Retail Counting App

User Guide

The Retail Counting application enables you to access the collective counting reports generated by VIVOTEK counting cameras. A sample topology is shown below:
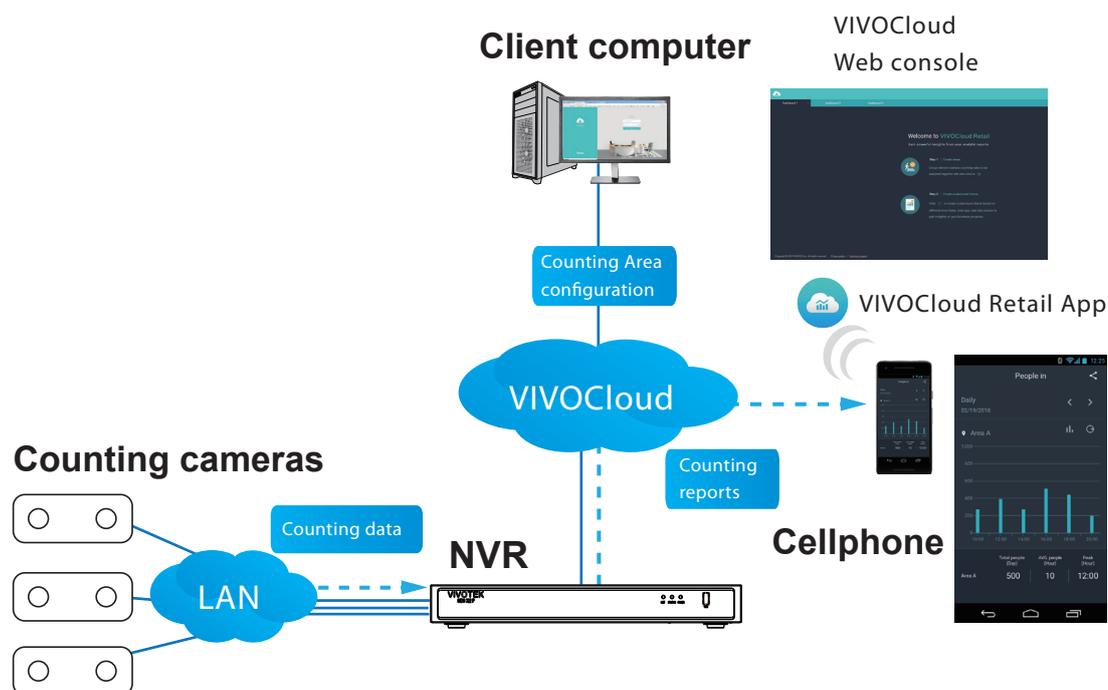
Elements & Prerequisites

1. Counting cameras	Installed and properly configured according to the documentation that came with the SC8131, SC8132, and SC8133 stereo cameras, FD8166A, FD8166A-N, and CC8370-HV. .
2. NVR (Retail version)	The stereo cameras are added to the NVR. The live video and counting results are recorded to the NVR.
3. VIVOCloud app	Download and install the VIVOCloud app. Add NVR to the VIVOCloud configuration.
4. VIVOCloud account	Use a valid Email address to apply for a VIVOCloud account.
5. Client computer	Use your VIVOCloud account to log in to the cloud server: https://retail.vivocloud.com/bi.html#/ Configuration of the counting areas is made through a web console to the cloud server. The portal is also able to access counting results.
6. VIVOCloud Retail app	Download the Retail app. The Retail app provides instant access to the counting results.

The activity data collected by the cameras is displayed in comprehensive graphs and bar charts. You can monitor and compare the historical data acquired through a span of time and fine-tune the detection parameters with the ease of use of a graphical interface.

Areas

Up to 4 stereo counting cameras can be configured with an NVR for an installation. A retail store may have several entrances/exits that are individually monitored by several cameras. The accummulated numbers from these cameras can be used to detect the total number of customers inside, of the number of visits, or the number during a specific span in a day, week, month, quarter, or year.

These numbers can be used for performance evaluation, promotion efficiency, and so on. Users can customize their focus information, counting report, and the long time performance. The following can apply using the count results:

1. Staff scheduling and resource control, knowing the customers' favorite visit hour, and handle man power more efficiently.
2. Store performance comparison by monitoring multiple sites.
3. Marketing efficiency, evaluate the performance of promotions or activities. For example, by comparing the promotion day to regular days, to see if the promotion really works.
4. Up to 2-year of counting data can be stored in WoW, MoM, YoY card report format.

Note the following when configuring counting cards and areas:

- A VIVOCloud instance supports the management of up to 16 NVRs. For the performance concern, each NVR can manage up to 4 stereo counting cameras.

