



NVR - Third-Party Integration

Adding Third - Party IP cameras failed

Revision History

Author	Version	Release Note	Date	Audit
Stephen	V1.0	General Troubleshooting	2021.8.10	Lyndon

[NVR - Third-Party Integration] Adding Third-Party IP cameras failed

Description

The Third-party IP cameras are successfully added and displayed on the Camera Management list, but the status is disconnected.

The screenshot shows the 'Camera Management' interface. On the left is a sidebar with navigation options: Local Configuration, Camera Management (selected), Device Search, PTZ Configuration, Image, Audio, Advanced, Camera Maintenance, Storage, Event, and System. The main area has tabs for 'Camera Management' and 'Batch Management'. Below the tabs are input fields for adding a new camera: Channel (9), Channel Name (CAM9), IP Address, Port (80), User Name (admin), Password, Transport Protocol (Auto), and Protocol (ONVIF). There are 'Add', 'Refresh', and 'Delete' buttons. Below these is a table of existing cameras:

Channel	Channel Name	Edit	Delete	Status	IP Address	Channel ID	Port	Protocol	MAC	Firmware Version	Model
1	CAM1			Disconnected	192.168.10.96	-	80	MSSP			
2	CAM2			Disconnected	192.168.7.77	-	80	ONVIF			
3	CAM3			Disconnected	192.168.7.87	-	80	MSSP	1CC31621F0F1	40.7.0.79-F	MS-C2951-EPB
4	CAM4			Connected	192.168.7.127	-	80	MSSP	1CC3162569AF	40.7.0.79-F	MS-C2964-PB
5	CAM5			Connected	192.168.7.189	-	80	ONVIF	1CC316258222	33.7.0.79-India	SP-C8203S
6	CAM6			Connected	192.168.7.244	-	80	ONVIF	1CC316220B53	43.7.0.79-LPR3-F	MS-C2961-QELPB
7	CAM7			Disconnected	192.168.5.120	-	80	ONVIF			
8	CAM8			Disconnected	192.168.7.88	-	80	MSSP			
16	CAM16			Disconnected	192.168.10.92	-	80	MSSP			

Free Receiving Bandwidth: 299.50Mbps

The screenshot shows the 'Camera Settings' interface. On the left is a sidebar with navigation options: Camera Management (selected), Device Search, PTZ Configuration, Image, Audio, Advanced, Camera Maintenance, and Live View. The main area has tabs for 'Camera Management' and 'Batch Settings'. Below the tabs are input fields for configuring a camera: Channel (3), Channel Name (CAM3), Protocol (ONVIF), IP Address, Port (80), Transport Protocol (Auto), User Name (admin), Password, and Time Setting. There are 'Test' and 'Add' buttons. Below these is a table of existing cameras:

Channel	Channel Name	Edit	Delete	Status	IP Address	Channel ID	Port	Protocol	MAC	Firmware Version	Model
1	CAM1			Disconnected	192.168.5.120	-	80	ONVIF			
2	CAM2			Connected	192.168.7.77	-	80	ONVIF	1CC31621666C	41.7.0.76-r1	MS-C4472-FPB
4	CAM4			Connected	192.168.7.88	-	80	ONVIF	1CC316276043	41.7.0.78-r1	MS-C5363-PB

Free Receiving Bandwidth: 77.50Mbps

Note:

We recommend updating the NVR firmware to the latest version before starting. The latest version can be downloaded from the [Download Center|Milesight](#).

Cause

1. [ONVIF Protocol Related](#)
2. [Other Parameters Requirements](#)

