



IVSS
V2.002.0000000.0
Release Note

ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.

Legal Information

Copyright

© 2018 ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD. All rights reserved.

This document cannot be copied, transferred, distributed, or saved in any form without the prior written permission of Zhejiang Dahua Vision Technology Co., LTD (hereinafter referred to be "Dahua").

The products described in this document may contain the software that belongs to Dahua or the third party. Without the prior written approval of the corresponding party, any person cannot (including but not limited to) copy, distribute, amend, abstract, reverse compile, decode, reverse engineer, rent, transfer, sublicense the software.

Trademarks

   , and  are the trademarks or registered trademarks of Dahua.

All other company names and trademarks mentioned herein are the properties of their respective owners.

Disclaimer

- This release note is for reference only, and the actual product shall prevail.
- Succeeding products and release notes are subject to change without notice.
- If there is any uncertainty or controversy, please refer to our final explanation.

Table of Contents

Legal Information	I
Release Note	1
1.1 Overview	1
1.2 Product Introduction.....	1
1.3 New Features.....	1
1.3.1 Face Database Management of FR Cameras, Bin Import and Export of Local Face Database.....	1
1.3.2 Passerby Database	6
1.3.3 IVS Models: General and Advanced	10
1.3.4 People Counting	10
1.3.5 Extracting Eigenvector Again.....	12
1.4 Fixed Bugs	13
1.5 Compatibility.....	13
1.6 Software Environment.....	13
1.7 Pending Issues.....	21
1.8 Upgrade Guide.....	22

Release Note

1.1 Overview

Item	Description
Product name	Intelligent video surveillance server
Version No.	V2.002.0000000.0.R
Software package information	DH_IVSS7XX_Eng_V2.002.0000000.0.R.201106.bin
OS requirement	None
Release date	November 13, 2020

1.2 Product Introduction

As an intelligent video surveillance server (hereinafter referred to as IVSS or the Device), IVSS delivers not only the basic video surveillance functions, but also a bunch of advanced AI features including face recognition, perimeter protection, video metadata and ANPR, providing AI-based all-in-one surveillance solution for customers.

- General functions: Video surveillance, video storage, alarm, record search and playback, intelligent analysis features.
- User-friendly interface.
- 4K and H.265 decoding.
- Applicable to scenarios such as intelligent building, large parking lot, safe city project, financial planning area and more.

1.3 New Features

1.3.1 Face Database Management of FR Cameras, Bin Import and Export of Local Face Database

Configuring Remote Face Database

The Device can get face databases from the remote devices, and also allows creating face databases for remote devices. The remote device face database is suitable for face recognition AI by Camera.



You cannot view face image information on the remote devices from the Device.

Creating Face Database for Remote Devices

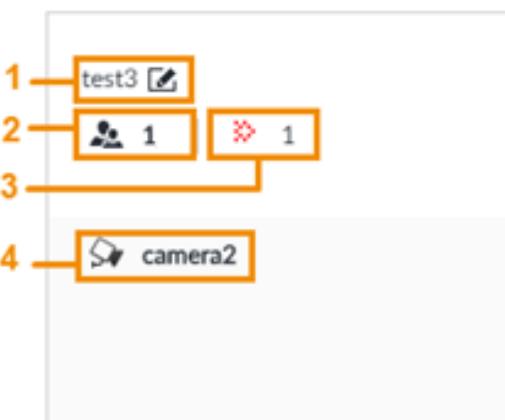
Procedure

- Step 1** On the **LIVE** interface, click , and then select **FILE > Face Management > Face Database > Remote**.
- Step 2** Select a remote device from the **Remote Device** drop-down list.
- Step 3** Click **Create**.
- Step 4** Enter **Face database name**.
- Step 5** Click **Register Face** or **Save and close**.
 - To add faces into the database, click **Register Face**.
 - To save and exit, click **Save and close**.

Related Operations

- View face database details and status,

Figure 6-33 Face database



- ◊ 1: Face database name. To modify, click .
- ◊ 2: Number of face images in the face database.
- ◊ 3: Number of face images that failed to abstract. For details about face abstracting, see "6.3.3.4 Human Face Abstract".
- ◊ 4: Face recognition devices associated to this face database.
- To manage face images, double-click the face database.
- To arm the face database, see "6.3.5 Configuring Face Recognition".
- To delete face databases,
 - ◊ One by one: click .
 - ◊ In batches: Hover over the face database, and then select the database by clicking .
 - After selecting multiple databases, click .
 - ◊ Delete all: Select **All**, and then click .

- To clear a face database, select the face database, and then click **Clear**.

Adding Face Images for Remote Devices

Add face images to the remote face databases manually or in batches.



- If you are using the local interface, put face images in the USB disk, and then connect the USB disk to the Device.
- If you are using the web interface or PCAPP, put face images into the PC you are using.

Manual Add

You can add human face image one by one. If the registered human face image quantity is small, you can use manual add mode.

Step 1 On the **LIVE** interface, click **+**, and then select **FILE > Face Management > Face Database > Remote**.

Step 2 Double-click face database.

Step 3 Click **Manual Add**.

Figure 6-34 Face register

Step 4 Click and select face image.

The **Confirm Choice** interface is displayed.



