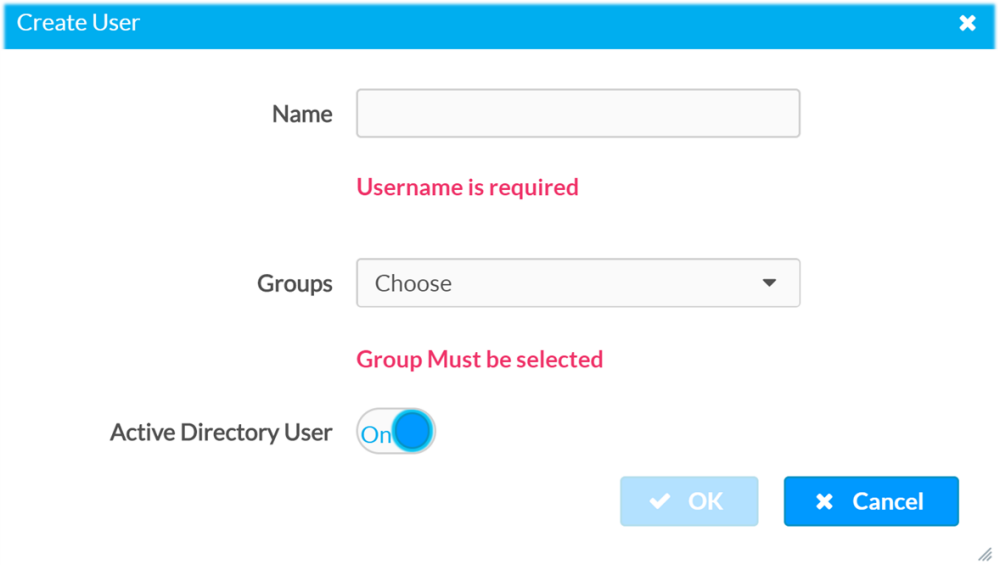
Users cannot be created or removed from the Active Directory server, but access can be granted to an existing user in the Active Directory server.

To grant access to an Active Directory user, you can either add the user to a local group on the DM-NVX-D30/E30(C), or add the Active Directory group(s) that they are a member of to the DM-NVX-D30/E30(C) (see the Add Active Directory Group (on page 34) topic for more information).

To add an Active Directory user:

1. Click the **Create User** button.
2. In the **Create User** dialog, enter the following.

   Create User Dialog Box

   - Enter the user name in the **Name** field in the format "Domain\UserName", for example "crestronlabs.com\JohnSmith".

     Valid user names can contain alphanumeric (letters a-z, A-Z, numbers 0-9) and underscore characters.
   - Select one or more groups from the **Groups** drop-down list.
   - Make sure that the **Active Directory User** slider is set to **On**.
3. Click **OK** to save. Click **Cancel** to cancel the changes.

Delete User

Click the trashcan button ( ) in the **Actions** column to delete the user. Click **Yes** when prompted to delete the user or **No** to cancel the deletion.

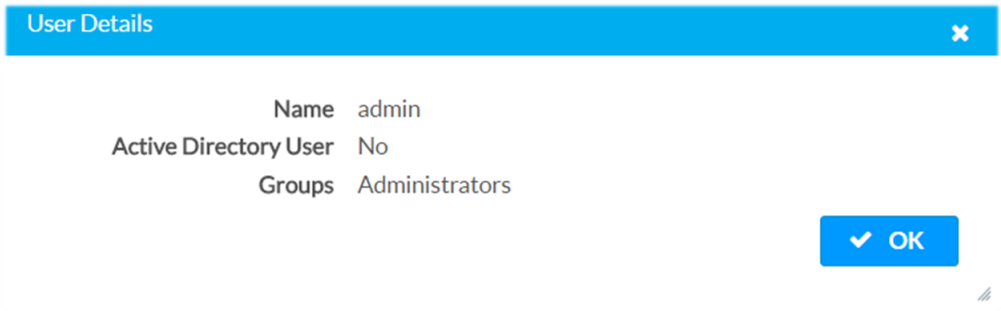
After a user is removed from a group, they lose any access rights associated with that group. Note that the user account is not deleted by the delete user operation.

