

# i-PRO NVR with Luxriot EVO Setup and Usage Guide

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## 1. Overview

#### Introduction

The integration of the i-PRO devices with Luxriot EVO makes adding an NVR as simple as adding cameras. From the Luxriot EVO server side - the NVR is just one more device, and there are at least three ways to add a device to EVO. You can add the device manually or use autodiscovery by scanning devices in the network range. This "how-to" will guide you on how to add a device manually or by scanning IP addresses in range; it will also explain how to add a native i-PRO NVR web interface to the Luxriot EVO monitor using the Luxriot *Crosslink* feature. If you want to use the *Autodiscovery* feature - please consult the Administration Guide, *"Add Devices Using Autodiscovery"* chapter.

#### Prerequisites

Before setting up the i-PRO NVR device, make sure you have:

- 1. Supported Luxriot EVO version (1.28 and newer)
- 2. i-PRO NVR with some cameras connected to the network accessible to the Luxriot EVO server

You also will need to know:

- 1. i-PRO NVR exact model (See supported devices)
- 2. i-PRO NVR IP address and Port
- 3. Device login details (username, password)

## 2. Adding NVR device

### Adding device manually

To add the device manually, go to:

- 1. Console -> Configuration -> Devices
- 2. Click the +*Add Device* button at the top of the *Devices* section. A new popup window will open.
- 3. Provide a meaningful device *Title*, then click the *Select Model* button to find the exact i-PRO NVR model.
- 4. If you have many EVO servers, you can modify the *Server* field to select the server to which you want to attach the device.

| nfiguration       | + New device      | Edit Assign group View channels |    |
|-------------------|-------------------|---------------------------------|----|
| Servers           | Device i-PRO NVR* |                                 |    |
| Networks          | Device            | Details                         |    |
| External services | Details*          | Title                           |    |
| Failover clusters | Folder            | i-PRO NVR                       |    |
| Users             | 👫 Membership      | Device name                     |    |
| Devices           | 😂 Network 1       | Model                           |    |
| Channels          | Channels*         | Model                           |    |
| Recording         |                   | Server                          |    |
| Maps              |                   | Global Server (101) Change      |    |
| Layout templates  |                   |                                 |    |
| Lavouts           |                   | Apply OK Cance                  | el |

**!N.B.** If you can't locate the exact device model, you still have an option to try the closest similar driver from the i-PRO device line-up

The next step is to provide device network settings and authentication info.

- 1. Click the *Network* tab.
- 2. Fill in The NVR's IP address in the *Host* field, and add a *Port number* if it differs from the default setting (80)
- 3. Add username and password to the corresponding fields.

| Device i-PRO NVR* |   | - 🗆    | × |
|-------------------|---|--------|---|
| Device            | Network   |        |   |
| 🏈 Details*        |   |        |   |
| Eoldor            | Host  |        |   |
| Folder            | 192. 5  |        |   |
| Membership        | The pame or learnings                                   |        |   |
| Network*          | Port  |        |   |
|                   | 80  |        |   |
| Channels*         | Port number   |        |   |
|                   | Secure connection                                       |        |   |
|                   | Secure connection (HTTPS must be enabled on the device) |        |   |
|                   | Username  |        |   |
|                   | admin   |        |   |
|                   |   |        |   |
|                   | ✓ Enter password  |        |   |
|                   |   |        |   |
|                   | Password to access the device                           |        |   |
|                   | Open device in browser Ping device                      |        |   |
|                   |   |        |   |
|                   |   |        |   |
|                   | Apply OK  | Cancel |   |

If the device is connected to the network and the IP and password are correct, the list of the NVR channels will appear in the *Channels* tab. You can click the *OK* button, and the device will be added to the server with all its Channels. You can also review the Channels tab to exclude empty or unnecessary channels from the configuration before configuration confirmation.

| Device i-PRO NVR | -  |     | × |
|------------------|--|-----|---|
| Device           | Channels   |     |   |
| 🖋 Details        | Channel Detach Attach Reset Reset channel titles |     |   |
| Folder           | ΠΤLΕ   |     |   |
| 🗛 Membership     | 1 🗗 i-PRO NVR 1                                  |     | ^ |
| Network          | 2 📑 i-PRO NVR 2                                  |     |   |
| Channels         | 3 🖬 i-PRO NVR 3                                  |     |   |
| Channels         | 4 🖬 i-PRO NVR 4                                  |     |   |
|                  | 5 🖬 i-PRO NVR 5                                  |     | ~ |
| Related items 🔻  | Apply OK Can                                     | cel |   |

That's it! Now you can visit *Configuration -> Channels* and configure each NVR channel as any other Luxriot EVO Channel. You can also review any NVR channel inside the Luxriot EVO monitor, just like any other camera channel.