- When the uploaded image is half-length photo or full-body photo, the system automatically selects the frame of the uploaded image and only the face area will be retained.
- When there are multiple faces in the uploaded images, the system automatically identifies the faces in the images and uploads multiple face images according to the number of faces recognized. See Figure 6-29. Select face image you want to upload. Blue frame means that it is selected.
- Click **Cancel** to cancel all checked face images.

Step 5 Click **OK** and import face image.



Move the pointer to the face image and click **Change Picture** to change it.

Step 6 Fill in face image information.

Step 7 Click **Save and continue** or **OK**.

- Click **Save and Continue to add** to save current face image information and add another human face image.
- Click **OK** to save current face image information and complete registration.

After adding the image, at the lower-left corner of the human face image, there is an icon . It means device that face abstracting in process. See "6.3.3.5 Managing Face Pictures" for detailed information.

Batch Import

Before the batch import, name the face image according to the following rule:

"Name#SGender#BBirthday#NNation#PProvince#TIDtype#MIDnumber#AAddress.jpg"

(such as "Tim#S1#B20000101#NCN#PZheJiang#T1#M0000#AAddress").

Name the face image according to the rule. After successful import, the system will identify the face image automatically. For details about naming rule.



Name is required and the rest are optional. For example, if you want to enter the name and ID number only, the naming can be Tim#S#B#N#P#T#M0000#A.jpg or Time#M0000.jpg.

Table 6-5 Naming rules for batch import

Item	Description
Name	Enter the corresponding name.
Gender	Enter number. 1: Male; 2: Female.
Birthday	Enter number in the format of yyyyymmdd or yyyy-mm-dd. For example, 20181123.

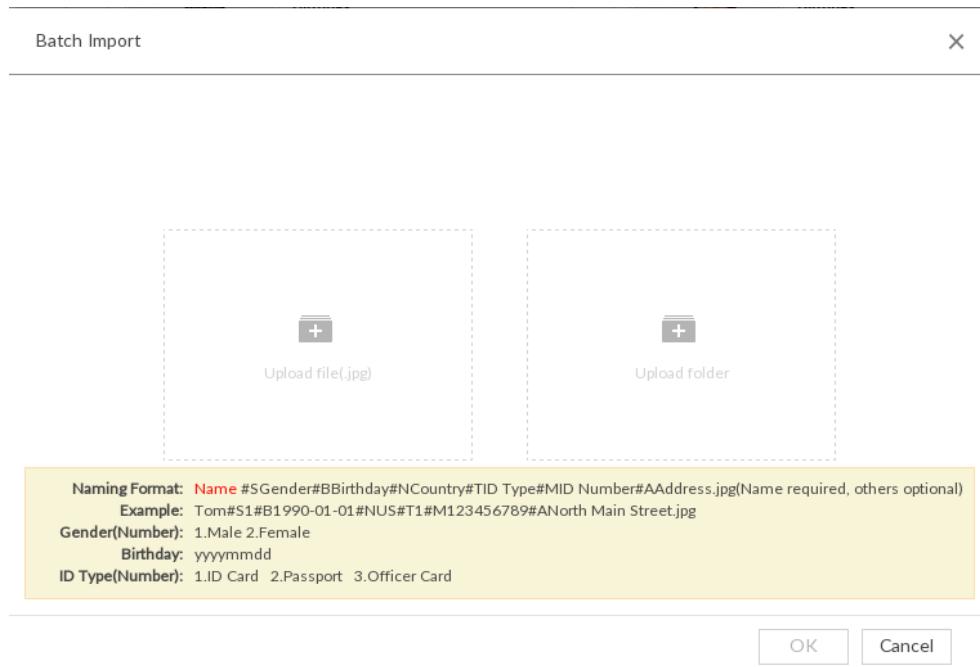
Item	Description
Region	Enter the corresponding abbreviation of the region.
Province	Enter the corresponding spelling or English name of the province.
ID type	Enter the corresponding number. 1. ID card, 2. Passport, 3. Officer Card.
ID number	Fill in the corresponding ID number.
Address	Enter the detailed address.

Step 1 On the **LIVE** interface, click +, and then select **FILE > Face Management > Face Database > Remote**.

Step 2 Double-click face database.

Step 3 Click **Batch Import**.

Figure 6-35 Batch import



Step 4 Import face image.

The system supports uploading file or folder. Select according to your actual need.

- Upload a file: Click , select multiple face images, and then click **Open**.



You can select multiple face images by holding Shift and then clicking the first and the last face images, or holding Ctrl and then click the images one by one.

- Upload a folder: Click , select the folder with face images, and then click **Upload**.

Step 5 Click **OK**.

Step 6 Click **Continue to add or OK**.

- Click **Continue to add** to add more images.
- Click **OK** to complete adding images. Face database interface is displayed, and you can see the added images.

After adding the image, at the lower-left corner of the face image, the icon  appears, which indicates that face information is being processed.