View User Details

Click the information button ( ) in the **Actions** column to view information for the selected user. The **User Details** dialog displays the following information for the selected user.

- **Name:** Displays the name of the selected user.
- **Active Directory User:** Displays whether the user is an Active Directory user.
- **Group:** Displays group(s) the selected user is part of.

User Details Dialog Box



Click **OK** to close the **User Details** dialog and to return to the **Authentication Management Users** tab.

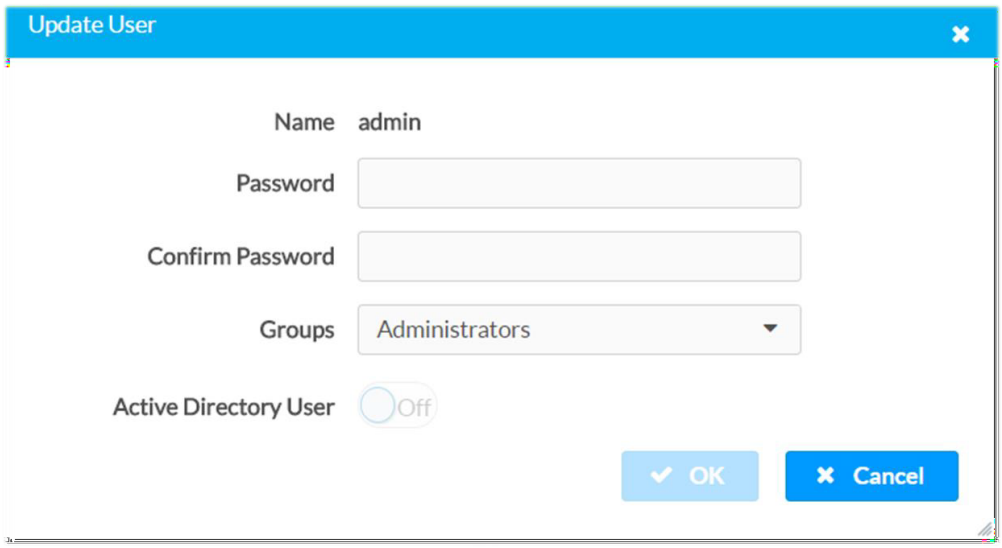
Update User Details

1. Click the information button ( ) in the **Actions** column to update information for the selected user.
2. Enter a password in the **Password** field; reenter the same password in the **Confirm Password** field.
3. Select one or more groups to assign the user to from the **Groups** drop-down list.
4. Click **OK** to save or click **Cancel** to cancel the changes.

The **Update User** dialog also displays the following read-only information for the selected user.

- **Name:** Displays the name of the user.
- **Active Directory User:** Displays whether the user is an Active Directory user.