- A Dashboard can house up to 15 counting cards (one that displays the results of one or multiple counting rules).
- 2 points in time or spans of time can be used in one comparison counting card.
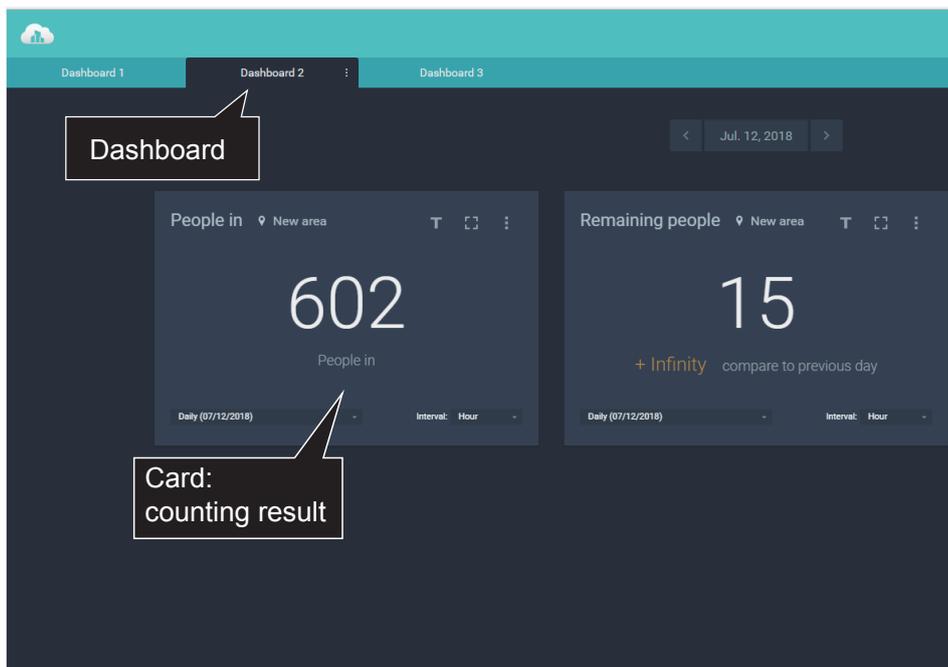
- An area can contain one or multiple counting rules. For the current free trial version, up to 5 counting rules in 1 area is supported.

- An area can contain installations at multiple sites and be named as, e.g., Taipei city area.

- It is recommended you name your cameras clearly by their locations and their special characteristics.

* Up to 4 counting cameras w/ 1 NVR
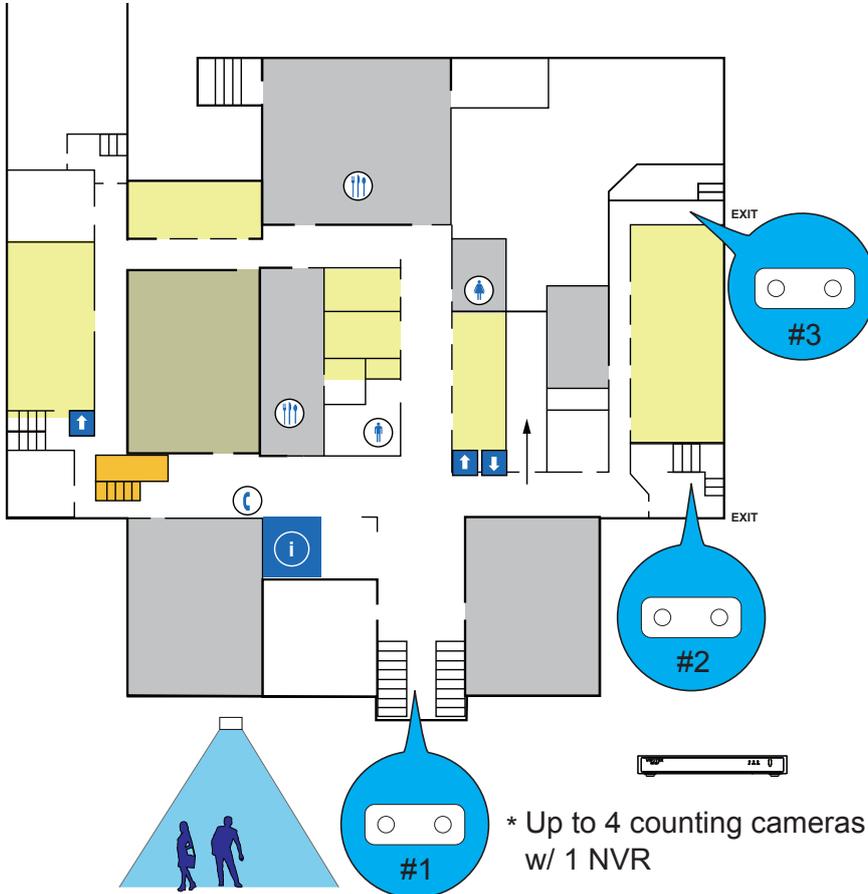
To install the VIVOCloud app, use your cell phone to scan the QR code from the NVR management screen.
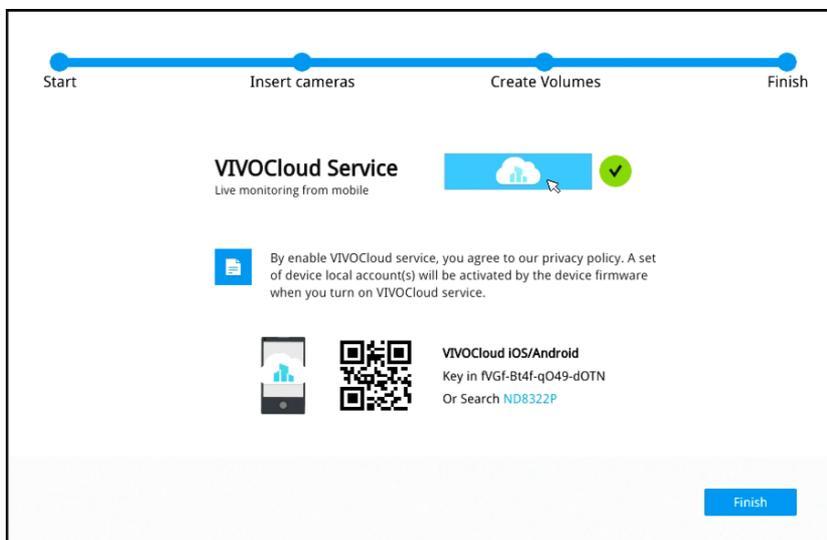
Configuration Steps:

1. Open a web console to the VIVOCloud server: https://retail.vivocloud.com/bi.html#/ Before you proceeed, make sure your stereo cameras and NVR have been properly installed and are operating normally.

2. Enter your VIVOCloud account name and password. Click Log in.
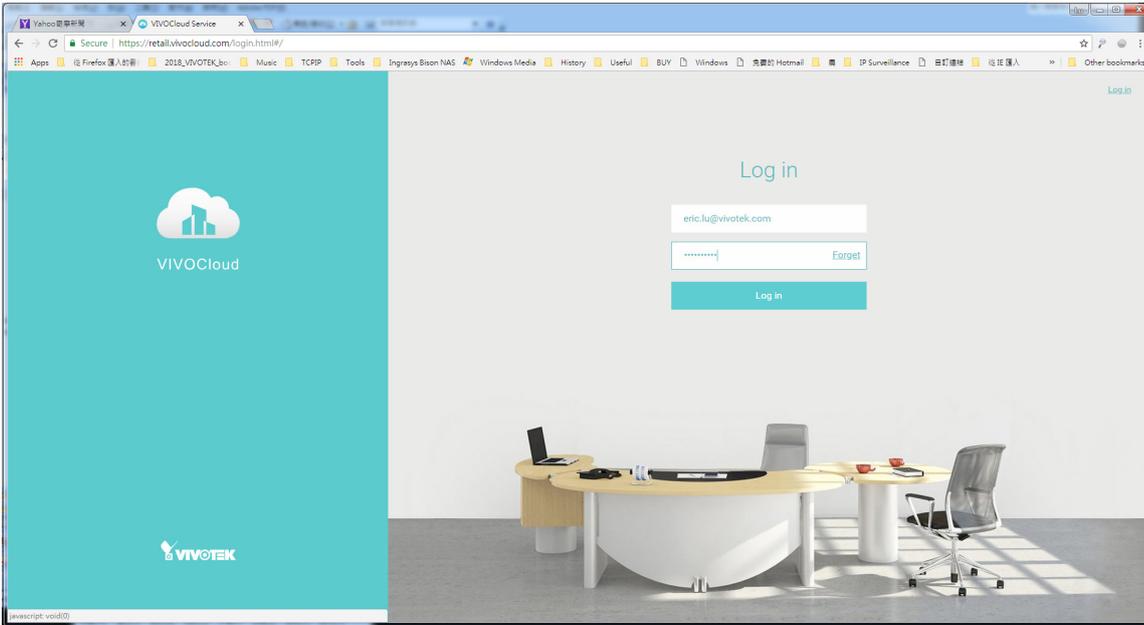