1.3.2 Passerby Database

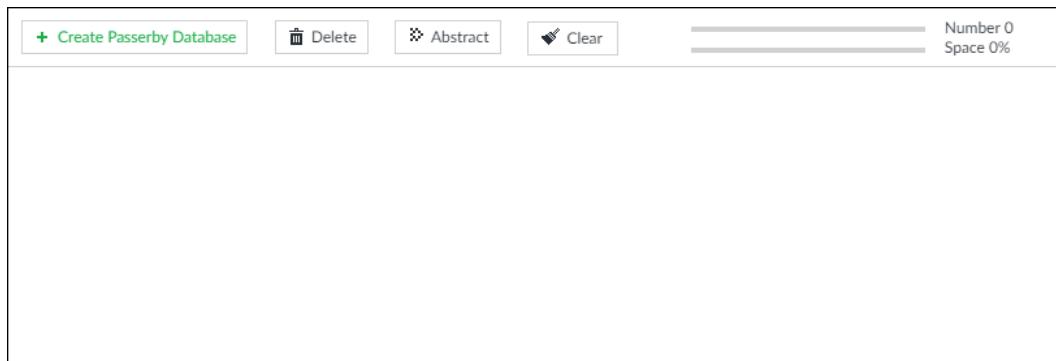
Creating Passerby Database

If you configure an alarm to link passerby database, when the detected face is not in the face database, system automatically captures the face image, and then save it to the passerby database.

Step 1 On the **LIVE** interface, click , and then select **FILE > Face Management > Face Database > PasserBy Database**.

Step 2 Click **Create Passerby Database**.

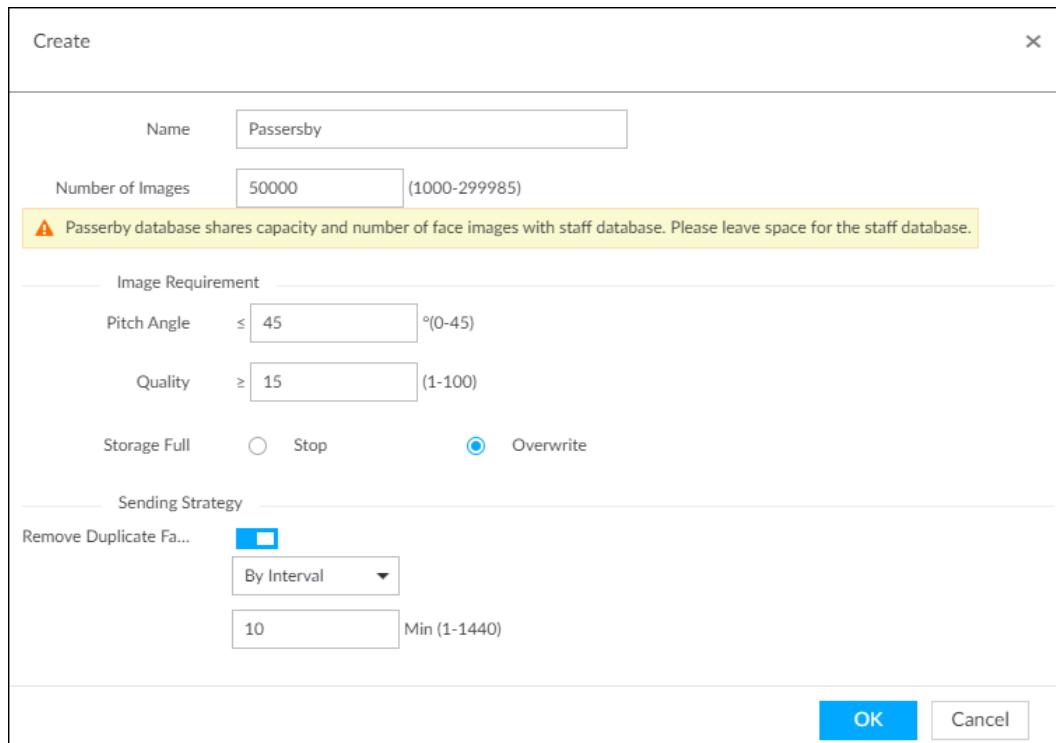
Figure 6-26 Passerby database



- Number: The proportion of the number of added face images in the face databases and passerby databases to the allowed face images in total.
- Space: The proportion of the space occupied by the face databases and passerby databases to the allowed space in total.

Step 3 Enter the passerby database information as required, and then click **OK**.

Figure 6-27 Create a passerby database



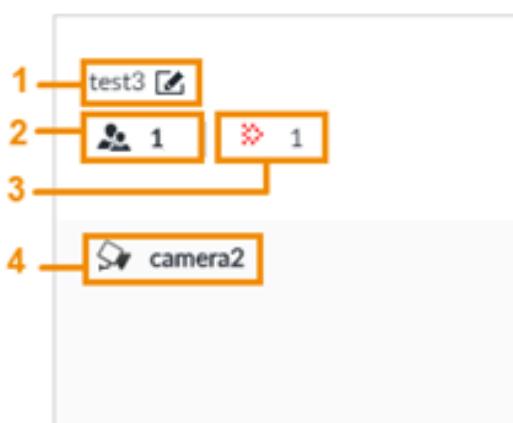
- Name: Name the database.
- Number of Images: The range of the number of face images in the database.
 - ◊ Maximum: = Total number of face images of the device - the face image number of the current face databases - the face image number of the current passerby databases.
 - ◊ Minimum:
 1. If the total face images in the current face databases are fewer than 1,000, the minimum number here is 1,000.
 2. If the total face images in the current face databases are more than 1,000, the minimum number here is the total number of the current face images.
- Pitch Angle: Pitch angle of the face image. The allowed pitch angle is 0 to 45 degree. The smaller the pitch angle, the more accurate the face image.
- Quality: Only face images within the allowed quality range (1 to 100) can be added.
- Storage Full: The storage strategy when space is full.
 1. Stop: No more images can be added.
 2. Overwrite: The newest images overwrite the oldest images. Back up the old images as necessary.
- Remove Duplicate Face Images: When the captured face image is found in the passerby database, and the quality is higher than that of the one in the database, the system replaces the face image in the database.

