

## 2<sup>nd</sup> generation of DeepinMind NVR V4.1.70 Build190814

### Release Notes

(2019-09-06)

<b>Firmware Basic Information</b>	Firmware Version:	V4.1.70build190814
	SDK Version:	V6.1.0.30build20190731
	Play Library (PlayCtrl.dll)	6.0.0.5/7.3.3.61
	Web version	V4.0.1 build 190812
	Client version	V2.6.18.104 build20190731

#### Reason of Upgrade

Add new features and optimize product performance.

#### New features

1. Optimize face detection and facial recognition algorithm.
2. People Frequency - Frequently appeared person:
  - 1) [WEB] Configuration: Can configure linked face picture library , arming schedule, linked method.

The screenshot displays the HIKVISION web interface with the 'Configuration' tab selected. The left sidebar shows various system settings, with 'People Frequency' highlighted. The main content area is titled 'Frequently Appeared Person' and includes the following settings:

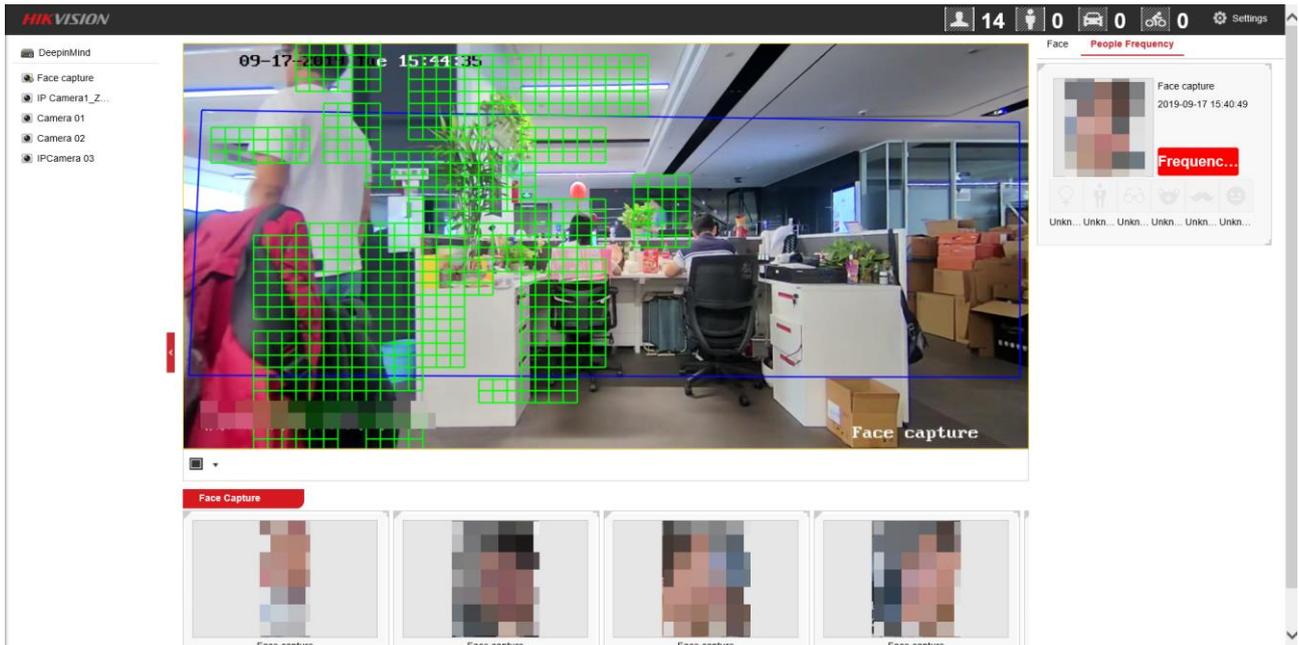
- Enable
- Capture Interval: 10 minute(s)
- Frequency Threshold (≥): 10
- Statistics Cycle: 7 Day(s)

Below these settings are four tabs: 'Linked Channel' (selected), 'Linked Face Picture Library', 'Arming Schedule', and 'Linkage Method'. Under the 'Linked Channel' tab, there is a 'Select All' checkbox and a list of cameras with checkboxes:

