



**HIKVISION®**

Density Control Solution

# OVERVIEW

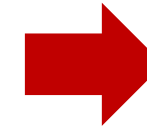
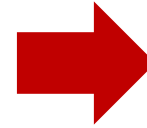
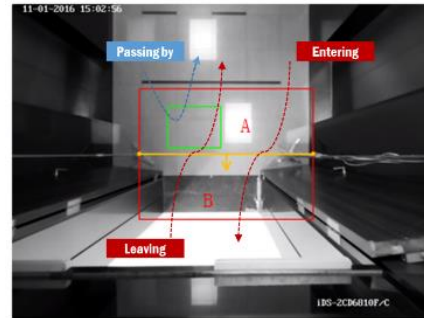
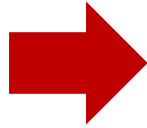
In the current unprecedented climate, in order to enable social distancing, it's imperative that buildings and facilities limit the number of people allowed inside. Many supermarkets, for instance, have a current maximum of 100 people let in at a time.

## Pain Points

- To help prevent the spread of coronavirus, public places are required to control the number of people in specific areas
- Incidents such as panic buying and subsequent lack of supplies can occur when supermarkets or other spaces are overcrowded



# SOLUTION BUSINESS FLOW



Camera Detects People Entering

Counted number +1

Warning information is displayed if the counted number reaches the configured maximum.

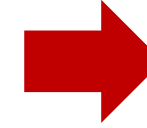
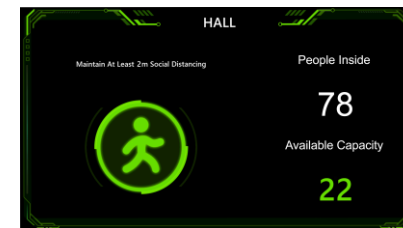
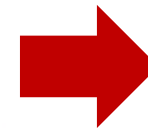
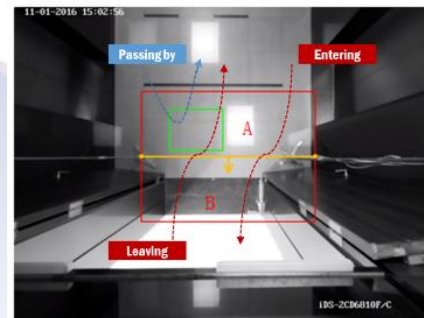
A pre-configured alarm can be triggered, warning against entry, or an alert sent to monitoring centre to prevent entry.

1

2

3

4



Camera Detects People Leaving

Counted number -1

The remaining capacity is updated and clearly displayed.

People can easily see from the display whether they can enter; there is no need for real-time supervision by a manager.

5

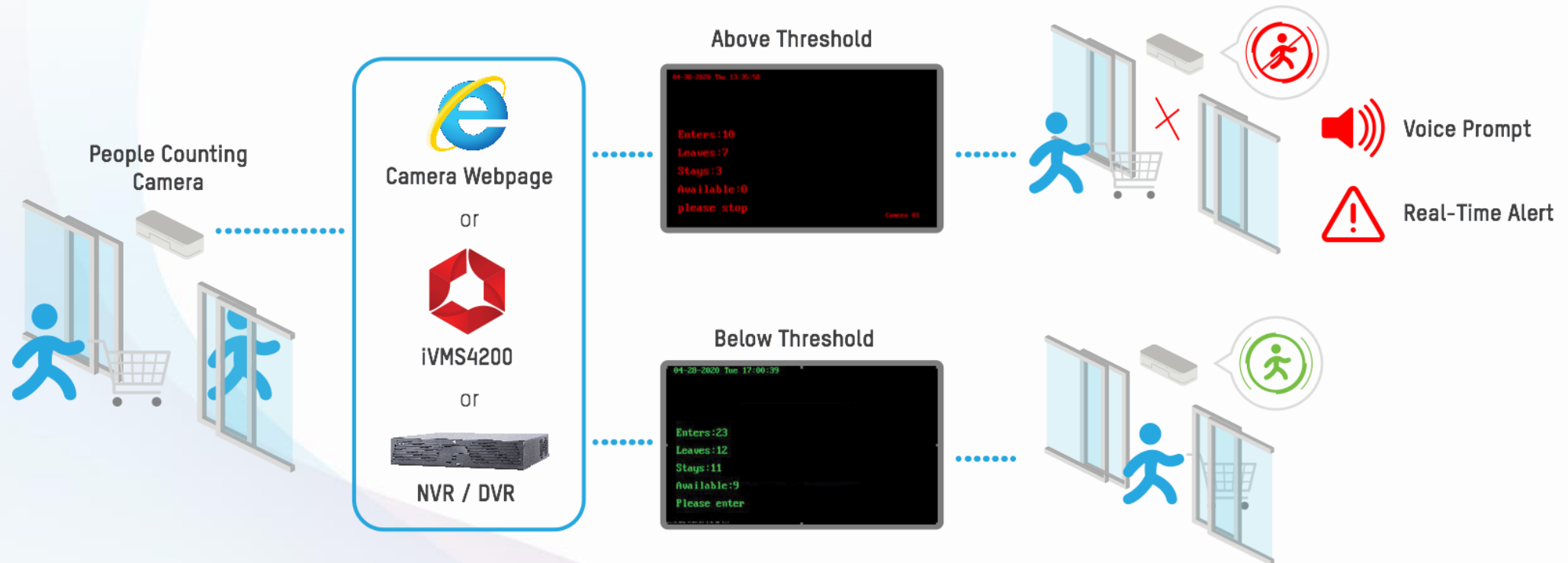
6

7

8

# SINGLE DOOR ECO SOLUTION

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## Deployment

1. Installing a people counting camera for a single door
2. Camera live view displays the real-time number of people in the area and triggers pre-configured alarms when that number exceeds the defined threshold.

## Highlight

- Cost effective
- Voice prompt from camera when threshold reached
- Only available on dual lens model DS-6825

# CONFIGURATION-SINGLE DOOR ECO SOLUTION

1. Go to camera webpage->VCA->Rule

**Rule** Reverse Counting Alarm

Enable People Counting

Enable Privacy

People Threshold

**Rule** Arming Schedule Linkage Method

Calibration Mode  Auto  Manual

IP Camera Parameters Lens Height: 301cm Tilt Angle: 90° Heel Angle: -3° Calibration

Make sure that the green calibration area is level ground before clicking the button.