1. Always: Always remove duplicate face images. A successful comparison of the captured image against the database will not be reported.
2. By Interval: Remove duplicate face images by interval to control comparison pressure.
3. By Duration: Within the defined time period, if a captured face image is found in the passerby database, the system replaces the image in the database with the new one. Otherwise, the system does not compare the captured face image against the passerby database, but enroll it directly.

Related Operations

- View face database details and status,

Figure 6-28 Face database



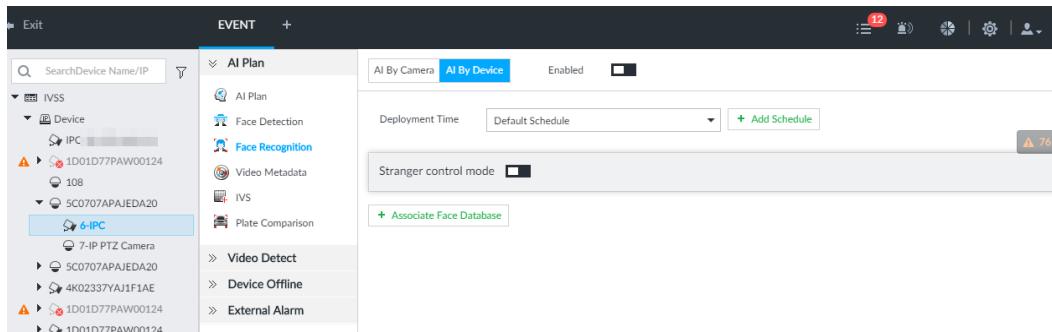
- ◊ 1: Face database name. To modify, click .
- ◊ 2: Number of face images in the face database.
- ◊ 3: Number of face images that failed to abstract. For details about face abstracting, see "6.3.3.4 Human Face Abstract".
- ◊ 4: Face recognition devices associated to this face database.
- To manage face images, double-click the face database.
- To arm the face database, see "6.3.5 Configuring Face Recognition".
- To delete face databases,
 - ◊ One by one: click .
 - ◊ In batches: Hover over the face database, and then select the database by clicking .
 - After selecting multiple databases, click .
 - ◊ Delete all: Select **All**, and then click .
- To clear a face database, select the face database, and then click **Clear**.

Arming Passerby Database

To use AI by Device, enable face detection first.

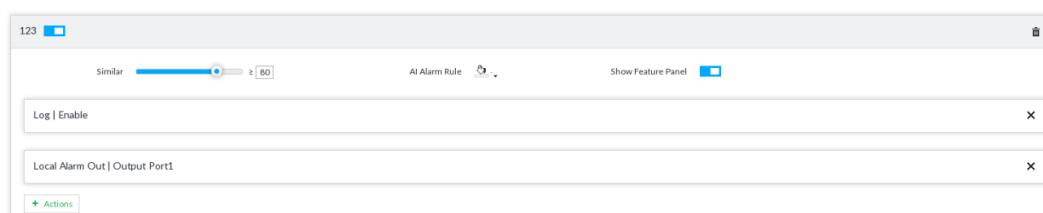
- Step 1 Click  or click  on the configuration interface, and then select **EVENT**.
- Step 2 Select remote device in the device tree on the left.
- Step 3 Select **AI Plan > Face Recognition**.

Figure 6-37 Face recognition (AI by Device)



- Step 4 Click **AI by Device**, and then click .
- Step 5 Click **Deployment Time** to select schedule from the drop-down list.
After setting arm period, system triggers actions when there is a motion detection alarm in the specified period.
- Step 6 Set linked face database.
 - 1) Click **Associate Face database**, and then select the triggered human face database.

Figure 6-39 Face database configuration



- 2) Set parameters.

Table 6-7 Configuration description

Parameters	Description
Similar	It is to set human face similarity. System compares the human face with the image on the face database. System triggers an alarm once the similarity reaches the threshold you set here.
AI alarm rule	Click  to set alarm rule box color.
Show feature panel	Click  to enable features panel function. System displays features panel once there is an alarm.

- 3) Click **Actions** to set alarm actions.
- Step 8 Click **Save**.

1.3.3 IVS Models: General and Advanced

The advanced model additionally supports crowd gathering, parking detection and loitering.

Switching IVS Model

This function is only effective to AI by Device.