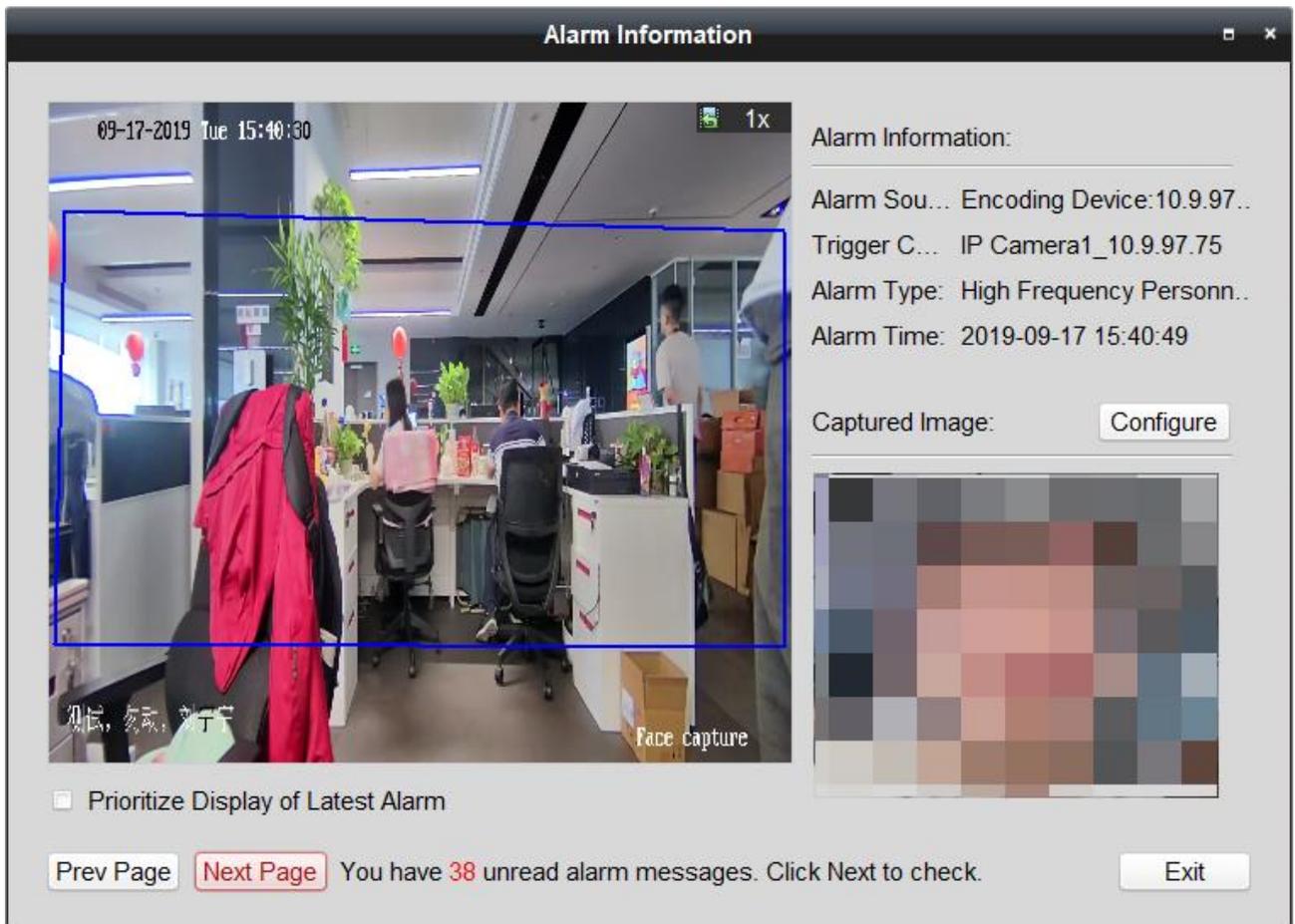
- Face capture
- IP Camera1\_ZCW\_01
- Camera 01
- Camera 02
- IPCamera 03
- Camera 01

- 2) Support upload frequently appeared person alarm;

### 3)[WEB/GUI/4200] Support frequently appeared person alarm display;



Web interface



iVMS-4200 interface

4)[WEB/4200] Support to search frequently appeared person alarm log. Support to view the alarm detail on iVMS-4200.