No.	Region Name	Operation
1	Region1	Clear

05-25-2020 Mon 17:34:52

- Calibration Area
- Count Area
- Region
- Detection Line
- Region A—B

- Enable People Counting
- Define **the threshold** which is the maximum number of people available to enter
- Draw counting rules on the image
- Enable **“Privacy”** to black the image

# CONFIGURATION-SINGLE DOOR SOLUTION **HIKVISION**

## 2. Go to camera webpage->Configuration->Image

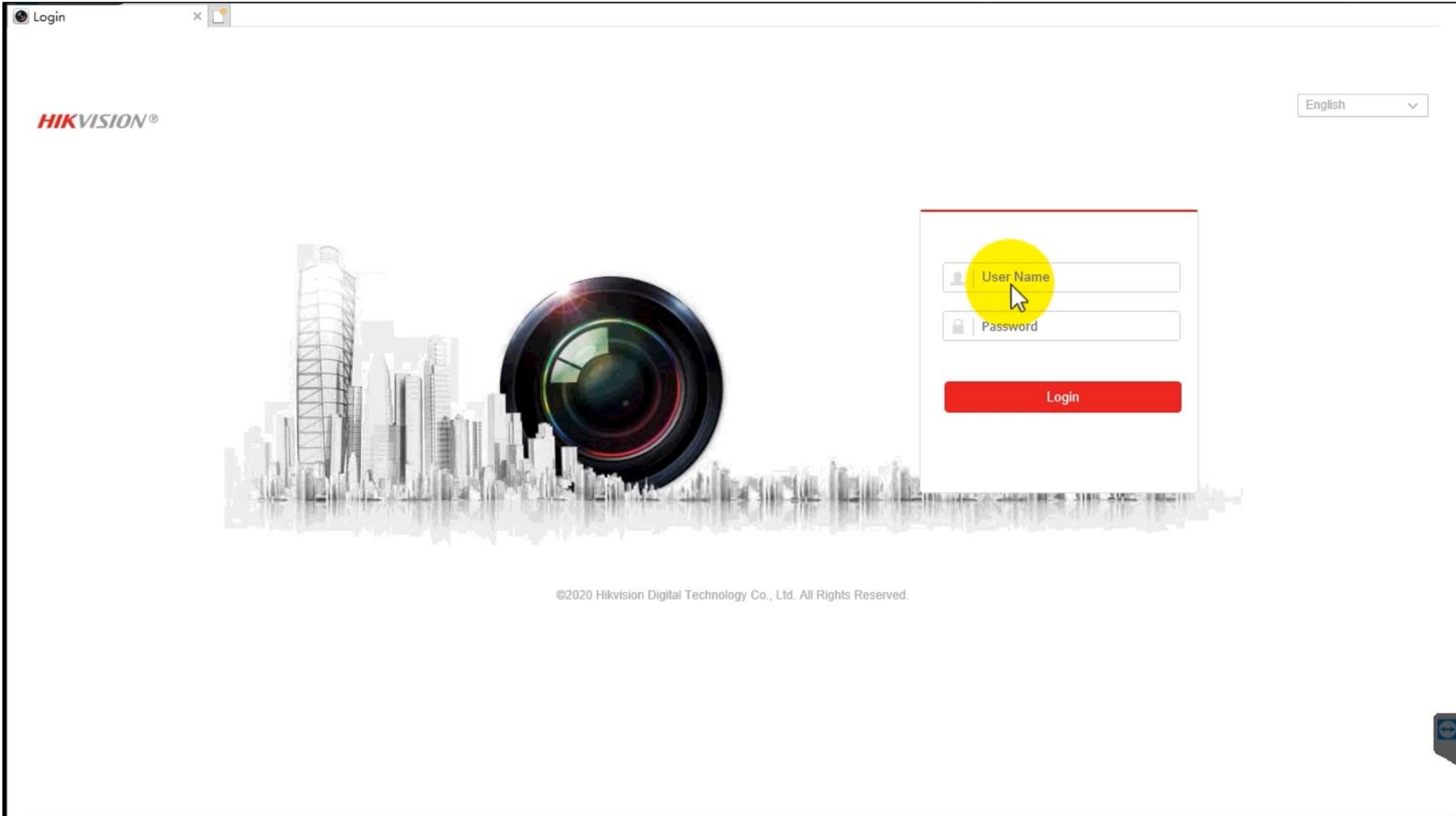
The screenshot displays the Hikvision VCA configuration interface. The top navigation bar includes 'Live View', 'Application', 'Configuration', and 'VCA'. The left sidebar lists 'VCA Resource', 'People Counting', 'Rule', 'Shield Region', 'Data Uploading', 'Overlay & Capture', and 'Advanced'. The main content area is titled 'Rule' and 'Reverse Counting Alarm'. It features checkboxes for 'Enable People Counting' and 'Enable Privacy', and a 'People Threshold' slider set to 1000. Below this are tabs for 'Rule', 'Arming Schedule', and 'Linkage Method'. The 'Calibration Mode' is set to 'Auto'. IP Camera Parameters are listed: Lens Height: 301cm, Tilt Angle: 90°, Heel Angle: -3°. A 'Calibration' button is present. A note states: 'Make sure that the green calibration area is level ground before clicking the button.' A table below shows the calibration area configuration:

No.	Region Name	Operation
1	Region1	Clear

At the bottom, a live video feed shows a room with a green calibration area and a red count area. A legend on the right identifies the elements: Calibration Area (green), Count Area (red), Region (blue), Detection Line (yellow), and Region A-B (purple). The video feed also displays the date and time: '05-25-2020 Mon 17:34:52'.

- Enable #1 and #2 under Text Overlay column.
- Input the caption in the #1 filed you want to show when the number of people inside is **below the threshold**.
- Input the caption in the #2 filed you want to show when the number of people inside **reaches or over the threshold**.

# CONFIGURATION-SINGLE DOOR SOLUTION



# SINGLE DOOR PRO SOLUTION

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## Deployment

1. Installing a people counting camera in a single door.
2. NVR information screen displays real-time number of people in the area, and triggers pre-configured alarms when the number exceeds the defined threshold.

