Technical Newsletter

March 2025 Service Operation Team

Contents

Technology Information

- How to receive an alarm email in case of an event
- How to resolve 'SSM License Active' failure and Clone detection
- Information on NVR HDD RAID1
- Restrictions on camera installation for Slip & Fall detection

Latest Firmware Information (Jan. 2025 – Feb. 2025)

How to receive an alarm email in case of an event

Info. Type	☐Quality ■Settings ☐Repair ☐S/W ☐Etc

● **Target model**

- Network storages

● **Summary**

- To receive an event in a camera registered to the NVR, you must complete all of the settings in Step 1 and Step 2.

● **How to configure the event alarm settings**

Step 1. SMTP Setting: Setup > Network > E-mail

  A. Select the [SMTP] tab, and then enter the server address and port number to connect to

    - User options: [Enable authentication], [Enable Transport Layer Security(TLS)]

  B. Select the [Event] tab, and then set the transmission interval, Duration.

  C. Select the [Recipient] tab, and then set the main recipient group and recipients.

Step 2. Event Rule Setting: Setup > Event > Event Setup

  A. Set up event rules and triggers

    - Motion/Face/Tampering Detection, IVA

  B. Select the [E-mail] option in the event rule

● Event action : Displays the event action set in the event rule.
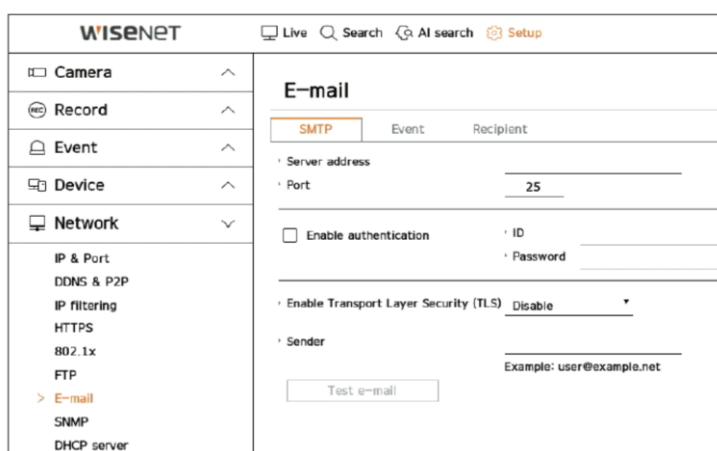
Item	Description
✛	Record/Go to preset
⏱	Alarm output
✉	E-mail
FTP	Transfer images to FTP server

[Step 1. SMTP Settings]
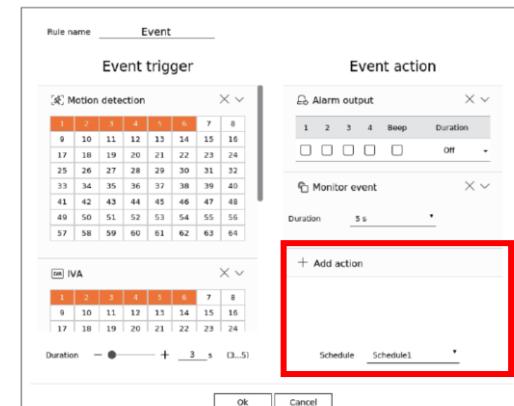
[Step 2. Event rule settings]

● **Note**

- The [Test e-mail] function is not related to event alarm settings.

- With multiple event triggers selected, an alarm e-mail will be sent when all selected events are triggered (AND condition)

How to resolve 'SSM License Active' failure and Clone detection

Info. Type	☐Quality ☐Settings ■Repair ☐S/W ☐Etc

● **Target model**

 - SSM

Case 1) When a paid license is not activated

 - Even though a paid license purchased by a customer has been registered, its status does not change to Active.

 . Reason: If the number of the Trial (Free) License channels is greater than that of the Paid License channels, the paid License becomes active after the Trial period ends (Product Specifications)

 ※ Trial(Free) License Duration : 45 days

● **Solution: How to delete the Trial(Free) License**

1) Go to the file path where the license is stored.