Upgrade & Maintenance **Log** Diagnose Filtered Alarm Statistic

Major Type: Alarm Minor Type: Frequently Appeared Person  
Start Time: 2019-09-17 00:00:00 End Time: 2019-09-17 23:59:59 Search

Log List							Export	Export All
No.	Time	Major Type	Minor Type	Channel No.	Local/Remote User	Remote Host IP		
1	2019-09-17 15:09:39	Alarm	Frequently Appeared Per...	D1				
2	2019-09-17 15:40:50	Alarm	Frequently Appeared Per...	D1				
3	2019-09-17 16:03:04	Alarm	Frequently Appeared Per...	D1				
4	2019-09-17 16:03:24	Alarm	Frequently Appeared Per...	D1				
5	2019-09-17 16:04:22	Alarm	Frequently Appeared Per...	D1				

Total 5 Items << < 1/1 > >>

## Web interface

The screenshot shows the iVMS-4200 web interface. The top navigation bar includes 'File', 'System', 'View', 'Tool', and 'Help'. The main menu has 'Control Panel', 'Main View', 'Face Retrieval', 'People Frequency Search', 'Log Search', 'Alarm Event', 'Person Pattern', and 'Device Management'. The 'People Frequency Search' window is active, showing search conditions and results. The search condition panel on the left includes 'Device' (9632人脸识别), 'Start Time' (2019-09-11 00:00:00), 'End Time' (2019-09-17 23:59:59), 'Statistics Types' (High Frequency), and 'Frequency Above' (1). The search result area displays a person's face with the text 'Frequency of Frequently Appeared 2019-09-17 00:08:38'. The bottom status bar shows 'Total 1 Page: 1/1' and a page navigation bar.

## iVMS-4200 interface

## 5)[4200] Support to export frequently appeared person alarm log.

Alarm Name	Person ID	Name	Frequency	First Appearance Time	First Appearance Content	First Appearance URL	Recent Appearance Time	Recent Appearance Content	Recent Appearance URL	Age	Wear Glasses	Gender
Frequently Appeared	9f1b8d14-1460-4	Stranger	1	2019-09-17 00:06	Face capture	http://10.9.97.75:2019-09-17 00:06	2019-09-17 00:06	Face capture		Youth	Yes	Female

## 3. People Frequency – Low frequency person

### 1) [WEB] Configuration

**Configuration**

Frequently Appeared Person **Low Frequency Person**

Enable

Capture Interval: 10 minute(s)

Frequency Threshold (<): 7 Time

Statistics Cycle: 7 Day(s)