Update User Dialog Box

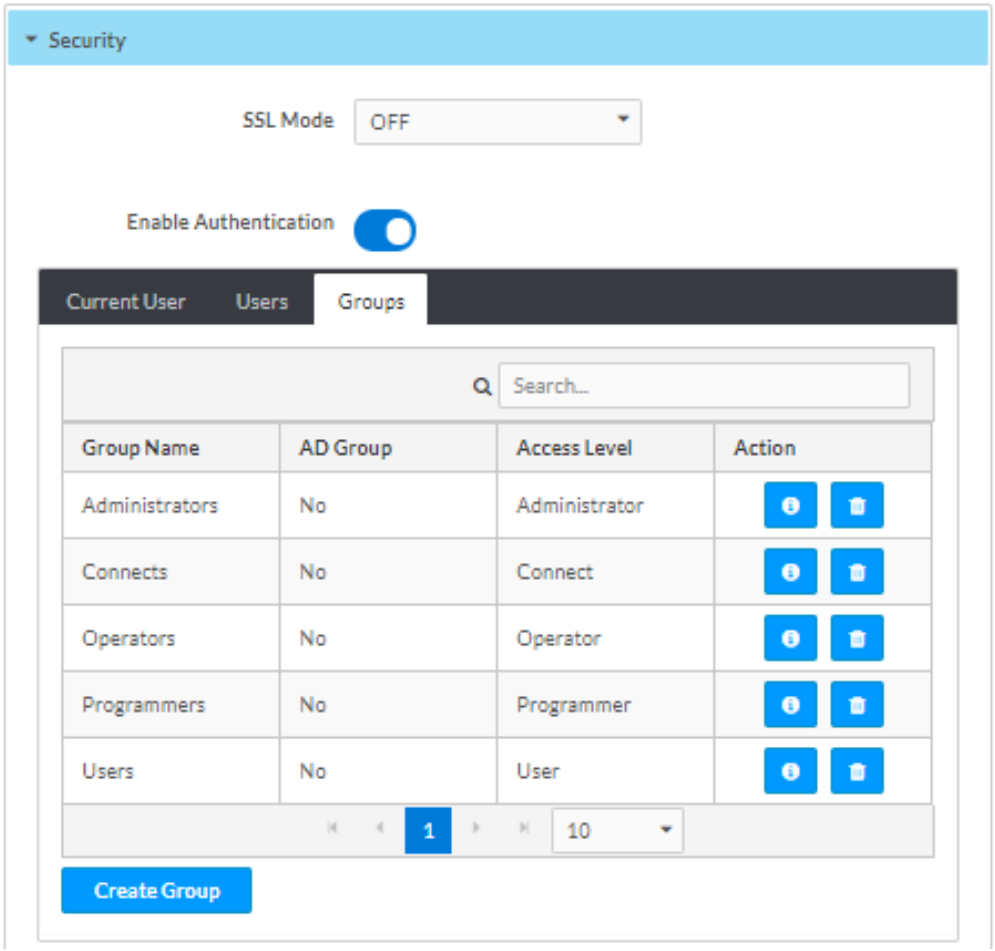


Groups

Click the **Groups** tab to view and edit group settings. The **Groups** tab can be used to add or remove local and Active Directory groups, and preview information about a group.

Use the **Search Groups** field to enter search term(s) and display groups that match the search criteria.

Security Page - Groups



If groups listed in the **Groups** table span across multiple pages, navigate through the groups by clicking a page number or by using the left or right arrows at the bottom of the Groups pane to move forward or backward through the pages.

Additionally, each page can be set to display 5, 10, or 20 groups by using the drop-down menu to the right of the navigation arrows.

Existing groups are displayed in a table and the following information is provided for each group:

- **Group Name:** Displays the name of the group.
- **AD Group:** Displays whether the group requires authentication using Active Directory.
- **Access Level:** Displays the predefined access level assigned to the group (Administrator, Programmer, Operator, User, or Connect).

Click the corresponding button in the **Actions** column to view detailed group information or to delete the selected group .

Click on the **Create Group** button in the **Groups** tab to create a new group.

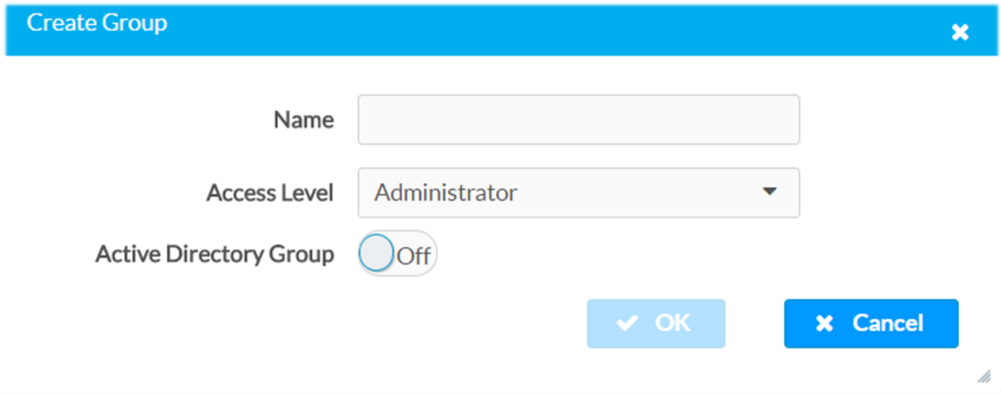
Create Local Group

1. Click the **Create Group** button.
2. In the **Create Group** dialog enter the following:
   - Enter the group name in the **Name** field.
   - Assign the group access level by selecting a predefined access level (Administrator, Connect, Operator, Programmer, User) from the **Access Level** drop-down list.
   - Make sure that the **Active Directory Group** slider is set to **Off**.
3. Click **OK** to save. Click **Cancel** to cancel the changes.