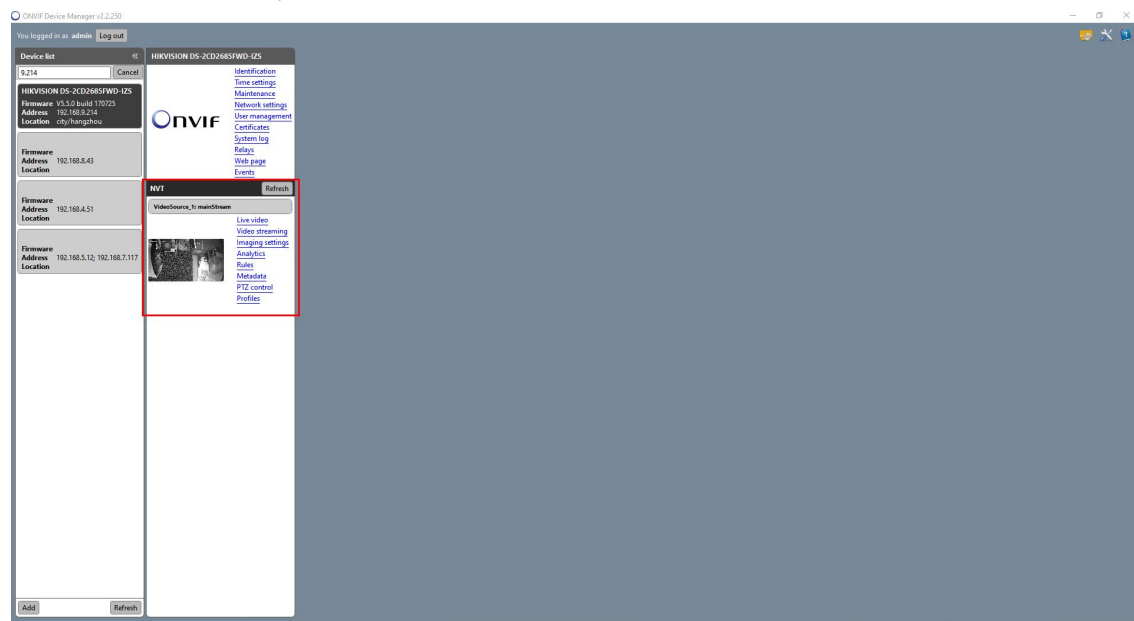
Resolution

1. ONVIF Protocol Related

1.1 ONVIF Protocol Support

Milesight NVR that connects to third-party cameras requires ONVIF protocol support. You can test if the ONVIF camera works on **ODM(ONVIF Device Manager)**. It's a program which can be searched through Google, you can download it by yourself.

- Ensure the camera can be detected by ODM. It represents the camera supports ONVIF.
- Ensure that the camera can be added via ONVIF. Check whether the **NVT** will display the camera information normally after logging in.

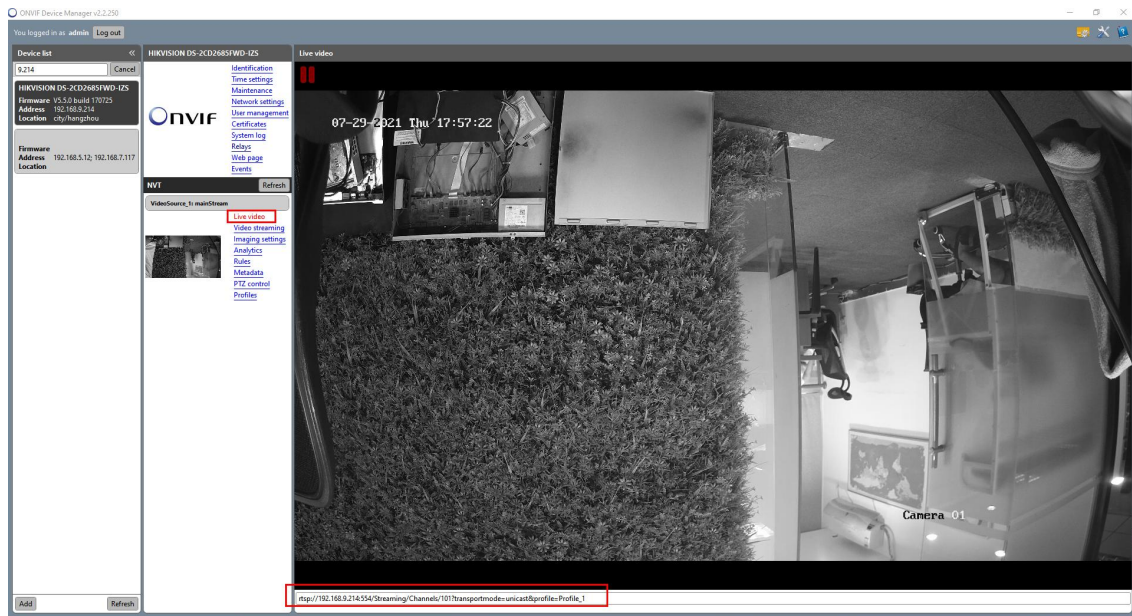


Note:

Input **the corresponding ONVIF account** and click Log in.