Daily Report Time: 18:00

**Linked Channel** | Linked Face Picture Library | Linkage Method

Select All

Face capture

IP Camera1\_ZCW\_01

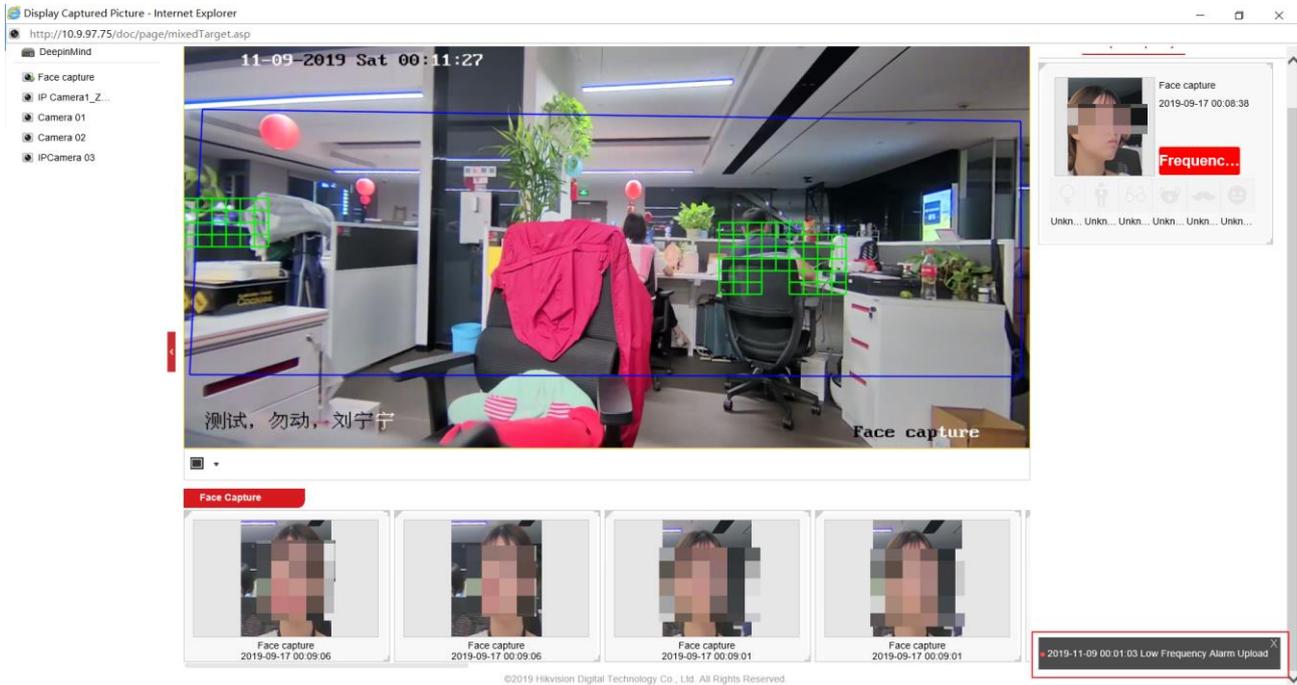
Camera 01

Camera 02

IPCamera 03