Add Active Directory Group

A group cannot be created or removed from the Active Directory server, but access can be granted to an existing group in Active Directory.

Create Group Dialog Box



Once the group is added, all members of that group will have access to the DM-NVX-D30/E30 (C).

1. Click the **Create Group** button.
2. In the **Create Group** dialog enter the following:
   - Enter the group name in the **Name** field, for example "Engineering Group."

     Note that group names are case sensitive; space is a valid character than can be used in group names.
3. Assign the group access level by selecting a predefined access level (Administrator, Connect, Operator, Programmer, User) from the **Access Level** drop-down list.

   Make sure that the **Active Directory Group** slider is set to **On**.
4. Click **OK** to save. Click **Cancel** to cancel the changes.

Delete a Group

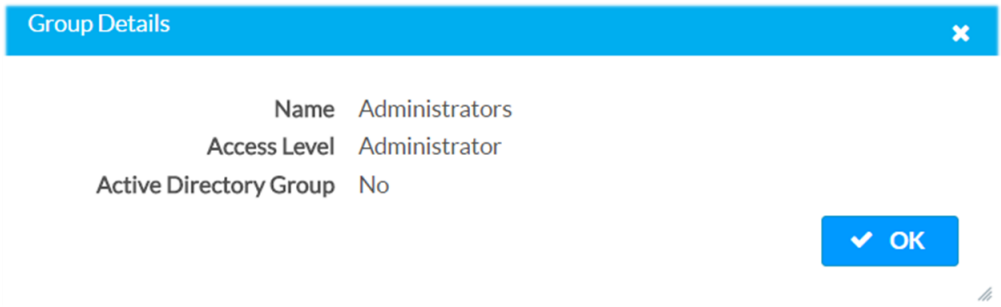
Click the trashcan button ( ) in the **Actions** column to delete a group. Click **Yes** when prompted to delete the group or **No** to cancel the deletion.

When a group is deleted, users in the group are not removed from the device or Active Directory server. However, because a user's access level is inherited from a group(s), users within the deleted group will lose the access rights associated with this group. When an Active Directory group is removed from DM-NVX-D30/E30(C), all members of that group will lose access to the DM-NVX device.

View Group Details

Click the information button ( ) in the **Actions** column to view information for the selected group. The **Group Details** dialog listing the following information for the selected group.

Group Details Dialog Box



- **Name:** Displays the name of the group.
- **Access Level:** Displays the access level of the group and its users.
- **Active Directory Group:** Displays whether the group is an Active Directory group.