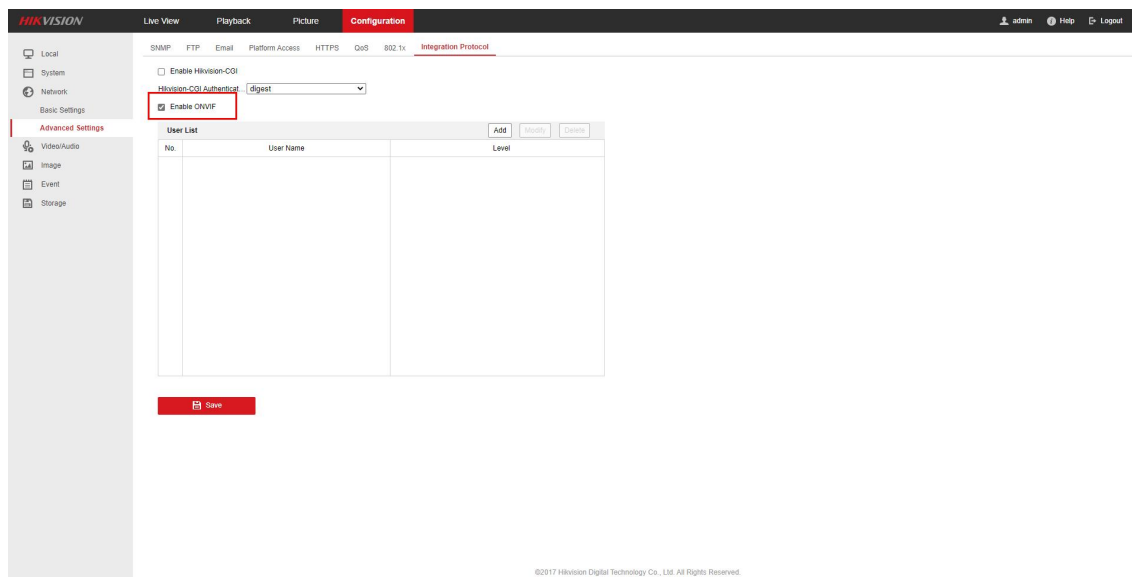
- Ensure the RTSP stream is available. Check whether the video stream can be played normally after the camera is successfully added through ONVIF.



1.2 ONVIF Protocol is NOT Enabled

Ensure the ONVIF is Enabled.

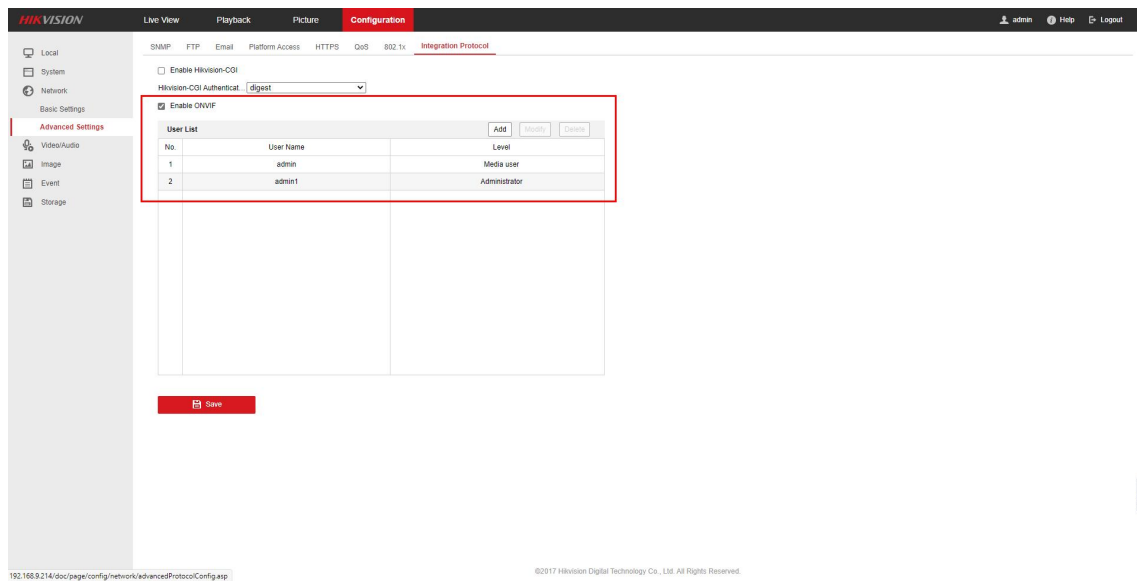
For most of IP cameras, ONVIF is an optional protocol as shown in the figure below:



1.3 No ONVIF Account

Ensure there is at least one ONVIF account available.

Some third-party brand IP cameras, such as **HIKVISION**, needs to add ONVIF account but there is no default one. You need to Enable ONVIF and add ONVIF accounts. For example, you can add this camera to NVR through either of these two ONVIF accounts as shown below:

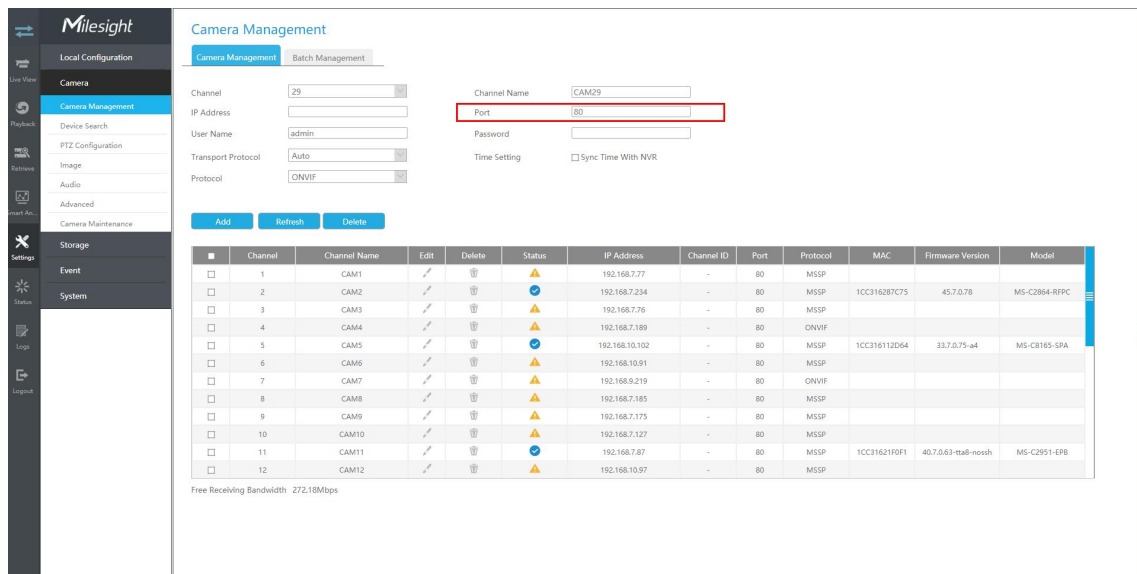


1.4 Incorrect ONVIF Port

Check the ONVIF port of camera. Ensure the filled ONVIF port is correct.

In most cases, the port of ONVIF is 80, so the default port value of Milesight NVR ONVIF protocol is 80.

But some third-party cameras' ONVIF ports are not, such as Grandstream's is 8080.