2) Support to upload low frequency person alarm (once a day).

3) [WEB/4200] Support low frequency person alarm display.

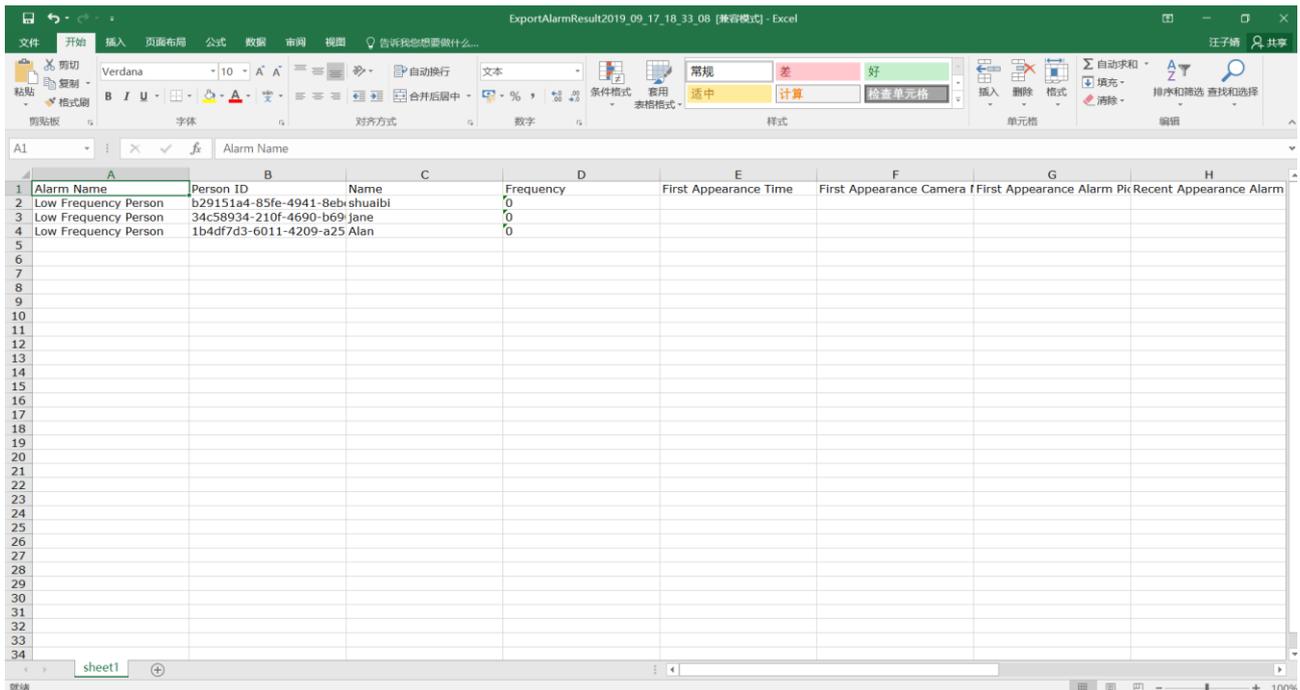
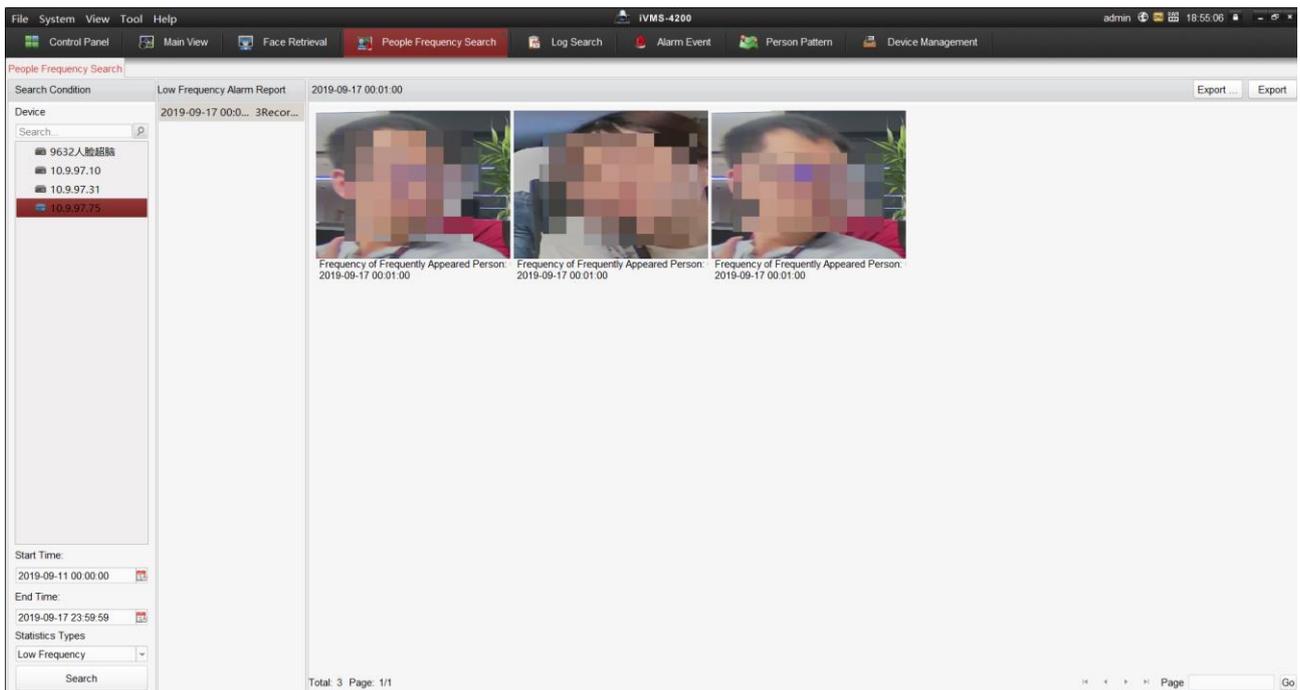