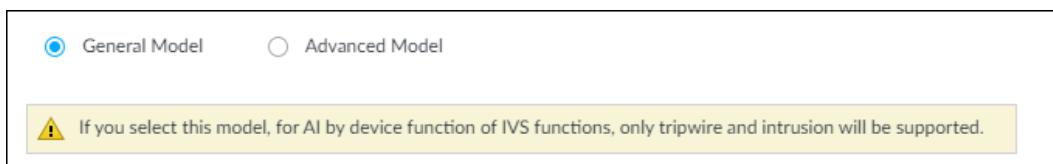
Step 1 Click , or click  on the configuration interface, and then select **EVENT**.

Step 2 Select the root node in the device tree on the left.

Step 3 Select **AI Plan > Switch IVS Model**.

Step 4 Select a model as you need.

Figure 6-70 Switch IVS model



- General Model: Includes only Tripwire and Intrusion.
- Advanced Model: Includes Tripwire, Intrusion, People Gathering, Parking Detection, and Loitering.



- The Advanced Model includes more detections but supports fewer channels.
- You need to configure IVS AI-by-Device event again after switching IVS model.

Step 5 Click **Save**.

1.3.4 People Counting

Configuring People Counting

The system counts the number of people in and out of the detection area. When the number of entry, exit or stay is larger or smaller than the threshold, an alarm is triggered.

Step 1 Click , click , and then select **EVENT**.

Step 2 Select a camera in the device tree, and then select **AI Plan > People Counting > People Counting**.

Step 3 Click **Add Rule**, select **People Counting**, and then click  to enable the function.

Step 4 Draw a people counting area.

- Click  to draw the detection area.
- Click  to draw the detection line.
- Click  to set the whole image as the detection area.

Step 5 Set parameters.

Figure 6-46 People counting

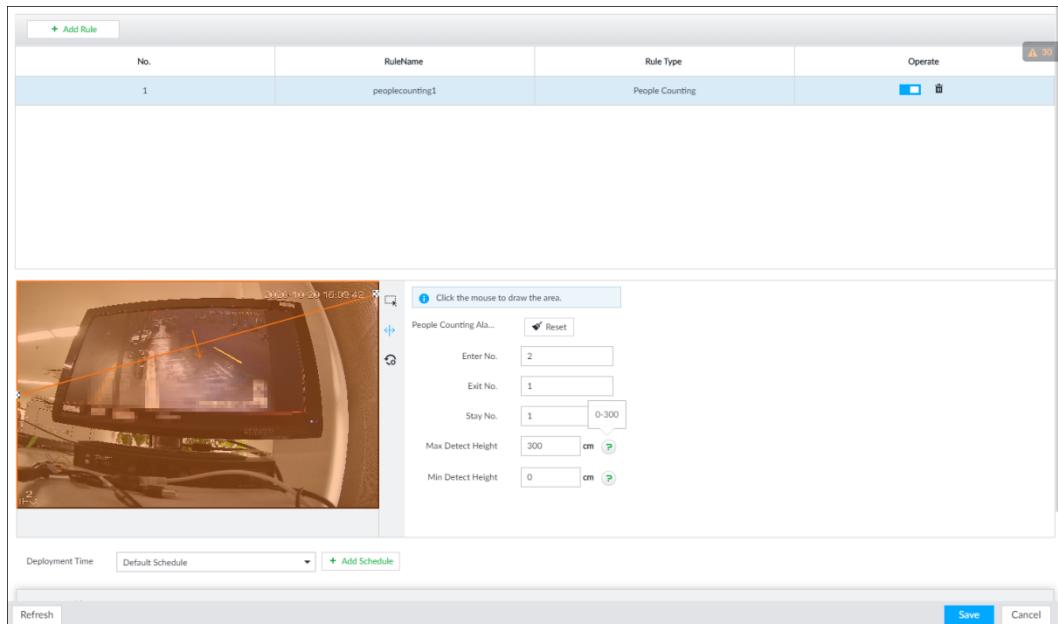


Table 6-9 Parameter description of people counting

Parameters	Description
People Counting Alarm	Click Reset to reset the numbers of entry and exit.
Enter No.	Number of people that entered.
Exit No.	Number of people that exited.
Stay No.	The number of stay is the result of entry number minus exit number. Alarm is triggered when the stay number reaches the threshold.
Max Detect Height	0–300
Min Detect Height	0–300

Step 6 Select a schedule in the **Deployment Time** drop-down list.

Alarms are triggered only within the scheduled time.

Step 7 Click **Actions** to set alarm linkage actions.

Step 8 Click **Save**.

Viewing AI Report

On the **LIVE** interface, click +, select **AI REPORT** and then you can view in-area people counting report and queue people counting report.



When viewing the report of a camera, make sure that people counting rules have been configured on it. For details, see "6.4.2 Configuring People Counting".

Step 1 Click , and then select **AI REPORT > AI REPORT > People Counting Report**.

Step 2 Select a device to be searched. You can only select AI fisheye camera.