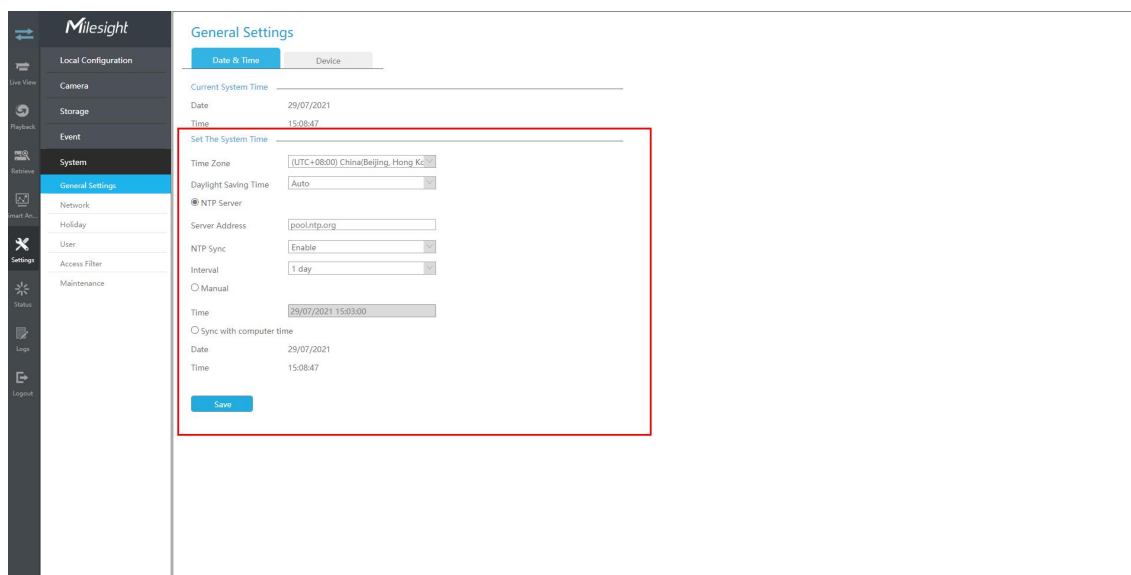


2. Other Parameters Requirements

2.1 Camera and NVR Time Synchronization

Ensure the system time of camera is the same as NVR.

For some third-party brands, like **Axis** cameras, you need to check whether the time is synchronized with the NVR, because this brand's camera has time synchronization requirement.



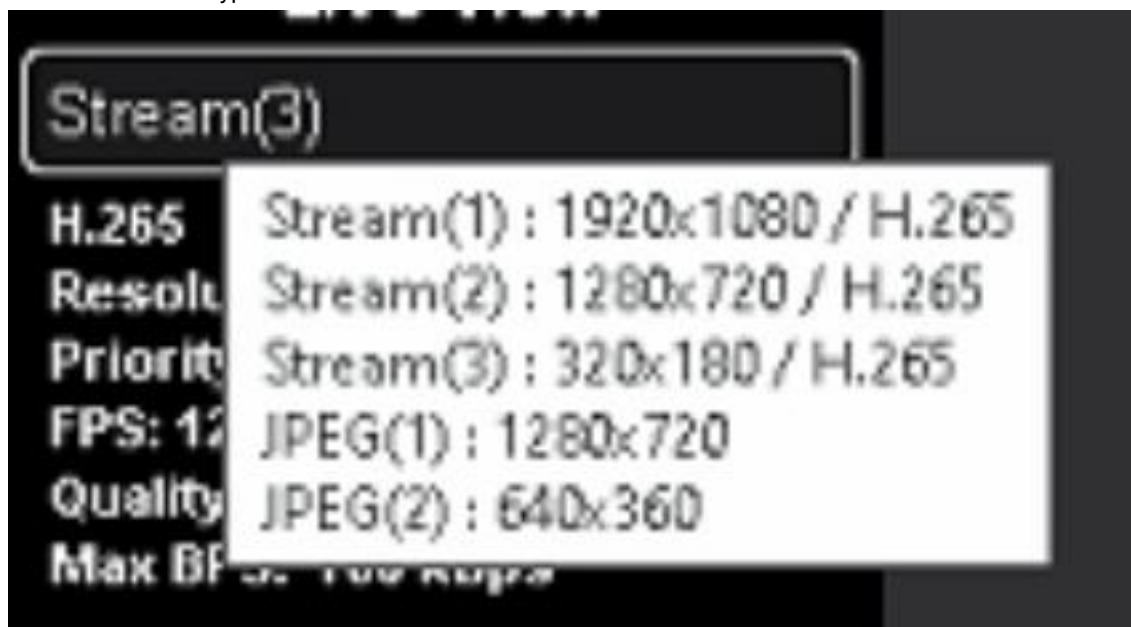
2.2 Video Codec Type Limitation

Due to Milesight NVR only supports H.264, H.265 video codec type, please pay attention to the camera's MJPEG, H.264+, H.265, H.265+ and smart stream options.