 ※ License File Path: C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel LDK\installed\86966

2) Find the V2C file whose filename is identical to the Key ID.

3) Delete the V2C file.

4) Then restart the service.

SSW-CH128L/EX	**100174447880001111**	**You must delete the V2C whose filename is identical to the Key ID.**

> This PC > Windows (C:) > Program Files (x86) > Common Files > SafeNet Sentinel > Sentinel LDK > installed > 86966

Name	Date modified	Type	Size
100174447880001111_provisional.v2c	6/30/2020 6:52 PM	V2C File	3 KB
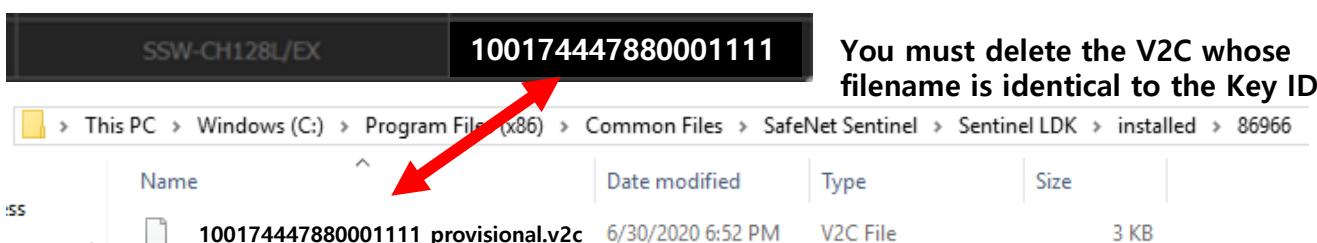
Case 2) When an SSM License is detected as a Clone

 - An SSM License is continuously detected as a Clone in a Virtual environment.

 . Reason: When the **ethernet_uid** value does not match, SSM detects the license as a Clone

 → When a Virtual LAN (MAC address) is added/changed arbitrarily, the SSM License is detected as a Clone.

● **Solution**

 - The SSM License needs to be reissued in the current Virtual Environment.

Information on NVR HDD RAID1

Info. Type	☐Quality ☐Settings ☐Repair ☐S/W ■Etc

● **Target model**

  - XRN-820S, XRN-1620SB1 [Firmware v5.34.10 or later]

● **Purpose**

  - To understand RAID1 features added to some storage products

● **RAID Level List** [Based on version 5.34.22]

RAID mode		RAID 1	RAID 5	RAID 6
Minumum Q'ty (HDD)		2	5	5
RAID Array operation	1 HDD failure	Operable * replace required	Operable * replace required	Operable * replace required
	2 HDDs failure	Inoperable	Inoperable	Operable * replace required
	3 HDDs failure	Inoperable	Inoperable	Inoperable
Hardware Fault Tolerance		High	Medium	High
Storage Efficency		50%	80%~87%	66%~75%

  * Please refer to each product manual for detailed RAID support list and specifications.

● **Advantages and disadvantages of RAID1**

 - **Advantages: High fault tolerance**(Hardware Fault Tolerance)

   All data is copied and stored across multiple drives.

   Even if a physical failure occurs on one drive, the system

   can switch to a mirrored drive without losing data.

   Thus, there is a low risk of data loss.

    * In case of 1 HDD failure, HDD replacement and

      reconfiguration are required.
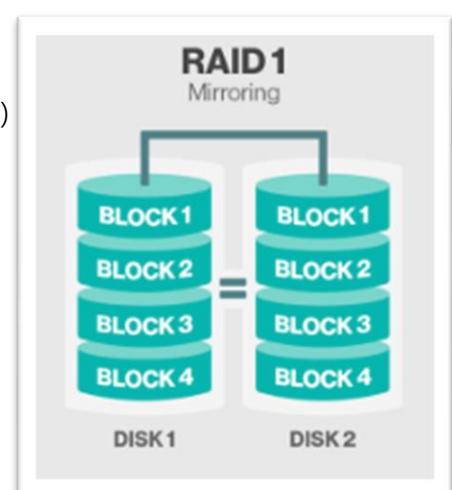
 - **Disadvantages: Reduced storage capacity**

   It has a recordable storage capacity of only half

   due to its data redundancy.