Web interface

Alarm Time	Alarm Source	Alarm Details	Alarm Content	Live	Send	Note
2019-09-17 18:44:30	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:44:15	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:44:14	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:43:57	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-11-09 00:01:03	Encoding Device:10.9.97.75	Low Frequency Alarm Report Counts: 3	Low Frequency Personnel Detection	✓	✕	
2019-09-17 18:43:33	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:43:07	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:42:59	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:42:53	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:42:41	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:42:10	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:40:52	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:40:50	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	
2019-09-17 18:40:42	Encoding Device:10.9.97.75 IP Camera5_10.9.97.75	Trigger Camera: IP Camera5_10.9.97.75 Rule No.:1	Line Crossing Alarm	✓	✕	

iVMS-4200

## 4) [4200]Support to search low frequency person alarm report , view the detail and export record.

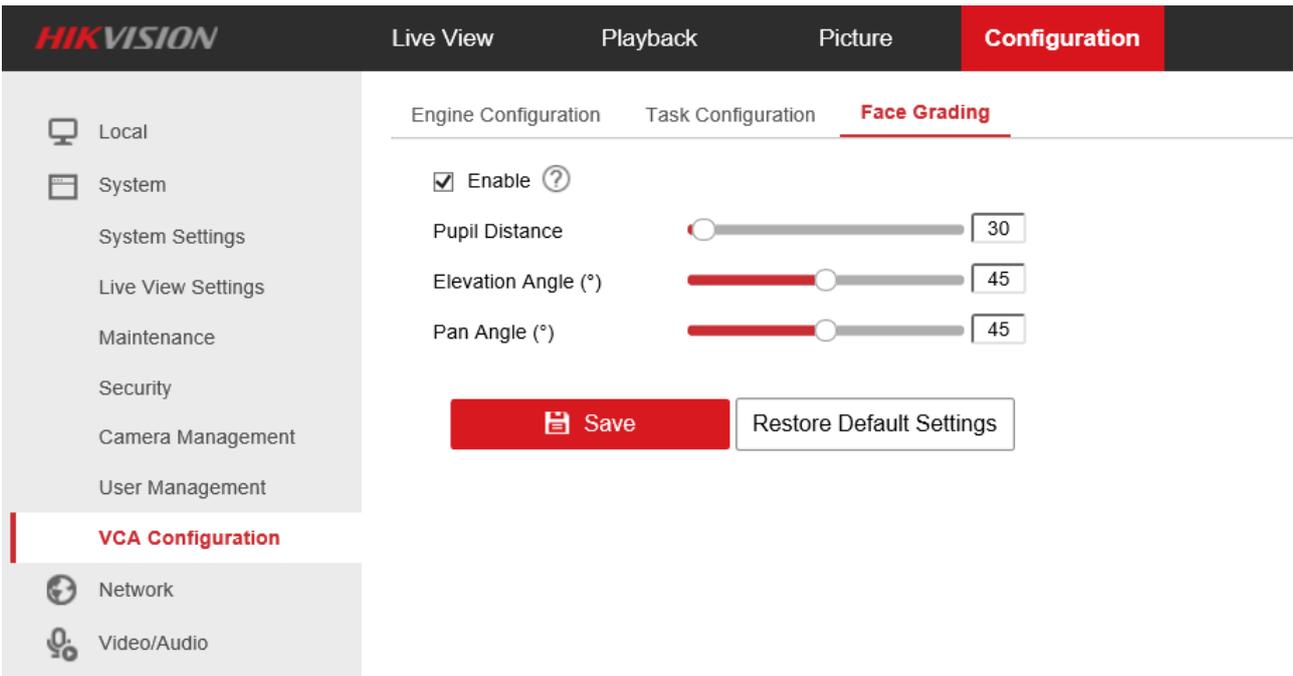


## 4. Face Grading

1) Support to enable face grading (enabled by default), configure pupil distance, elevation angle and pan angle.

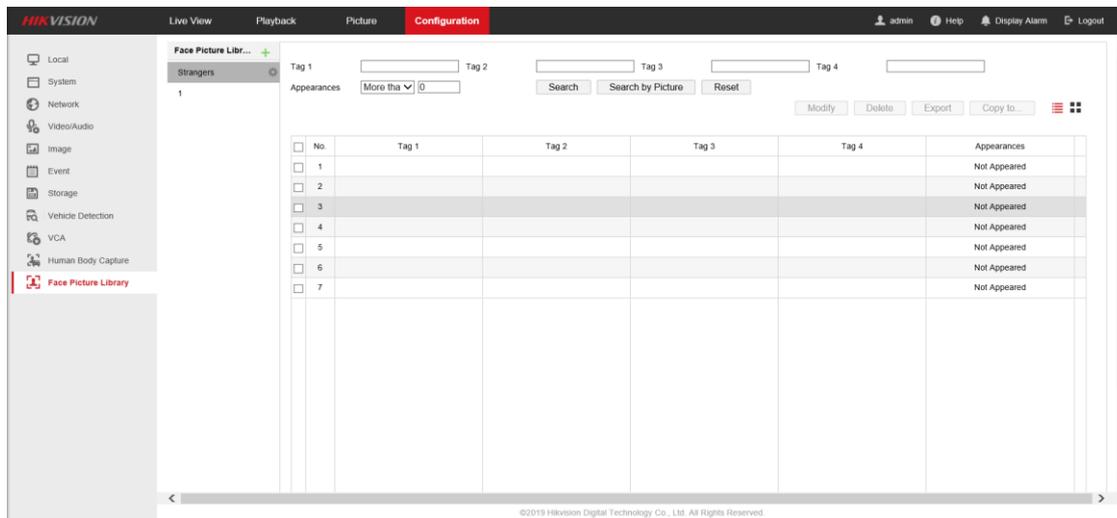
2) Support to restore default settings.

3) People frequency and face comparison using the same face grading rule.