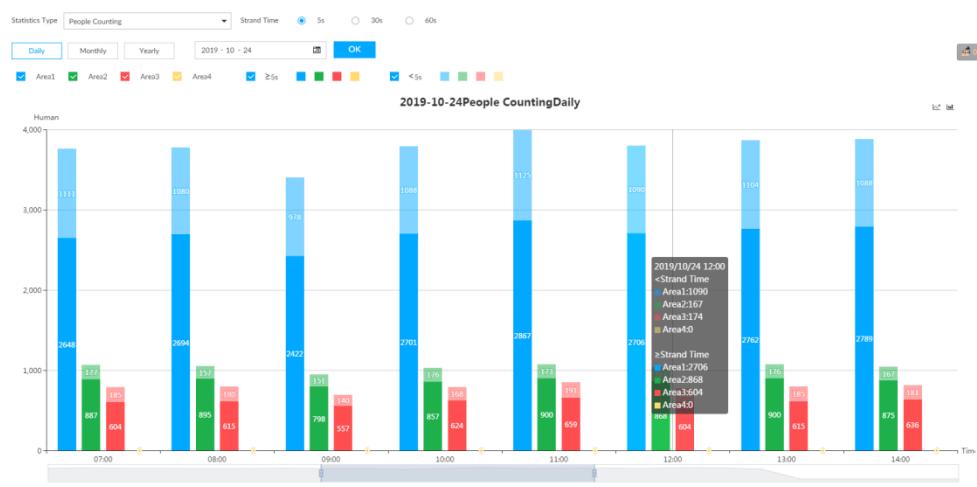
Step 3 Select a statistics type.

- People counting: Select **People Counting**, and then select the strand time (5 s, 30 s, 60 s).
- Average strand time: The report shows the average strand time during different time periods.

Step 4 Select a time period type from **Daily**, **Monthly**, and **Yearly**, and then set the corresponding date, month or year.

Step 5 Click **OK**.

Figure 9-8 People counting report



1.3.5 Extracting Eigenvector Again

Re-extract Eigenvector of images with unmatched versions, to improve AI analysis accuracy.



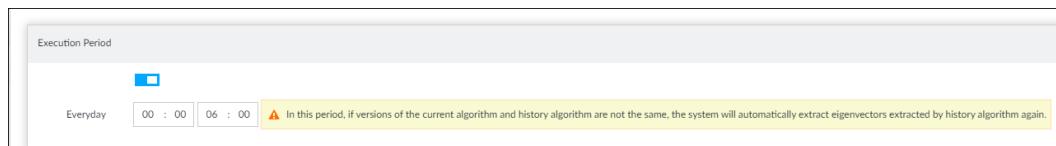
The Extract Eigenvector Again function is triggered automatically after Eigenvector model is updated. The system re-extracts hot data first after the model version update. The hot data includes history capture data such as all the face databases and passerby databases.

Step 1 Log in to PCAPP.

Step 2 On the **LIVE** interface, click **+**, and then select **TASK > Extract Eigenvector Again**.

Step 3 Click **■** to enable the function.

Figure 9-6 Extract Eigenvector Again



Step 4 Specify the start time and end time of the day.

- The system automatically creates tasks to re-extract Eigenvector of history images with unmatched model versions during the period.
- During the re-extraction period, the AI functions are not available.

1.4 Fixed Bugs

None

1.5 Compatibility

The current version V2.002.000000.R is backward compatible with V2.001.000000.R.

1.6 Software Environment

Model	Version
DSS PRO	2.7.01.02.01671 General_DSS-PRO_Win64_IS_V7.002.0000005.1.R.2020 0703.exe
Smart PSS	2.7.05.01.00828 DH_SMARTPSS-Win64_ChnEng_IS_V2.003.0000002.0. R.200513
DSS C9100	2.7.01.01.00894 General_DSSC9100_MultiLang_V3.006.0000000.1.R.200 730.tar.gz 2.7.01.01.00892 General_DSSC9100_MultiLang_Phoenix_V3.006.000000 0.1.R.200730.tar.gz 2.7.01.01.00896 General_DSSC9100_System_V3.006.0000000.1.R.20073 0.tar.gz
C9100+DSS C9505	2.7.01.03.08280 General_DSSC9505_FaceSaas_V3.006.0000000.0.R.20 0703.tar.gz
C9100+DSS C9200	2.7.01.03.09109 General_DSSC9200_VideoExSaaS_V3.006.0000000.2.R .200707.tar.gz
ICC	2.7.01.08.05520 General_ICC-Common-Face_Basic_Chn_IS_V1.000.000 0001.2.R.20200819.tar.gz
DMSS	V1.60.0000
DH-IPC-EBW81230P DH-IPC-EBW81230N	2.6.01.05.17336 DH_IPC-HX8XXX-Nova2_EngSpnFrn_NP_Stream3_V2.6 22.0000000.9.R.191210.zip