## Highlight

- Single door fast deployment
- Real time data on information screen



# MULTI DOOR NVR SOLUTION

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## Deployment

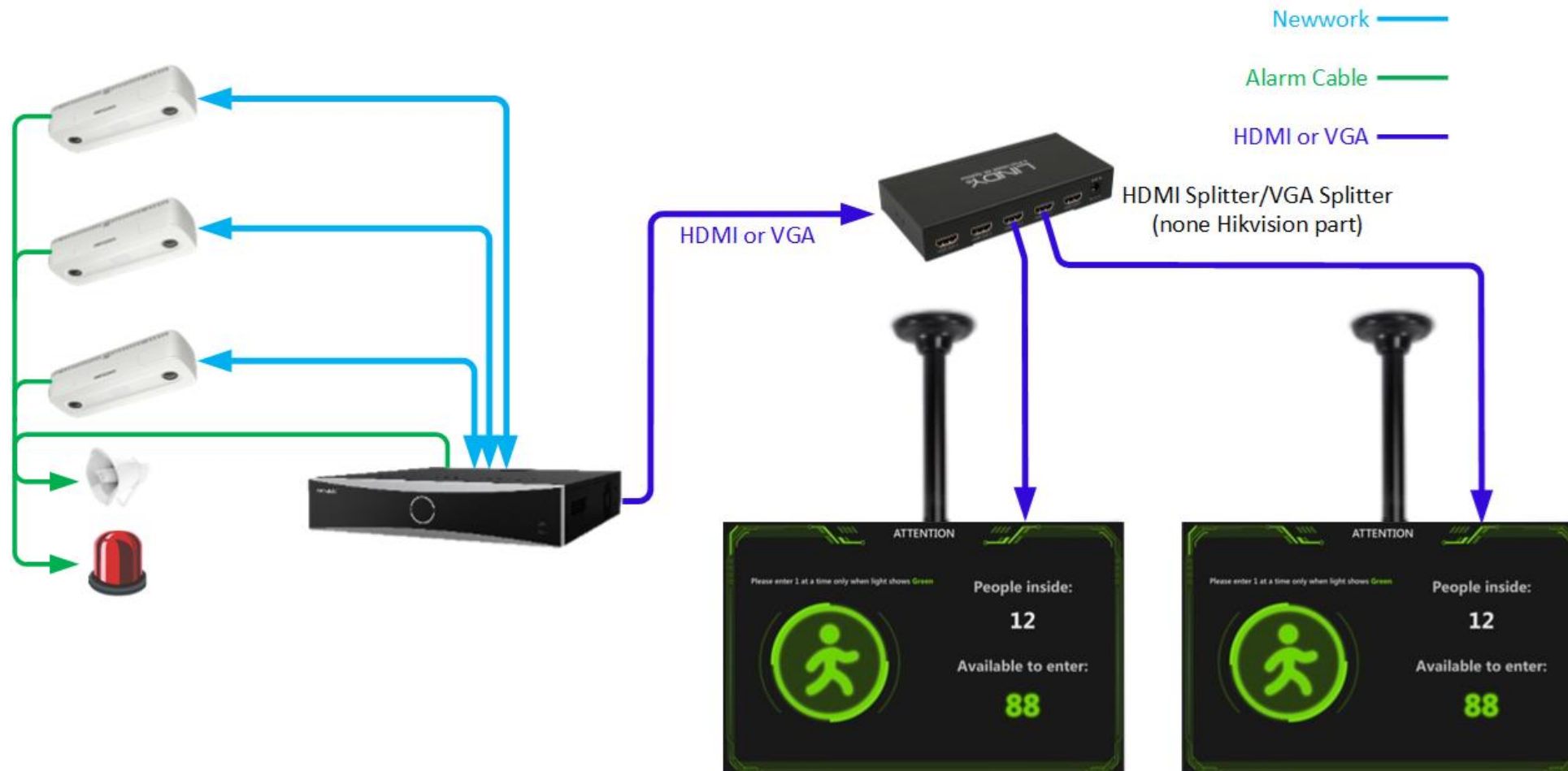
1. Install people counting cameras on all doors to count the number of people coming in and out.
2. NVR information screen displays real-time number of people in the area by adding the numbers from all people counting cameras.
3. Set the threshold for the total number of people in the area: NVR will trigger the pre-configured alarm when the number exceeds the threshold.