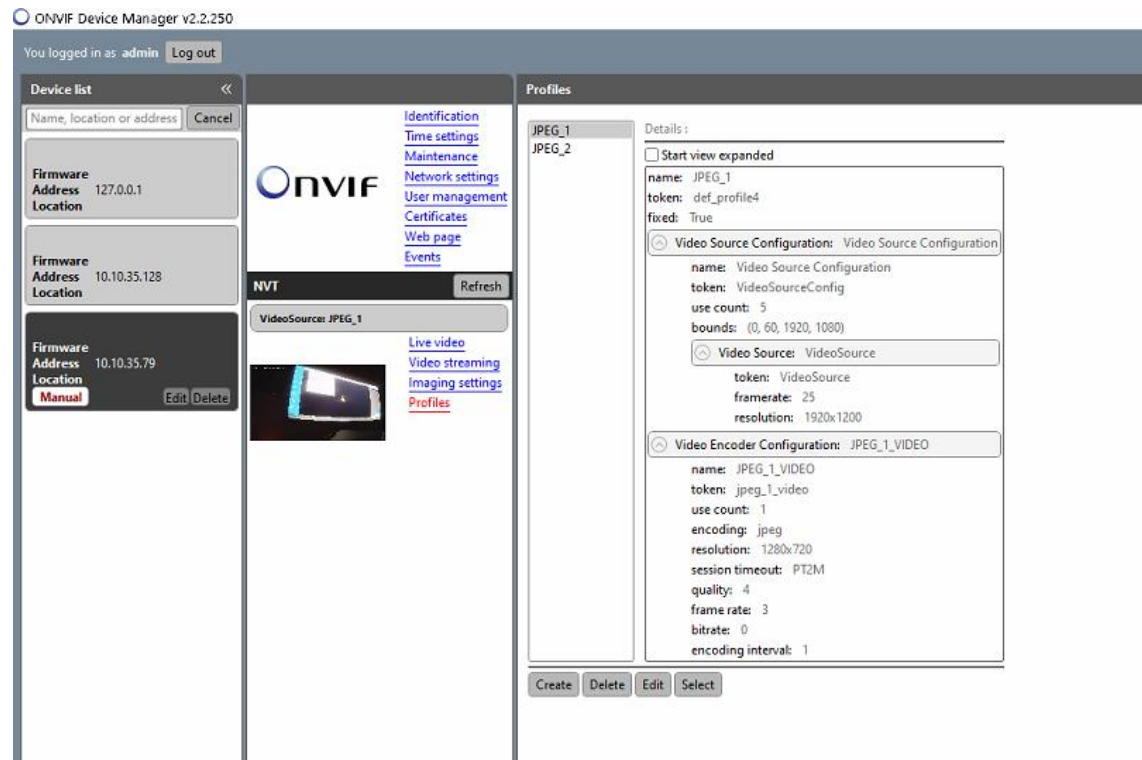
Note:

Considering that H.265 may have compatibility issues, H.264 is recommended. If you need to be compatible with H.265, please contact Milesight technical support for help.

Regarding the video codec type, here is an example: For Panasonic camera, some of them don't support H.264 video codec type as shown below.



Even choose the Stream 1-3 (H.265), Panasonic camera still get response from ODM of JPEG video codec type.



As you know, Milesight NVR doesn't support MJPEG video codec type which proves that these cameras cannot be added to Milesight NVR. Also, about H.265 responding to JPEG, you need to contact Panasonic technical support for help.

Others

1. Failed to add **Axis, Avigilon, Bosch, Dahua** cameras, **HIK NVR** RTSP stream.

Resolution: Upgrade NVR firmware version to **7X.9.0.12 (2021/6)** or above.