DH-IPC-EBW81242P DH-IPC-EBW81242N	2.6.01.05.16153 DH_IPC-EBW8XXXX-Fafnir_MultiLang_NP_Stream3_V2.800.0000000.0.R.191106.zip
DH-IPC-EW5541N-AS	2.6.01.05.26981 DH_IPC-EX5XXX-Leo_MultiLang_NP_Stream3_V2.800.000000.15.R.200922.zip
DH-IPC-PDBW5831P-B360-E4-2 712	2.6.01.05.18030 DH_IPC-HX8(5)XXX-Sag_EngSpnFrn_PN_V2.800.000000.5.R.200107.zip
DH-IPC-HFW5241TP-AS-PV-036 0B	2.6.01.05.24482 DH_IPC-HX5XXX-Volt_MultiLang_PN_Stream3_V2.800.000000.19.R.200709.zip
DH-IPC-HFW5241EP-ZE-27135	2.6.01.05.26353 DH_IPC-HX5XXX-Volt_MultiLang_PN_Stream3_V2.800.000000.20.R.200903.zip
DH-IPC-HF7442FP-FR	2.6.01.05.21691 DH_IPC-HX8XXX-Nobel_MultiLang_PN_V2.800.0000000.5.R.200525.zip
DH-IPC-HFS7842P-Z-5G-LED-08 56	2.6.01.05.24498 DH_IPC-HX8XXX-5G-Nobel_MultiLang_PN_V2.800.000000.7.R.200718.zip
DH-IPC-PFW83242N-A180-E4	2.6.01.05.27624 DH_IPC-PFW832XX-Fafnir_MultiLang_NP_Stream3_V2.800.0000000.2.R.200927.zip
DH-IPC-HFW3441EP-AS-0360B	2.6.01.05.23055 DH_IPC-HX5(4)(3)XXX-Leo_MultiLang_PN_Stream3_V2.800.0000000.14.R.200612.zip
DH-PSDW81642M-A360-D440 DH-PSDW8842M-A180-D440	2.6.01.05.26094 DH_IPC-PSDW8XXXL-Fafnir_EngSpnFrn_PN_Stream3_V2.800.0000000.3.R.200828.zip 2.6.01.05.26094 DH_IPC-PSDW8XXXL-Fafnir_EngSpnFrn_PN_Stream3_V2.800.0000000.3.R.200828.zip
DH-IPC-HDW8341XN-BV-3D-028 0B	2.6.01.05.28259 DH_IPC-HX8XXX-Dual-Lens-Nobel_MultiLang_NP_V2.800.0000000.12.R.201022.zip
DH-PSDW82442M-H-A270-E7-D 440-DC36V	2.6.01.05.26089 DH_IPC-PSDW824XL-Fafnir_MultiLang_PN_Stream3_V2.800.0000000.2.R.200828.zip

IPC-HDW8341XN-3D-0280B-S2	2.6.01.05.28259 DH_IPC-HX8XXX-Dual-Lens-Nobel_MultiLang_NP_V2.80 0.0000000.12.R.201022.zip
DH-SD49225XA-HNR	2.6.01.05.23292 DH_SD-Prometheus_MultiLang_PN_Stream3_V2.810.00 00001.3.R.200608.bin
DH-SD8A840WA-HNF	2.6.01.05.25344 DH_SD-Fafnir_MultiLang_PN_Stream3-NormalV2_V2.810 .0000014.0.R.200803.zip
DH-SDT5X425-4Z4-WA-2812	2.6.01.05.25590 DH_SD-Fafnir_MultiLang_PN_Stream3-LingxiV2_V2.810.0 000014.1.R.200819.bin
DH-TPC-BF1241	2.6.01.05.27812 DH_TPC-BF1241-TB_MultiLang_NP_V2.630.0000000.0.R. 201013.zip
DH-TPC-BF2221-T	2.6.01.05.14880 DH_TPC-BF2221-TB_MultiLang_NP_V2.630.0000000.5.R. 190917.zip
DH-TPC-PT8421A	2.6.01.05.24525 General_TPC-PT8X21A-TB_MultiLang_PN_V2.630.000000 0.3.R.200721.zip
DH-TPC-PT8421A-T	2.6.01.05.24525 General_TPC-PT8X21A-TB_MultiLang_PN_V2.630.000000 0.3.R.200721.zip

DH-TPC-PT8421B	2.6.01.05.11060 General_TPC-PT8X21B-B_EngItlSpnFrn_PN_V2.630.00000 00.1.R.190719.zip
DHI_ITC237_PW6M_IR_LZF1050	2.6.01.08.05467 General_ITC237-PW6M-IRLZF(LZF)_Eng_PN_Oversea_ITC PUSH_Europe_V2.623.0000000.1.R.200407.zip
DHI_ITC215_PW6M_IR_LZF	2.6.01.08.06523 General_ITC21X-PW5H-XXX_Chn_PN_GAYSITCPUSH_Mai nland_V2.625.0000000.0.R.200713.zip
ITC952_AU3F_IRL	2.6.01.08.05590 General_ITCX52-AF3F_Eng_P_Oversea_V2.822.0000000.0. R.200414.zip
DHI_ITC431_RW1F_IR_L	2.6.01.08.06801 General_ITCXX1-RW1F-IRL8(L)_Eng_N_Oversea_V2.822.0 000000.0.R.200729.zip