## Highlight

- Multiple door management in NVR local
- Real time data on information screen

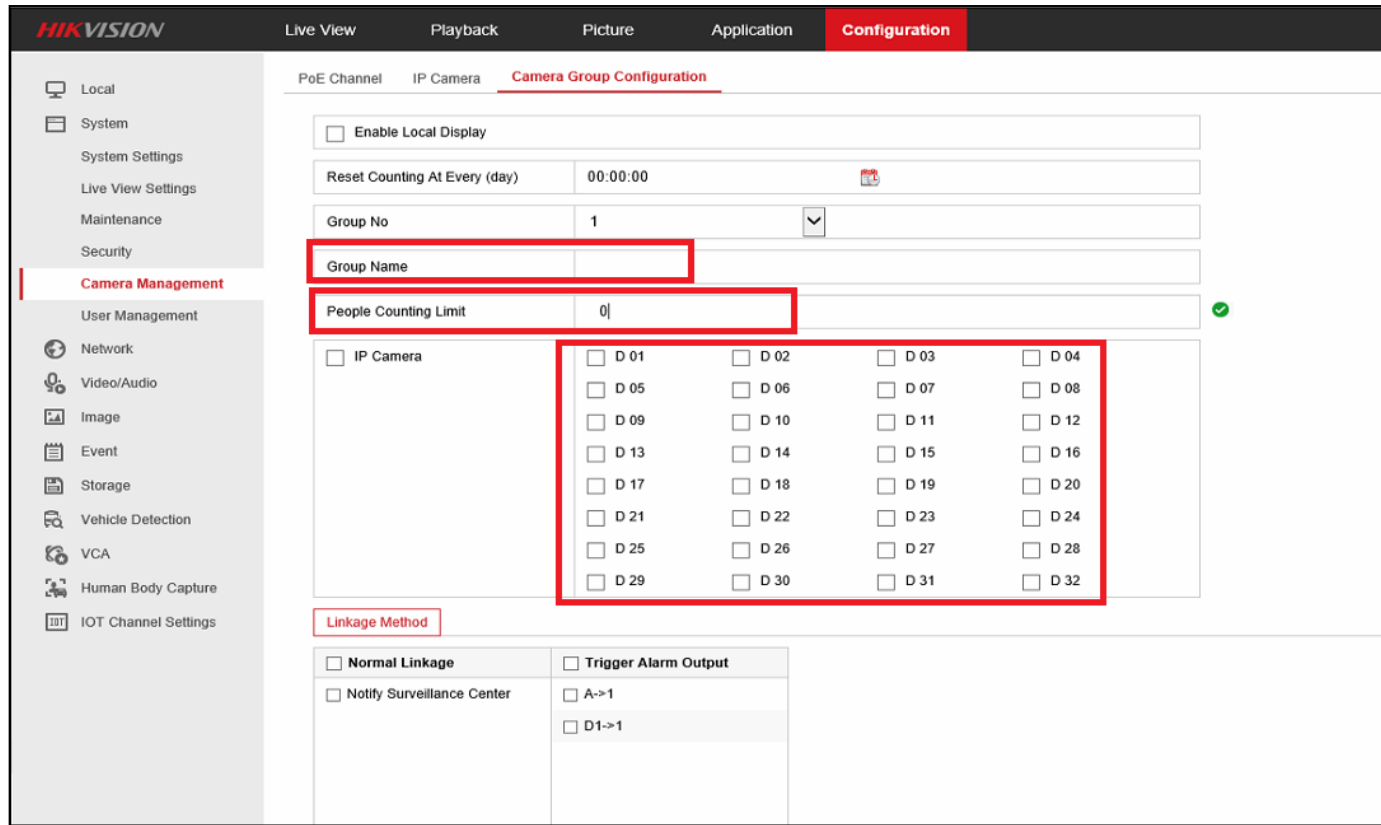
# MULTI DOOR NVR SOLUTION

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# CONFIGURATION-NVR SOLUTION

2. Go to NVR webpage or local GUI to set up people counting group and threshold



- Define group name
- Input a number in people counting limit field as maximum number of people available
- Select people counting camera(s) to be grouped
- Trigger linkage method as required

# CONFIGURATION-MULTI DOOR NVR SOLUTION

Live View   Playback   Picture   Application   **Configuration**   admin   Help   Logout


Local   System


**System Settings**


- Live View Settings
- Maintenance
- Security
- Camera Management
- User Management
- Network
- Video/Audio
- Image
- Event
- Storage
- Vehicle Detection
- VCA
- Human Body Capture
- IoT Channel Settings

**Basic Information**   Time Settings   RS-232   RS-485   Menu Output

Device Name	Network Video Recorder
Device No.	255
Model	DS-9616NI-I8
Serial No.	DS-9616NI-I81620190121CCRRC89992313WCVU
Firmware Version	V4.22.005 build 200503
Encoding Version	V5.0 build 200330
Web Version	V4.0.1 build 191120
Plugin Version	V3.0.7.21
Number of Channels	3
Number of HDDs	1
Number of Alarm Input	17
Number of Alarm Output	5

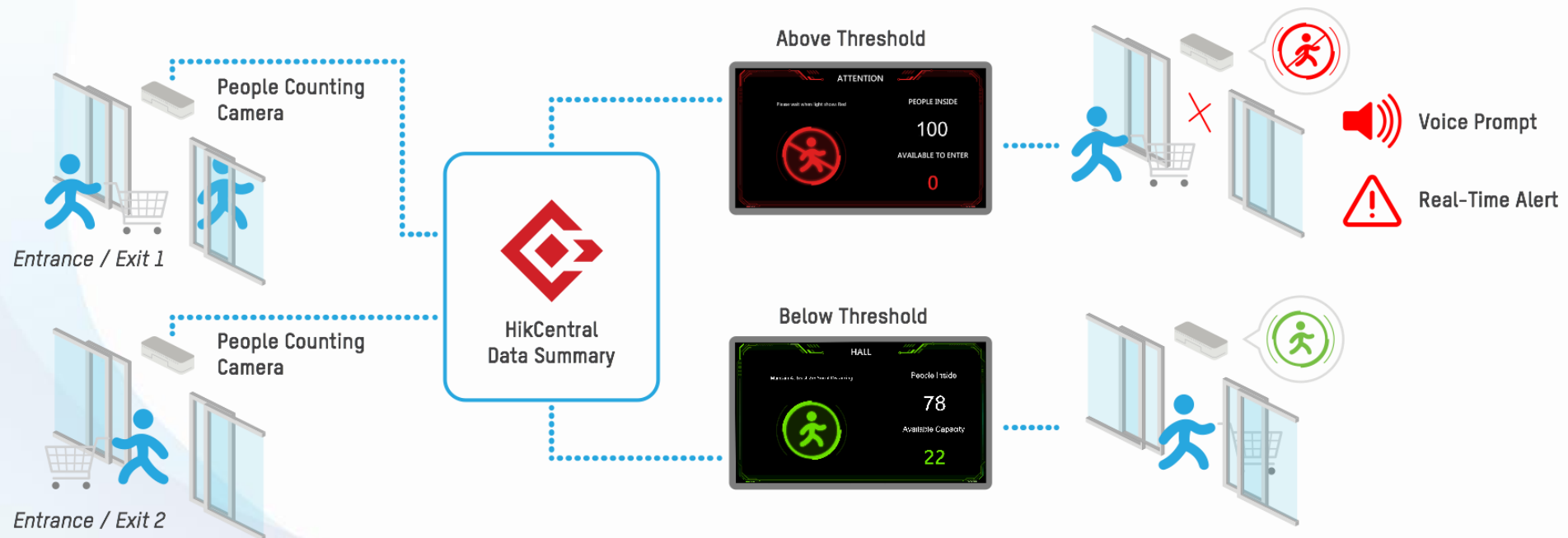






# MULTI DOOR HIKCENTRAL SOLUTION

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## Deployment

1. Install people counting cameras on all doors to count the number of people coming in and out.
2. HikCentral information screen displays the real-time number of people in the area by adding the numbers from all people counting cameras.
3. Set the threshold for the number of people in the area; HikCentral will trigger the pre-configured alarm when the calculated number exceeds the threshold.