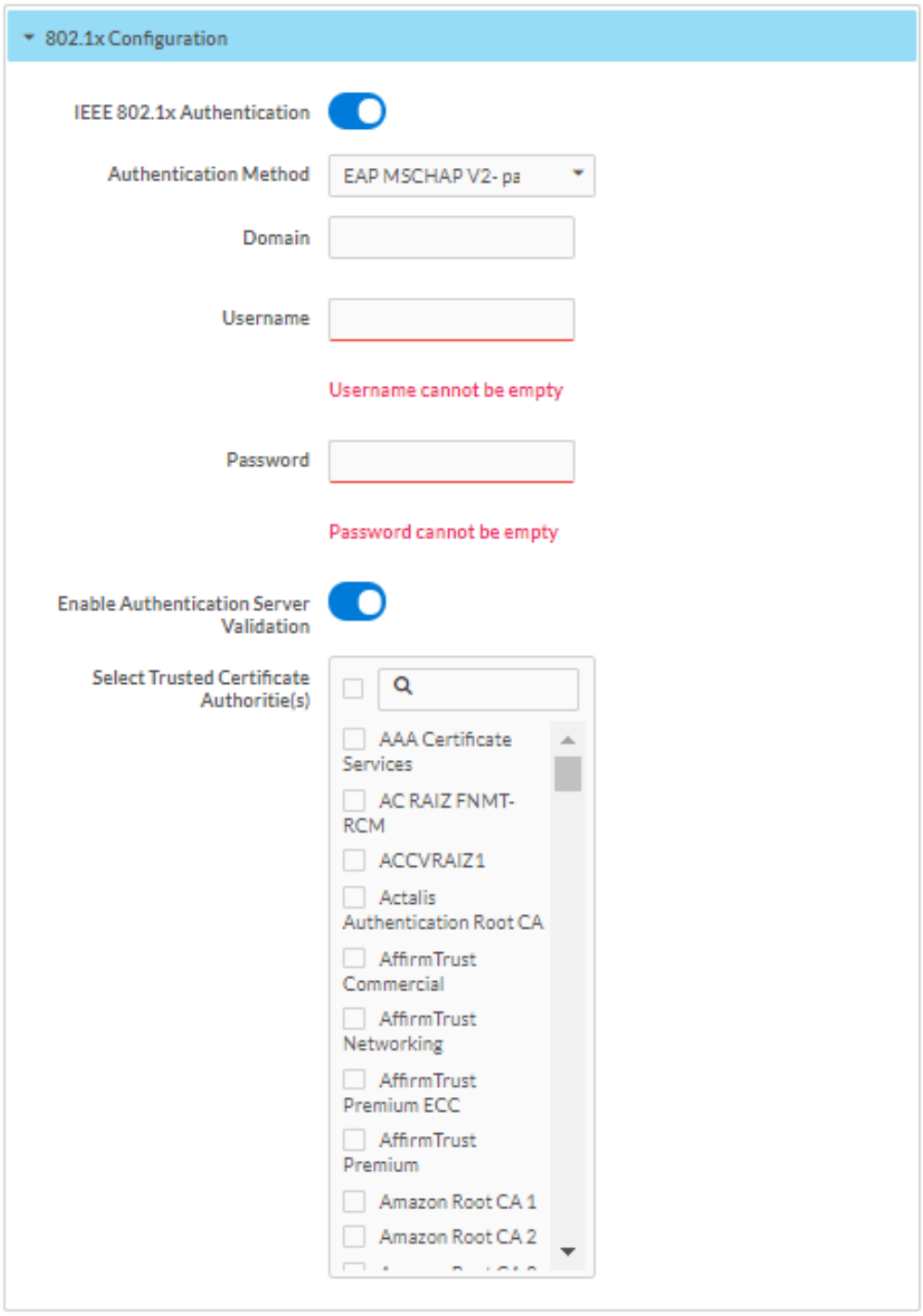
Click **OK** to close the **Group Details** dialog and to return to the Authentication Management Groups settings.

802.1x Configuration

The DM-NVX-D30/E30(C) has built-in support for the 802.1x standard (an IEEE network standard designed to enhance the security of wireless and Ethernet LANs. The standard relies on the exchange of messages between the device and the network's host, or authentication server), allowing communication with the authentication server and access to protected corporate networks.

The 802.1x Configuration page can be accessed at any time by simply clicking the **802.1x Configuration** tab in the navigation bar of the web user interface of the DM-NVX-D30/E30(C).

802.1x Configuration Page



Configure DM-NVX-D30/E30(C) for 802.1X Authentication:

1. Move the **IEEE 802.1X authentication** slider to **Enabled**. This will enable all options on the 802.1X dialog.

2. Select the **Authentication method: EAP-TLS Certificate** or **EAP-MSCHAP V2 Password** according to the network administrator's requirement.
3. If you select **EAP-TLS Certificate**, click **Manage Certificates** to upload the required machine certificate.

   The machine certificate is an encrypted file that will be supplied by the network administrator, along with the certificate password.

   -or-

   If you select **EAP-MSCHAP V2 Password**, enter the Username and Password supplied by the network administrator into the **Username** and **Password** fields. This method does not require the use of a machine certificate, only the user name and password credentials.
4. If you enabled the **Enable Authentication Server Validation** option, this will enable the list box **Select Trusted Certificate Authoritie(s)** which contains signed Trusted Certificate Authorities (CAs) preloaded into the DM-NVX-D30/E30(C).

   Select the check box next to each CA whose certificate can be used for server validation, as specified by the network administrator.

   If the network does not use any of the listed certificates, the network administrator must provide their own certificate, which must be uploaded manually, via the **Manage Certificates** functionality.
5. If required, type the domain name of the network in the **Domain** field.

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