RAID1 : Stores identical data copies
(DISK1 = DISK2)

Restrictions on Camera Installation for Slip & Fall Detection(1/2)

| Info. Type	□Quality □Settings □Repair □S/W ■Etc

● **Target model**

  - P series AI cameras

● **Purpose**

  - To reduce malfunctions and false detections of market products by providing information on installation environments and restrictions for slip & fall detection through screen analysis.

● **Recommended Installation Environment**

 - Recommended installation conditions for Slip & Fall detection

   ・ The minimum requirements for camera installation:

     Height: 3.5m or higher, Angle: 70° or higher

   ・ Target detection at least 5m away from the camera installation location

   ・ A recommended installation place is a flat area with no obstacles blocking pedestrians, no shaking of the camera and background, and no shadows
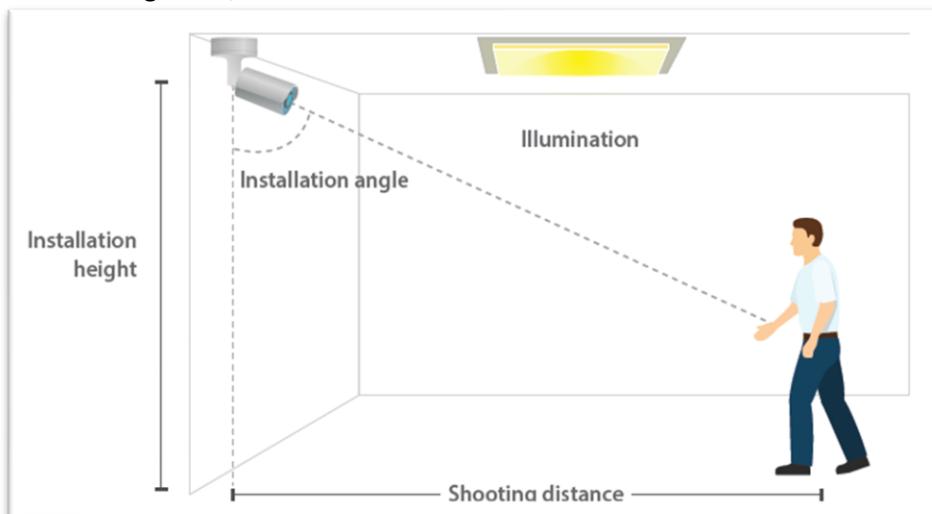
An example of P-AI camera installation

Camera installation environment	4k resolution	2M resolution
Installation height	Min: 3.5M, Max: 6M	
Installation angle	70° or higher	
Detection distance	Min: 5M, Max: 12M	Min: 5M, Max: 8M
People simultaneously Detected	3	

Restrictions on Camera Installation for Slip & Fall Detection(2/2)

Info. Type   □Quality □Settings □Repair □S/W ■Etc

● **Limitations of detection**

1) When the target person's body is partially or completely covered

① When the person's body is partially or completely covered by an object

② When the target (person) is not visible on the screen

③ When another person who overlaps with the target person on the screen falls down
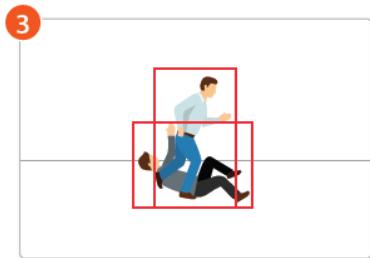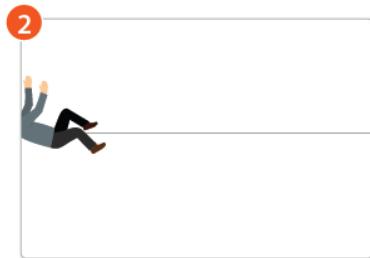
(Part of the body covered by an object)   (Part of the body has moved out of the camera screen)   (Overlapping with others)

2) When a person falls while not walking

- The slip and fall detection function is designed to detect a person who falls while walking.