## Highlight

- Multiple door management in HikCentral
- Real time data on information screen
- BI report for further analysis

# CONFIGURATION-HIKCENTRAL SOLUTION

1. Go to camera webpage->VCA to configure people counting rules (same with NVR solution)
2. Go to HikCentral Web Client->Logical View->Click “Edit” button

**Add People Analysis**

\*Analysis Type  Entry & Exit Counting  **People Counting**

\* Name test\_500 ✓

\* Limit of People Counting 500 ✓

RES for People Stayed CALC

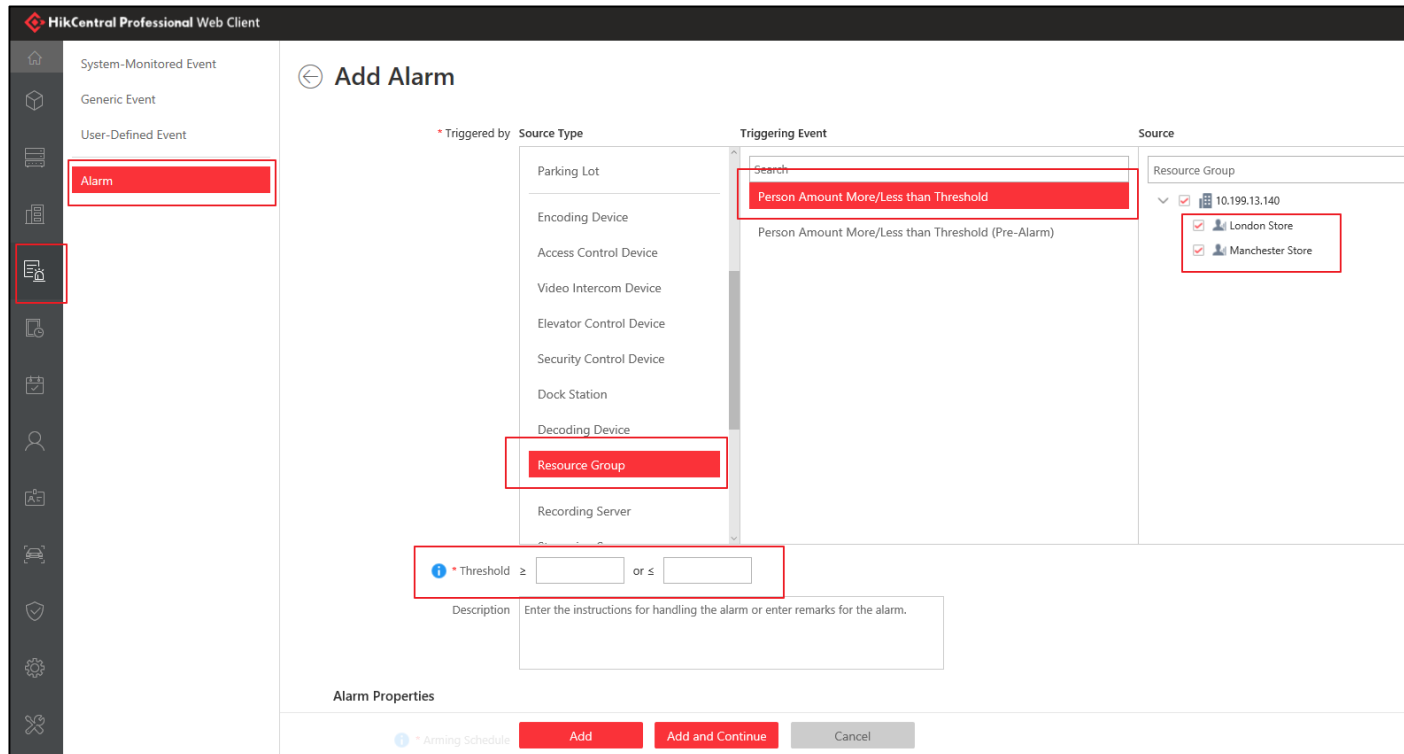
Name	Entering and Exiting	Operation
Camera 01	Entered: Entering. Exited: Exiting.	✕

Add to Map

- Enable Emap or GIS map
- Add **People Counting** analysis group
- Input maximum number of people allowed to enter
- Add people counting camera(s) to the group
- **Add the group onto Map**

# CONFIGURATION-HIKCENTRAL SOLUTION

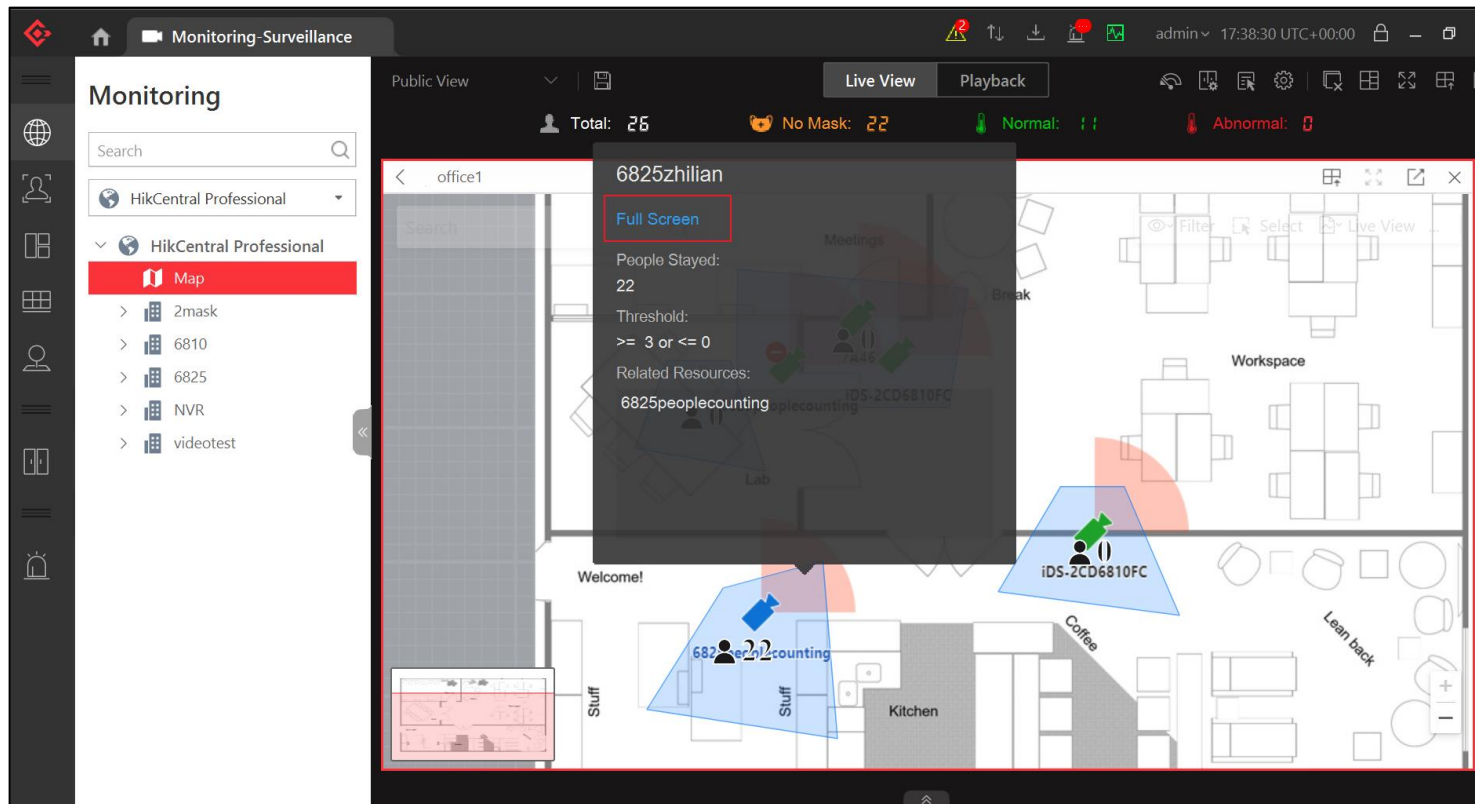
3. Go to HikCentral Web Client->Event & Alarm>Add system-monitored event or alarm