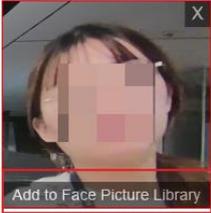
## 5. Stranger library management

- 1) [GUI/WEB] Support edit and search tag;
- 2) [GUI/WEB] Support appearances display;
- 3) [GUI/WEB] Support delete people and appearance record;
- 4) [GUI/WEB] Support add stranger face picture to other face picture library.



### Alarm Frequency Details

Clear



Channel No. 1  
Youth, No Facial Expression, Female, No Glasses, Not Wearing Mask  
2019-11-09 00:35:32

Total 1 Items    Prev Page    1    Next Page    Go to    Page    Go to

## 6. Face picture library:

- 1) [GUI] Newly added display and search of modeling status;
- 2) [GUI/WEB] Support face picture display by list (100/p) or thumbnails (12/p) ;

## 7. Optimize face picture comparison alarm and stranger alarm;

- 1) When the face capture alarm is triggered, if the face comparison alarm or stranger alarm is enabled, it will trigger only one alarm of the three (successful face comparison succeed alarm, face comparison failed alarm and stranger alarm). Each result alarm has an independent linkage mode;
- 2) Priority: Face comparison succeed>Stranger alarm>Face comparison failed

## 8. Input and output bandwidth

- 1) Each hik protocol access channel will increase 512k fixed bandwidth for picture alarm;
- 2) The picture output bandwidth accounts for 10% of the network output bandwidth.

## 9. Optimize file management;

## 10. Optimize search by picture;

- 1) The lowest retrieval similarity is 50%;
- 2) Achieve asynchronous retrieval;

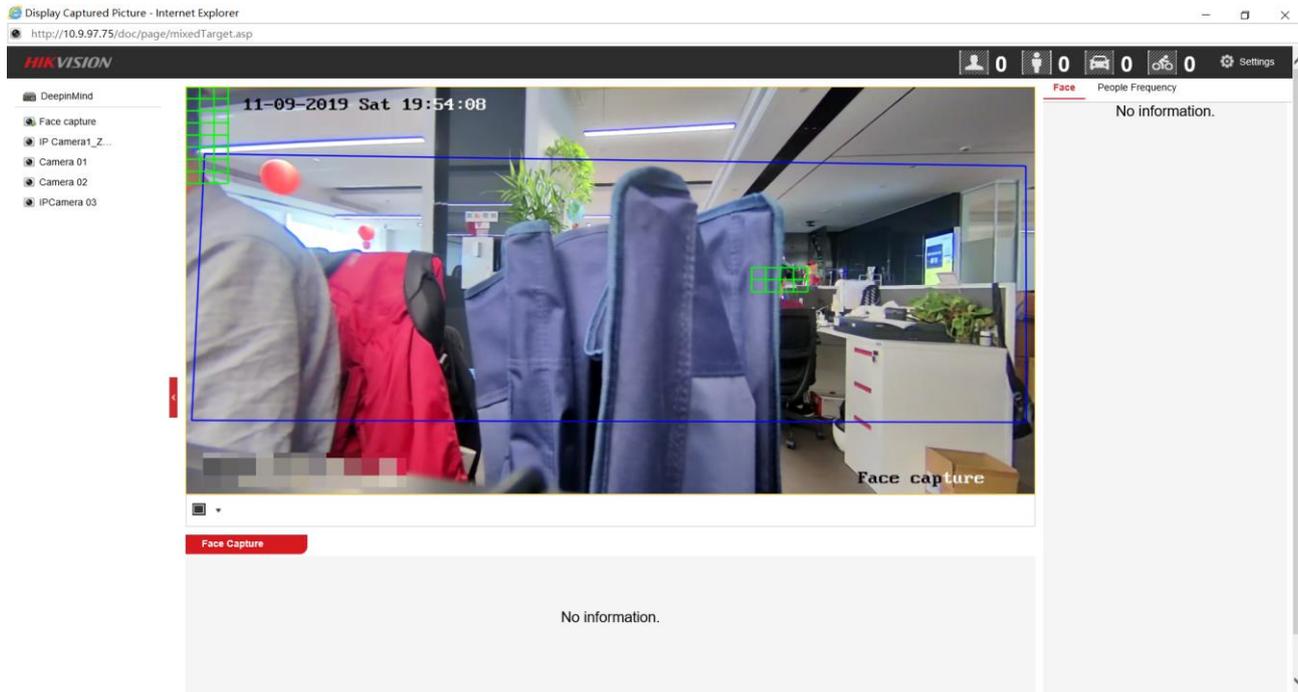
## 11. Optimize search by property;