### Find devices automatically

You can also add compatible devices using the Luxriot EVO find devices feature. To do so, go to:

 Configuration -> Devices, find the "+ New device" button and click on the arrow to expand all available options, then click the "Find devices" option.



2. Select the *Server*, mark the *Scan IP address range*, and provide the IP range the device may belong to.

| Configuration                     | + New device   Edit Assign group View channels Move   |
|-----------------------------------|---|
| Servers                           | ControlDialog – 🗆 🗙   |
| Setworks                          | Scan parameters   |
| 🖄 External services               | Server  |
| Failover clusters                 | S Global Server (101) Change  |
| L Users                           | The server that will perform the scan   |
| Devices                           | <ul> <li>Scan network adapter address range</li> <li>Scans one or more network adapters and attached devices</li> </ul> |
| Channels                          | Scan IP address range   |
| Recording                         | From: 192.168.3.135 to: 192.168.3.135   |
| Maps                              | Scan attached devices   |
| 🔜 Layout templates                | Scans attached devices  |
| Layouts                           | Ports   |
| III Video walls                   | OU<br>Comma separated list of port numbers  |
| 🕞 User buttons                    | Passwords   |
| <ul> <li>Visual groups</li> </ul> | admin,Admin1234   |
| CrossLinks                        |   |
| Live podcasts                     | Usernames and passwords (one combination per line). Usernames and passwords separated by a comma.                       |
| 🗐 Data sources                    | Reset OK Cancel   |
| 🚎 Data channels 🗸 🗸               |   |

- 3. Please fill in the *Passwords* field. Add your NVR **username** and **password**, separated by a comma without white spaces. To start the **Find device** feature, click the *"OK"* button.
- 4. Wait until Luxriot EVO completes network scanning and locate your NVR inside the *Found Devices* window.
- 5. Mark the checkboxes for the devices you want to add to your system.

| Configuration                     | <ul> <li>New device</li> <li>Device autodiscovery</li> </ul> | ··· · · · · · · ·                        |  | ×    |
|-----------------------------------|--|--|--|------|
| Servers                           | TIT Device autodiscovery                                     | Found devices                            |  | s    |
| Networks                          | DahuaONVIF     Found devices                                 |  |  | d    |
| 🗠 External services               | Found channels   | Start device search Scanning has been    | successfully completed. 3 new device(s) discovered.                          |      |
| Failover clusters                 | Emu_UIC  | Device properties                        | Found devices Search Q   |      |
| L Users                           | HikiTest   | During and                               | DERCENAME MODEL HOST   | d    |
| Devices                           | IPRO_ONVIFC  | i PPO WI NU200 Series on 193 168 2 12    | ✓ ■ i-PRO WJ-NU300 Series on 192.168.3.135 i-PRO WJ-NU300 Series 192.168.3.1 | 35 d |
| =1 Channels                       | ■ Milesight  | Device name                              | DemoCreator Virtual Camera on localhost:60 (Generic) DirectShow Device       | d    |
| L. Channels                       | MQTT-IPRO  | Model                                    | Microphone (Yeti Stereo Microphone) on local (Generic) Audio Input Device    | d    |
| Recording                         | ■ TRENDnet ON  | i-PRO WJ-NU300 Series Change             |  | d    |
| Maps                              | group1   | Device model                             |  |      |
| 🗔 Layout templates                | 🖬 group2   | Host                                     |  |      |
| Layouts                           |  | 192.168.3.135<br>Host name or IP address |  |      |
| III Video walls                   |  | Port                                     |  |      |
| 🕞 User buttons                    |  | 80<br>Port number                        |  |      |
| <ul> <li>Visual groups</li> </ul> |  | Username                                 |  |      |
| CrossLinks                        |  | admin<br>Username to access the device   |  |      |