- Select “Resource Group” as type
- Select “Person Amount More/Less than Threshold” as triggering event
- Select the people counting analysis group
- Define the event/alarm threshold and triggering actions

# CONFIGURATION-HIKCENTRAL SOLUTION

## 4. Go to HikCentral Control Client->Monitoring



- Open the map where the real-time number of people stayed displaying
- Click on the blue colored area to pop up dialogue
- Click “Full Screen” to display the density control information in full screen



# CONFIGURATION-HIKCENTRAL SOLUTION

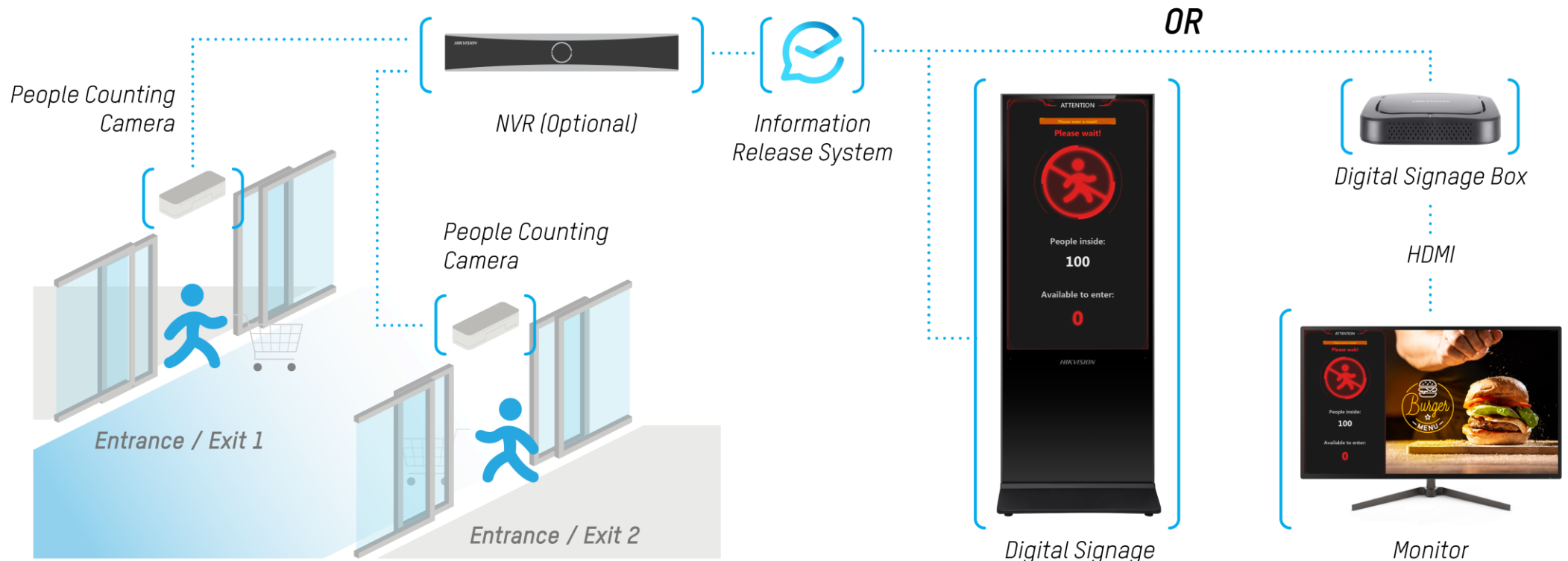
The screenshot shows the HikCentral Professional Web Client interface. The browser address bar shows '199.13.150/#/home'. The page title is 'HikCentral Professional Web Client'. The interface is divided into several sections:

- Configuration:** This section offers functions used to configure the system. It includes icons for Remote Site Management, Physical View, Logical View, Event & Alarm, Access Level, Time & Attendance, Person, Visitor, Vehicle, Security, and System.
- Applications:** This section offers various applications to help security professionals. It includes icons for Monitoring, Intelligent Analysis, and Skin-surface Temperature.
- Access Control:** A section with a 'Quick Start' link and an 'Access Control Test' button.
- Help:** A section with links for 'Web Client Video Tutorial', 'Maintenance', and 'User Manual'.
- Maintenance:** A section with links for 'Back Up and Restore System Data', 'Export Configuration Data', and 'Upgrade Device Firmware'.
- License:** A section with 'License Details', 'License Expiry Date: 2020-06-17', 'Update License', and 'Deactivate License' options.
- Download Installation Package:** A section with a link for 'Control Client(V1.6.0.0)'.

A yellow circle with the letter 'I' is overlaid on the 'System' icon in the Configuration section.