Therefore, if a person falls while sitting or bending for more than 3 seconds, he/she may not be detected.
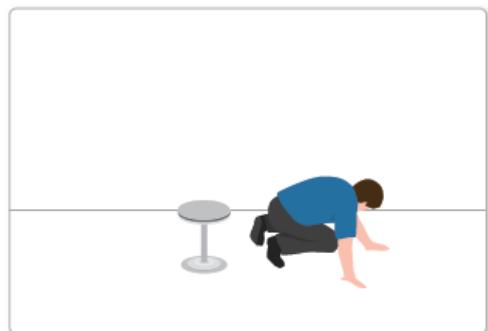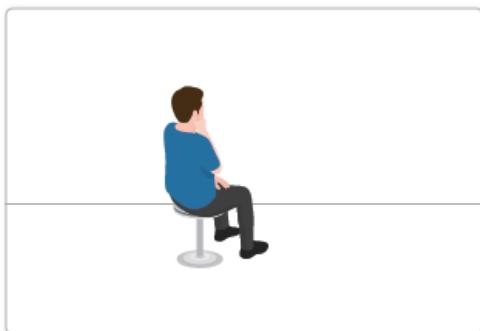
('Sitting' for 3 seconds or more)   (Falls down afterwards)

3) Environmental restrictions

- Location: Low-light and dark places, places where many people move randomly

- Area: Areas with reflection/glare/shadows, strong light such as direct sunlight or lighting, and heavy snow/rain

- Background: When a person's clothing and background colors are similar, when 2 or more objects overlap, when various objects appear at the same time

- Object: When it is obscured by a fence, etc., when it is less than 160cm, when it is rolling or falling with arms outstretched

☞ For camera installation, please follow the camera installation guide.
. Website(www.hanwhavision.com) → Technology → Technology White Papers → Camera Installation Guide

New updated firmware (2025 Jan ~ Feb)

Category	MODEL NAME	FIRMWARE	VER	DATE	REMARK
NW AI Box	AIB-800	AIB-800_24.01.03	24.01.03	2025-02-11	- Improved compatibility of Hanwha Vision cameras - Added a feature to encode BestShot to Base64 format. To enable this feature, click [Go to app] from the [Open platform] menu in the web viewer, then in the application that appears, click [Analytics] > [BestShot & Attributes] and toggle [Base64 Image] to On. - Fixed some bugs and improved the stability - Added support for third-party app integrations : Integrated AIA-BDPM2 AI event
Mobility	MMA-S1010 MMA-D1010	MMA-S1010_2.21.02	2.21.02	2025-02-14	- Improved event processing speed of the application
	MMC-O6080R	MMC-O6080R_2.21.02			
NET CAM	PNM-12082RVD	PNM-12082RVD_2.22.04	2.22.04	2025-01-24	- Enhanced functionality to ensure CDP operates normally even when LLDP is disabled. - Corrected an issue where an 802.1x certificate did not function after rebooting the camera after installing the 802.1x certificate. - Corrected the ping timeout issue that occurred when a 1Gbps switch port was connected.
	PNM-7082RVD	PNM-7082RVD_2.22.04			
	PNM-C9022RV	PNM-C9022RV_2.22.03	2.22.03	2025-01-16	- Improved the logic of the execution command for the LLDPd (Link Layer Discovery Protocol daemon) within the camera by adding "-ccc", allowing it to forcefully send CDP (Cisco Discovery Protocol) packets even if CDP switches are not detected
	XND-6083RV XNV-6083R XNO-6083R XNB-6003	XND-6083RV_2.23.03			
	XNF-9013RV	XNF-9013RV_2.23.03			
	XNO-6123R XNV-6123R	XNV-6123R_2.23.03			