- 6. Click the *Found channels* tab, review the list of *Found channels*, unmark irrelevant channels, then click through the channels you wish to add and configure the *Channel name* field and *Recording Settings* for each channel individually. Confirm each channel configuration with the *"Apply"* button.
- 7. Confirm your overall configuration with the *"Add selected devices and channels"* button.

| Configuration                     | + New device | Device autodiscovery |   |  |                           | _ D X   |
|-----------------------------------|--------------|----------------------|---|--|---------------------------|---|
| Servers                           | דוד          | Device autodiscovery | Found channels                          |  |                           | s sector s |
| 😫 Networks                        | DahuaONVIF   | Found devices        |   |  |                           | đ   |
| 🕑 External services               | Emu LPR      | Found channels       | Start device search Scanning has been   | successfully completed, 3 new device(s)                      | discovered.               |   |
| Failover clusters                 | Emu_UIC      |                      | Channel properties                      | Found channels   | Search                    | ۹   |
| L Users                           | HikiTest     |                      | Channel and                             | CHANNEL NAME   | RECORDING SETTINGS        | DEVICE d  |
| Devices                           | IPRO_ONVIE   |                      | LPPO WI-NU300 Series on 192 168 3 135 / | Free WJ-NU300 Series on 1.                                   | Continuous recording (32) | i-PRO WJ-NU300 Series on 1 d  |
| E Channels                        | Milesight    |                      | Channel name                            | PRO WJ-NU300 Series on 1.                                    | Continuous recording (32) | i-PRO WJ-NU300 Series on 1 d  |
| • • •                             | MQTT-iPRO    |                      |   | PRO WJ-NU300 Series on 1.                                    | Continuous recording (32) | i-PRO WJ-NU300 Series on 1 d  |
| Recording                         | TRENDnet Of  |                      | Recording settings                      | PRO WJ-NU300 Series on 1.                                    | Continuous recording (32) | i-PRO WJ-NU300 Series on 1 d  |
| Maps                              | 🗖 group1     |                      | Recording by motion (33)     Change     | i-PRO WJ-NU300 Series on 1.                                  | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| Layout templates                  | group2       |                      | Resording settings                      | i-PRO WJ-NU300 Series on 1.                                  | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| E Layouts                         |              |                      |   | Free PRO WJ-NU300 Series on 1.                               | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| III Video walls                   |              |                      |   | I-PRO WJ-NU300 Series on 1.                                  | Continuous recording (52) | i-PRO WJ-NU300 Series on 1  |
| 🚯 User buttons                    |              |                      |   | 🗆 🖶 i-PRO WJ-NU300 Series on 1.                              | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| <ul> <li>Visual groups</li> </ul> |              |                      |   | i-PRO WJ-NU300 Series on 1.                                  | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| CrossLinks                        |              |                      |   | Free PRO WJ-NU300 Series on 1.                               | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| E Live podcasts                   |              |                      |   | PRO WJ-NU300 Series on 1.     Fl i-PRO WJ-NU300 Series on 1. | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| 🛐 Data sources                    |              |                      |   | Free WJ-NU300 Series on 1.                                   | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| 🗃 Data channels 👻                 |              |                      |   | 🗌 🖶 i-PRO WJ-NU300 Series on 1.                              | Continuous recording (32) | i-PRO WJ-NU300 Series on 1  |
| Configuration                     |              |                      | Apply Reset                             |  |                           |   |
| Events & Actions                  |              |                      |   |  | Add selected devices      | and channels Cancel   |

That's it! You can work with your NVR channels as with any other Luxriot EVO device channel!

## 3. Configuring Recording, Motion and EDGE settings

After an NVR is connected and channels for the connected cameras are added, you can process them with the deep channel configuration.

**!N.B.** Please pay attention to the capabilities of the NVR and the cameras you are connecting to it—the available channel configuration is not the sum of NVR plus device features but rather a difference. For example, if a particular NVR does not support PTZ, we will not be able to address it, even if the camera does have such an option!