	2.6.01.18.06089 DH_VTO75X95X_Eng_PN_SIP_V4.300.0000000.0.R.20101 0.zip 2.6.01.18.04221 DHI-VTO7541G DH_VTO65XXX_Eng_PN_V4.300.0000000.6.R.20200402.zip DHI-VTO6541H DH_VTO65XXX_Eng_PN_V4.300.0000000.6.R.20200402.zip DHI-VTO6521F DH_VTO65XXX_Eng_PN_V4.300.0000000.6.R.20200402.zip DHI-VTO6521H DH_VTO65XXX_Eng_PN_V4.300.0000000.6.R.20200402.zip 2.6.01.18.04221 DH_VTO65XXX_Eng_PN_V4.300.0000000.6.R.20200402.zip
DHI-VTO2202F-P (主测) (IVSS 市场需求) DHI-VTO2111D-P-S2(IVSS 市场需求)	2.6.01.18.03844 General_VTO2202F_MultiLang_PN_SIP_V4.410.0000000.4 .R.20200221.zip 2.6.01.18.04130 DH_VTOXXXXD-G_MultiLang_PN_SIP_V4.400.0000000.9. R.20200326.zip

	2.6.01.18.05714 DH_ASI72XX-V3_Eng_NP_V1.000.0000005.2.R.200831.zip
DHI-ASI7213Y-V3-T1DHI-ASI721	2.6.01.18.05714 DH_ASI72XX-V3_Eng_NP_V1.000.0000005.2.R.200831.zip
3Y-V3-T0DHI-ASI7213X-T1	2.6.01.18.05912 DH_ASIX2XXX_Eng_NP_V2.000.0000000.0.R.200918.zip
	2.6.01.18.05714 DH_ASI72XX_V3_Eng_NP_V1.000.0000005.2.R.200831.zip
	2.6.01.18.05984
DHI-ASI7213Y-V3	DH_ASIX2XXX_Eng_NP_V2.000.0000000.0.R.201010.zip
DHI-ASI7213X	2.6.01.18.05222
DHI-ASI6214J-MFWDHI-ASI3213	DH_ASIX2XXJ_MultiLang_NP_V2.000.0000000.4.R.20072
G-MW	1.zip 2.6.01.18.05214 DH_AXS32XXG_MultiLang_NP_V2.000.0000001.1.R.200721.zip

	2.6.01.09.00598 General_VideoNexus-NVD0405DH-2I-4K_Eng_BURN_V3. 201.0000000.0.R.191127.zip
DHI-NVD0405DH-2I-4K	2.6.01.09.00596
OEM-NVD0405DH-2I-4K	General_VideoNexus-NVD0405DH-2I-4K_Chn_BURN_V3.
NVD0405DH-2I-4K	201.0000000.0.R.191127.zip 2.6.01.09.00598 General_VideoNexus-NVD0405DH-2I-4K_Eng_BURN_V3. 201.0000000.0.R.191127.zip

	2.6.01.11.00364 General_VideoNexus_Eng_NVD_SDA_V3.203.0000000.5. R.191021.BIN
	2.6.01.11.00143 General_VideoNexus_Eng_NVD_SDA_V3.201.0000000.5. R.190516.BIN
	2.6.01.11.00143 General_VideoNexus_Eng_NVD_SDA_V3.201.0000000.5. R.190516.BIN
	2.6.01.11.00143 General_VideoNexus_Eng_NVD_SDA_V3.201.0000000.5. R.190516.BIN
	2.6.01.11.00364 General_VideoNexus_Eng_NVD_SDA_V3.203.0000000.5. R.191021.BIN
	2.6.01.11.00143 General_VideoNexus_Eng_NVD_SDA_V3.201.0000000.5. R.190516.BIN
	2.6.01.11.00143 General_VideoNexus_Eng_NVD_SDA_V3.201.0000000.5. R.190516.BIN
	2.6.01.11.00143 General_VideoNexus_Eng_NVD_SDA_V3.201.0000000.5. R.190516.BIN
	2.6.01.11.00143 General_VideoNexus_Eng_NVD_SDA_V3.201.0000000.5. R.190516.BIN

DHI-LDH22-SAI200	2.6.01.01.03563 General_LDH(V)XX-SAI200_ChnEng_Android_V2.003.000 0000.7.R.191210.zip
DHI-NKB1000	2.6.01.09.00655 General_NKB1000_Eng_V3.621.0000000.0.R.200302.zip
DHI-NKB5000	2.6.01.09.00662 General_NKB5000_MultiLang_V3.212.0000001.0.R.20031 8.BIN
DHI-NKB5000-F	2.6.01.09.00662 General_NKB5000_MultiLang_V3.212.0000001.0.R.20031 8.BIN
ConfigTool	2.8.02.01.00366 General_ConfigTool_ChnEng_V4.011.0000003.6.R.202001 14.zip
SmartPlayer	2.8.02.01.00303 General_SmartPlayer-Win32_Eng_IS_V4.000.0000001.4.R. 191009.zip
DiskManager	2.8.02.01.00431 General_DiskManager-Win32_Eng_V1.000.0000003.2.R.2 00422.7z

1.7 Pending Issues

None

1.8 Upgrade Guide

- 1. You can upgrade the IVSS by ConfigTool, web and USB flash drive. For details, see Upgrade Guide.
- 2. Services such as recording and live view will be paused during the upgrade process. The IVSS works normally after upgrade and rebooting.
- 3. The upgrade does not affect previous settings of the IVSS.
- 4. Do not power off during the upgrade process, or the device will not boot up properly

Address: No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

Postcode: 310053

Tel: +86-571-87688883

Fax: +86-571-87688815

Email: overseas@dahuatech.com

Website: www.dahuasecurity.com