- 1) Search conditions remain unchanged;
- 2) Show the result of first channel by default;

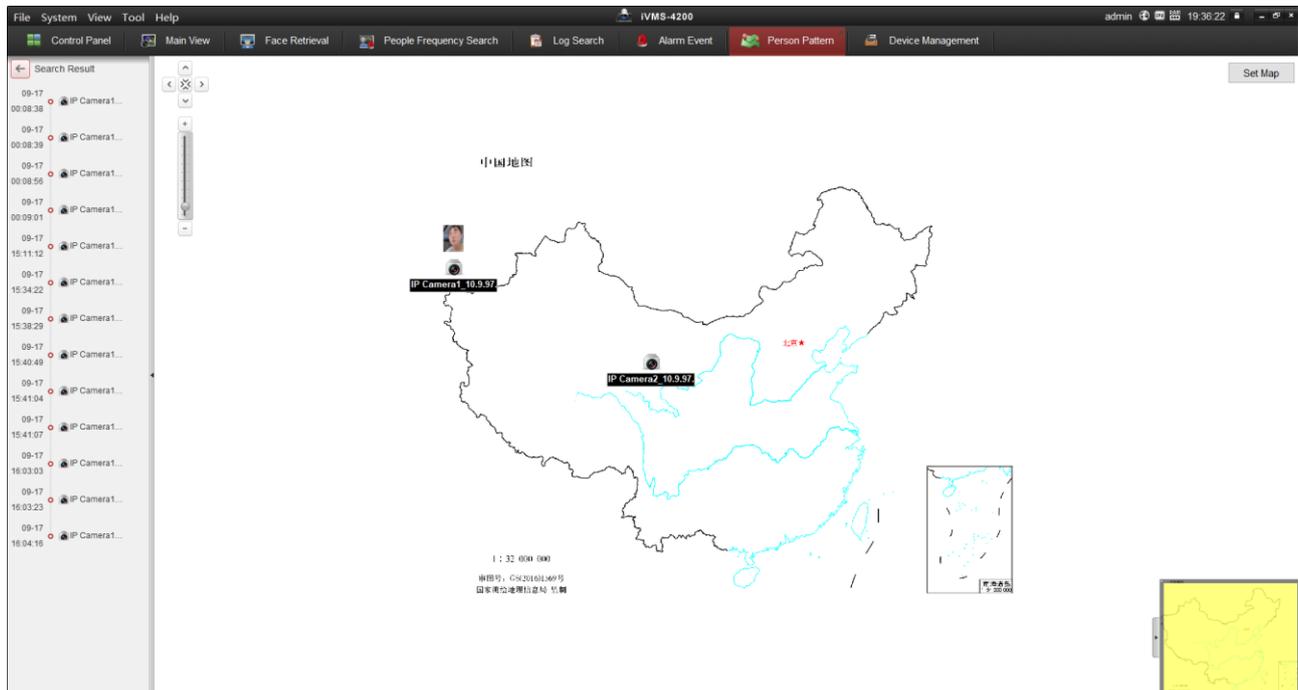
3) Show 12 results each page;

4) Supports switching channels, full selection, adding to face database, adding to sample database, and backup operation.

12. [WEB] Optimize alarm display;



13. [4200] Support person pattern;



**Related product list:**

2 <sup>nd</sup> generation of DeepinMind NVR	iDS-9600NXI-I8/X(B)
	iDS-9600NXI-I16/X(B)
	iDS-9600NXI-I8/8F(B)
	iDS-9600NXI-I16/8F(B)
	iDS-9600NXI-I8/16S(B)
	iDS-9600NXI-I16/16S(B)
	iDS-7700NXI-I4/16S(B)
	iDS-7700NXI-I4/16P/16S(B)
	iDS-7700NXI-I4/X(B)
	iDS-7700NXI-I4/16P/X(B)
	iDS-6716NXI-I/16S(B)
	iDS-6708NXI-I/8F(B)
	iDS-96064NXI-I16(B)
iDS-96128NXI-I16(B)	
iDS-96128NXI-I24(B)	

## **Customer Impact and Recommended Action**

This new firmware upgrade is to improve product performance, and will take effect automatically after upgrading from previous versions. We'd like to inform you the above changes. Also, we are sorry for any possible inconvenience of use-habit changes caused by this action.

For questions or concerns, please contact our local technical support team.

### Note:

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