# Digital Signage SOLUTION

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## Deployment

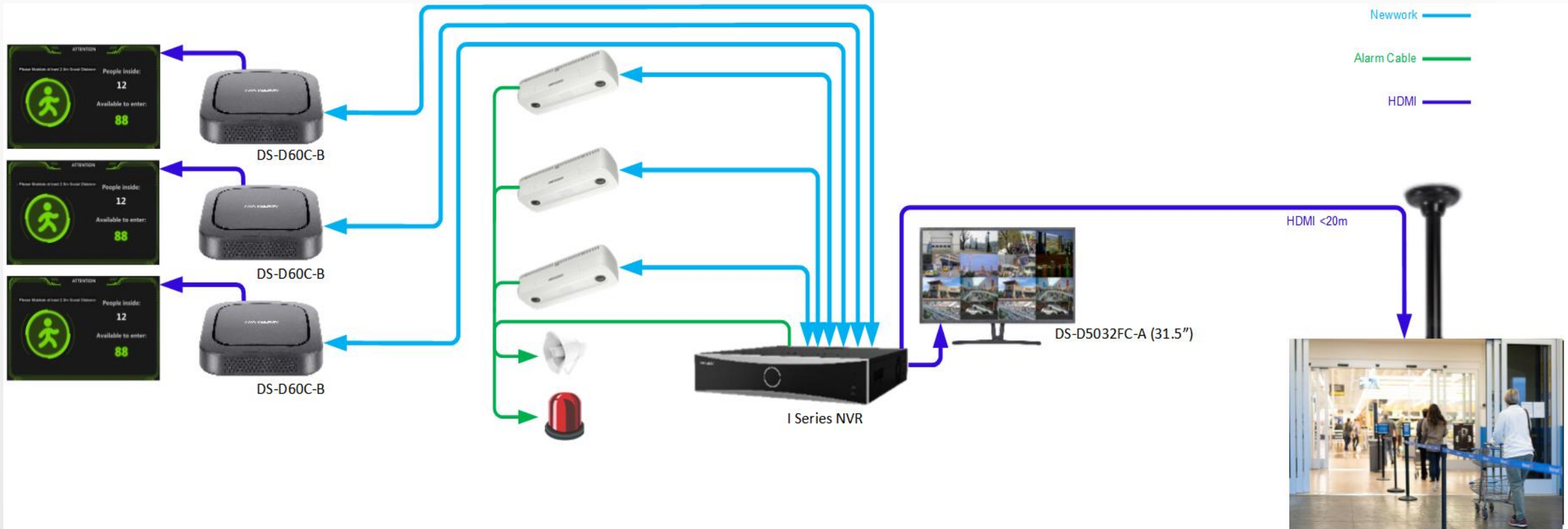
1. Install people counting cameras on all doors to count the number of people coming in and out.
2. Digital signage displays the real-time number of people in the area by adding the numbers from all people counting cameras.

## Highlight

- Multiple door management in Digital signage
- Real time data on information screen
- Flexible deployment

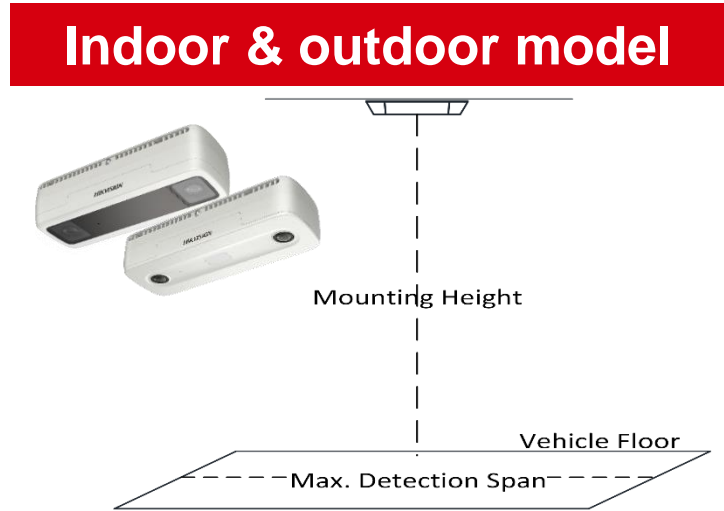
# Digital Signage SOLUTION

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# CAMERA INSTALLATION GUIDANCE

Following table shows the relations among mounting height, and max detection span of typical values. For detailed installation advice, please contact the technical support of HIKVISION



Mounting Height (m)	Max. Detection Span (m)
2.1	0.8
2.6	2.1
3.1	3.4
3.6	4.6
4.1	5.9
4.6	5.4
5.1	6.3
5.6	7.3
6	8.1

# SOLUTION SHOWCASES

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## Multiple Entrances/Exits

Gate 1



Gate 2



# SOLUTION SHOWCASES

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ATTENTION

Please wear a mask!

Please come in!



People inside:

**12**

Available to enter:

**88**

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DON'T LET YOUR CLOTHES  
TURN INTO FOOD FOR MOTHS.  
DONATE.



LEAVE YOUR CLOTHES AT THE STORE UNTIL JULY 1<sup>ST</sup> AND LET THEM GO WITH THE MOST NEEDY.

# SOLUTION VALUE

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## Flexible Deployment

Easy installation and rapid deployment



## Real Time Alert

Real time alerts to prevent people exceeding capacity thresholds



## High Accuracy

Highly accurate people counting thanks to 3D binocular stereo vision and Deep Learning algorithm