As for the model used for this example - we can reuse camera motion detection, control PTZ, and even receive the EDGE recordings. Let's dive deeper and configure your channels.

Go to:

- 1. *Configuration -> Channels ->* your preferred channel. Double-click the channel name.
- Inside the new popup window, select the *Details* tab and select the **recording profiles** for your *Main* and *Substreams*. From the default settings, you can choose "*No recording,*" "Continuous recording," or "Recording by motion." To learn more about custom recording profiles - please consult the Luxriot EVO administration guide.

| Configuration       | + Create cha  | Channel i-PRO WJ-NU300 Serie | es on 192.168.3.135 2* – □  | ×  |
|---------------------|---------------|------------------------------|---|----|
| Servers             |               | Channel                      | Details   | IP |
| Networks            | 🗗 DahuaONVIF  | Details                      |   | ,8 |
| 🖄 External services | 🖶 Emu LPR     | Folder                       | Title   |    |
| Failover clusters   | Enu_guns      | Wembers                      | Channel title   |    |
| L Users             | HikiTest      | Membership                   | Icon  | 58 |
| Devices             | 🗗 i-PRO WJ-NU | Permissions                  | Change<br>Change icon to be used in Luxriot EVO Monitor   | 6  |
| 🗗 Channels          | 🖶 i-PRO WJ-NU | Motion detector              | Main stream recording configuration   | 68 |
| Recording           | E i-PRO WJ-NU | SC Video analytics           | No recording (31) Change  Recording configuration assigned to the main video stream (includes supplementation default)  | 58 |
| Maps                | Milesight     | Audio                        | Main stream storage   |    |
| - Lavout templates  | MQTT-iPRO     |                              | Default Change  | 8  |
|                     | TRENDnet OI   | D Outputs                    | Target storage for the main stream recording  | 68 |
| Video walls         |               |                              | none Change   |    |
| S User buttons      |               |                              | Recording configuriton assigned to the secondary video stream   |    |
|                     |               | Video overlays               | Substream storage   |    |
| Creating outpos     |               | E Dewarp                     | Target storage for the substream recording  |    |
|                     |               | Video configuration          | Record supplementary streams with substream   |    |
| Eve podcasts        |               | Edge configuration*          | Audio stream     VCA stream     Motion stream     Data stream     fenabled, the selected data stream will be recorded with the substream instead of the main stream |    |
| 間 Data sources      |               |                              | Edge recording configuration  |    |
| 👼 Data channels 👻   | -             |                              | Continuous recording (32)<br>Promosconfiguration assigned to the edge video stream  |    |
| E Configuration     |               |                              | nccolorgenmonitori azgrice co un cogo noco zitem  | ~  |
| Events & Actions    |               | Related items 👻              | Apply OK Cancel   |    |

3. To get the EDGE data from the NVR for the particular channel, please use the "*Continuous record*" profile. All other profiles will not pull the available EDGE streams from your NVR.

First, you must enable motion detection to use the *"Record by motion"* profile. To do so, go to:

- 1. Configuration -> Channels -> your channel -> Motion detector tab.
- 2. Click the *Mode* field and select the type of motion detection you want to use. If your camera supports motion detection you can use it, or you can use software motion detection on the Luxriot EVO side.

| 🗗 Channel i-PRO WJ-NU300 Series | on 192.168.3.135 2*                                     |  |
|---------------------------------|---|--|
| Channel                         | Motion detector   |  |
| 🖋 Details                       | Mode  |  |
| Folder                          | Disabled  |  |
| Members                         | Disabled  |  |
| 👫 Membership                    | Camera Motion Detection                                 |  |
| 🛉 Permissions                   | Software (High Accuracy)<br>Software (High Performance) |  |
| 📌 Motion detector               |   |  |
|                                 |   |  |

That's it! Your channels are configured and ready for review inside Luxriot EVO monitor!