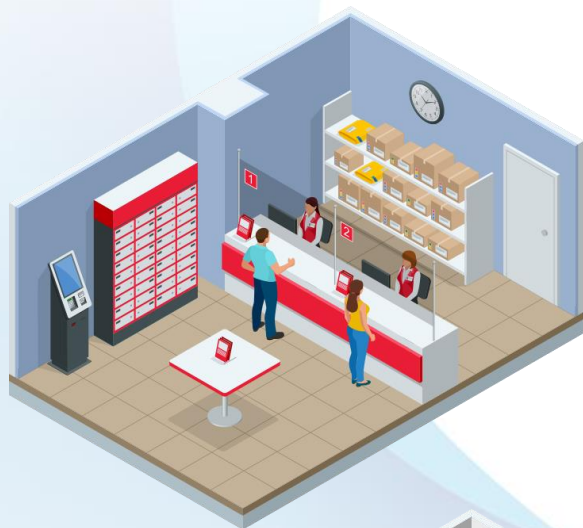


## Real Time Display

Real time density data clearly displayed and easily understood

# RECOMMENDED SCENARIOS

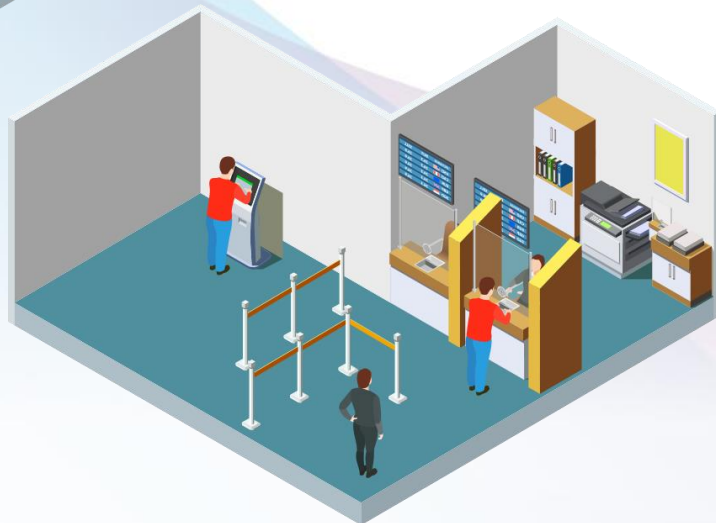
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Post Office



Supermarket



Banks



Retail





## Dual-Lens People Counting Network Camera

### DS-2CD6825G0/C-I(V)(S)

- 1920 × 1200 @ 30fps
- 2 mm fixed lens
- 1/2.8" Progressive Scan CMOS
- IP66, IK08

### Advantages:

- 3D binocular stereo vision and Deep Learning algorithm improve the accuracy of people counting
- Dual lenses provide rich full colour images and enhanced picture details
- Supports reverse alarm
- Supports filtering targets by height

# PRODUCT SHOWCASE

**HIKVISION**<sup>®</sup>

## Monitor

- 1080P, HDMI/VGA input, plastic casing, VESA, base bracket included, 24/7 operation



DS-D5022FN  
(21.5")



DS-D5032QE-B  
(31.5")



DS-D5043QE  
(43")

- 1080P/4K, HDMI/VGA input, **built-in speaker**, plastic casing, VESA, base bracket included, 24/7 operation



DS-D5027UC  
(27")



DS-D5032FC-A  
(31.5")



DS-D5043UC  
(43")

## I series NVR

Storage and Playback, Smart & POS Functions



DS-7600NI-I



DS-7700NI-I



DS-9600NI-I

## POE switch

- L2, Unmanaged, 10/100M RJ45 PoE ports, 1 10/100M RJ45 uplink port, 802.3af/at, PoE power budget. 300m long distance transmission, 6KV surge protection



DS-3E0105P-E(B)



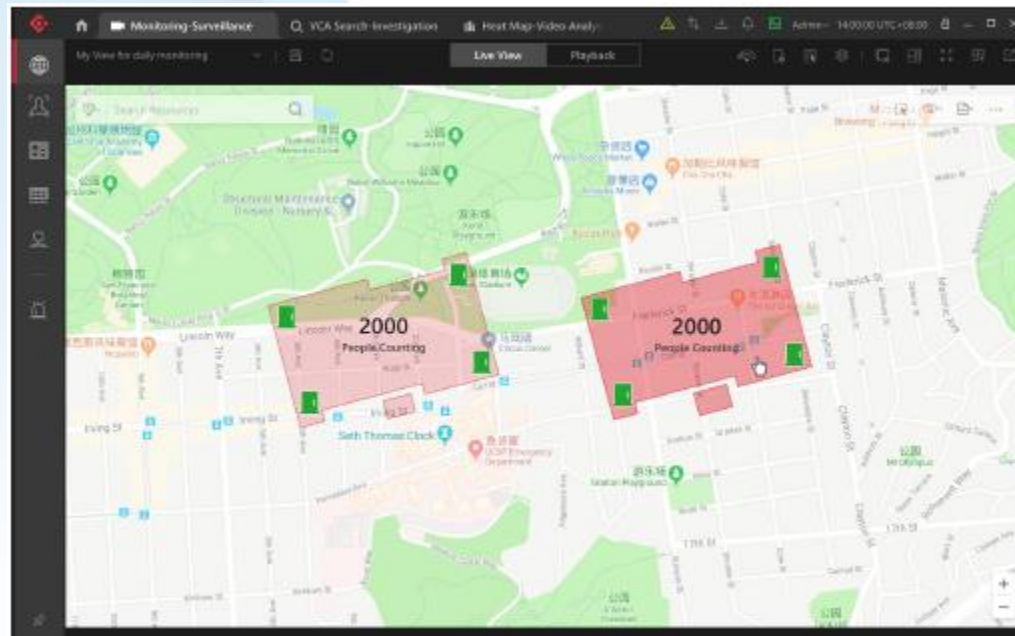
DS-3E0109P-E(C)



## HikCentral Professional with BI module (Customised version)

- Flexible, scalable, reliable and powerful central surveillance system.
- Supports live view, playback, access control, alarm management, personnel identification, BI dashboard, people counting report.

### Real time people number update on the map



### People counting number layout



# PRODUCT SHOWCASE

Full HD video  
(Up to 4K)



Longer service life

Support Horizontal  
and vertical



24/7 operation

Built-in Wi-Fi



DS-D60B-C



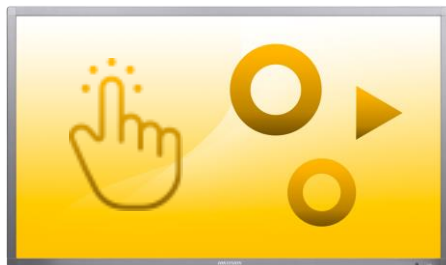
Build-in 32 GB  
SD Card



# PRODUCT SHOWCASE

**HIKVISION**<sup>®</sup>

## Wall-Mounted



### Touchscreen

- 22" DS-D6022TL/FL-B
- 32" DS-D6032TL/FL-B
- 43" DS-D6043TL-B
- 55" DS-D6055TL-B



### Narrow Bezel

- 43" DS-D6043FN-B
- 55" DS-D6055FN-B



### Narrow Bezel & 4K RGB

- 55" DS-D6055UN-B

## Floor-Standing

- 43" DS-D6043FL-B/S
- 55" DS-D6055FL-B/S



THANK YOU