## 4. i-PRO NVR with the Luxriot EVO Crosslink

If you have a license for *Crosslink*, you can add an i-PRO NVR web interface directly to Luxriot EVO monitor. To do so, go to:

- 1. Console -> Configuration -> Crosslinks
- 2. Click the +*New Crosslink* button at the top of the section
- 3. Inside the new popup window Details tab, provide a meaningful Title
- 4. Fill in the i-PRO NVR IP address inside the Address field

If you want to see it in Monitor, mark the corresponding checkbox inside the dedicated tab. You can also leave the checkbox unmarked and bring the NVR *Crosslink* in as any other channel directly to the monitor viewport. Confirm your configuration with the *OK* button.

| Configuration                     | + New CrossLink               | Edit   |
|-----------------------------------|-------------------------------|--|
| Channels                          |                               | ID FOLDER  |
| Recording                         | CrossLink i-PRO NVR web inter | face* _ 	 ×  |
| •                                 | CrossLink                     | Details  |
| Maps                              | Details*                      |  |
| 🔜 Layout templates                | Eolder                        | Title  |
| Layouts                           |                               | i-PRO NVR web interface  |
|                                   | A Membership                  | Crosslink due  |
| Video walls                       | 🛉 Permissions                 |  |
| 🚯 User buttons                    |                               | CrossLink icon to be used in Luxriot EVO Monitor   |
| <ul> <li>Visual groups</li> </ul> |                               | Address  |
| CrossLinks                        |                               | http://192.168.3.135/  |
|                                   |                               | CrossLink web address  |
| Live podcasts                     |                               | ☑ Ignore certificate errors  |
| 📰 Data sources                    |                               | If enabled, all certificates will be accepted  |
| 🚎 Data channels                   |                               | Allow file download  |
| -<br>-                            |                               | In enabled, the crosslink webpage will accept remote riles and save them in the Library                              |
| Mail servers                      |                               | Allow prompts If enabled, small popup dialogs like prompts and notifications will be allowed for this CrossLink page |
| (1) GSM modems                    |                               |  |
| MQTT clients                      |                               | If enabled, this CrossLink page will open new windows within the same domain   |
| ↔ Madhus diants                   |                               | Show in a dedicated tab  |
| -T- Mousus cients                 |                               | in seabled, the Crosslink webpage will appear in a separate tab instead of the viewport                              |
| Reports                           |                               |  |
| Access control                    |                               | Apply OK Cancel  |
|                                   | •                             |  |

Depending on your settings, you can use the native i-PRO interface directly from the Luxriot EVO monitor dedicated tab or inside the viewport.

# 5. Log in to the i-PRO NVR web interface with Luxriot EVO monitor.

After the server side is configured, open Luxriot EVO Monitor. If you checked the *"Show in a dedicated tab"* checkbox, Locate the new Tab at the top of the monitor window, click it, provide the NVR user credentials, and confirm with the *Connect* button.

| 🖵 Live | Playback          | 品 Sequence | 🔊 Smart Search | Alerts | 🖹 Library | Access Control | 01 Reports | VA Investigation | 🕑 FR group | 🛞 EVA | i-PRO NVR web interface | Sconnection (4 servers) |  |  | Help |
|--------|-------------------|------------|----------------|--------|-----------|----------------|------------|------------------|------------|-------|-------------------------|-------------------------|--|--|------|
| 😂 i-PR | ) NVR web interfa |            |                |        |           |                |            |                  |            |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            |                  |            |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            |                  |            |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            |                  |            |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            |                  |            |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            |                  |            | _     |                         |                         |  |  |      |
|        |                   |            |                |        |           |                | i-PRO I    | NVR web interfa  | ce         |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            | User name        |            |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            | User password    |            |       |                         |                         |  |  |      |
|        |                   |            |                |        |           |                |            | Connec           | Disconnect |       |                         |                         |  |  |      |

Here is how the native i-PRO NVR appears inside the dedicated tab:



If you want to use *Crosslink* inside the viewport and you did not check the corresponding checkbox inside the *Console -> Configuration -> Crosslink*, you will find the Crosslink inside the left panel under the *Crosslink* subsection. Drag and drop it into the preferred viewport and provide the device credentials.



Here is the preview of the native i-PRO NVR web interface inside a Luxriot EVO monitor viewport:



Remember —an NVR is the same as any other camera device. The best place to look if you run into any issues is to consult the corresponding administration guide section about cameras.