3. You will be defaulted to the welcome page. Click the Settings ⚙ button to proceed.
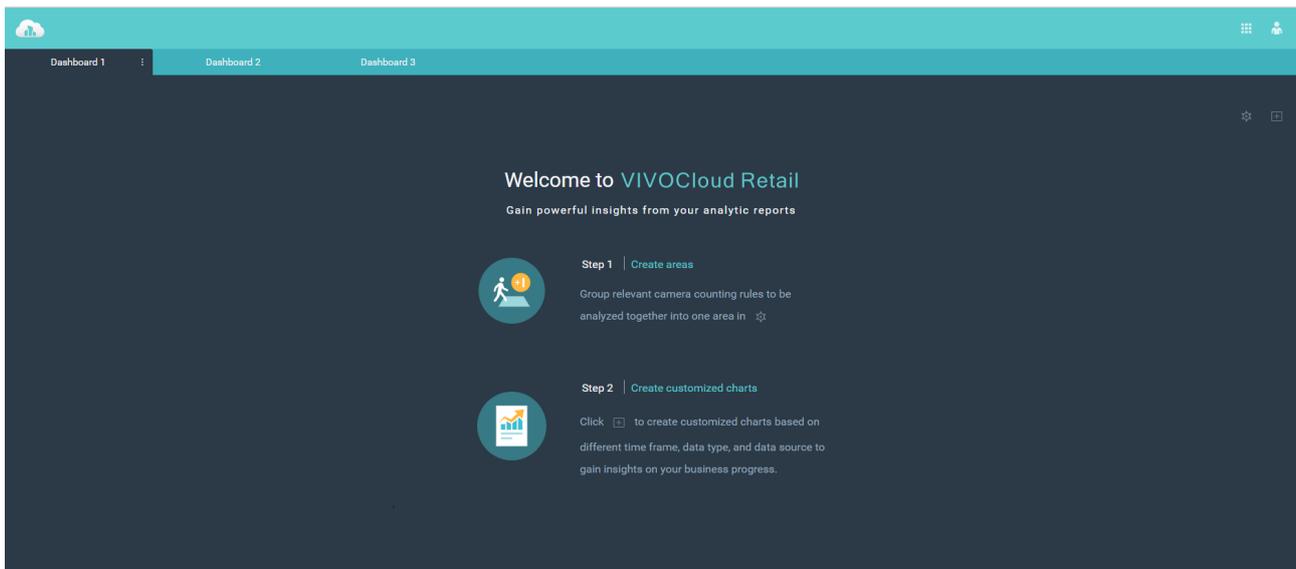
4. Click the + Area button.
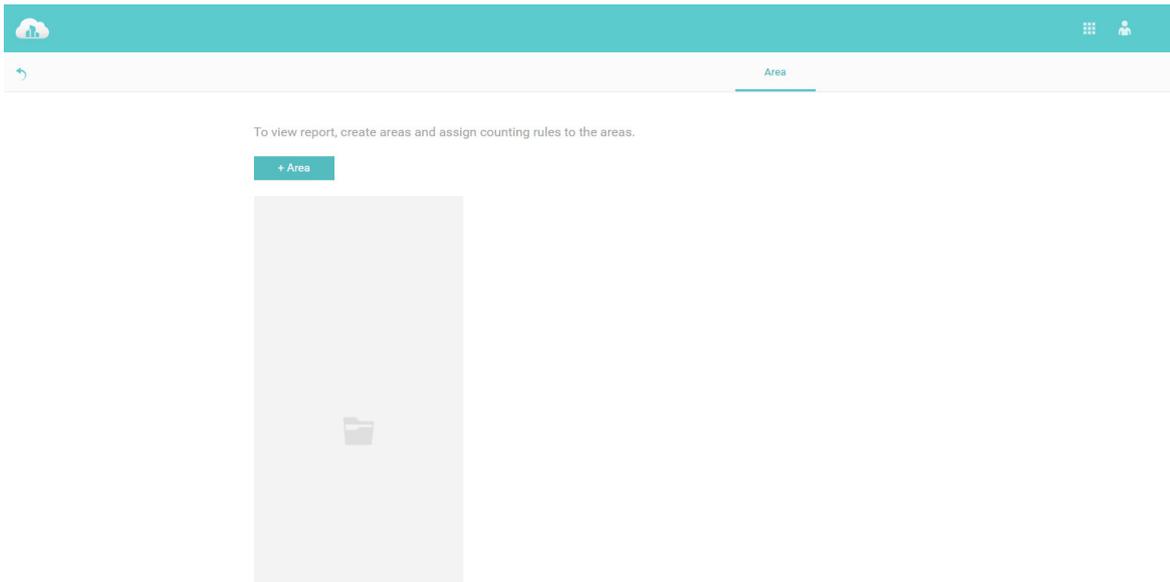
5. Click to expand the device tree, select individual cameras, and click to select their counting rules. Make sure you select the preferred rules, and then click the Save button.
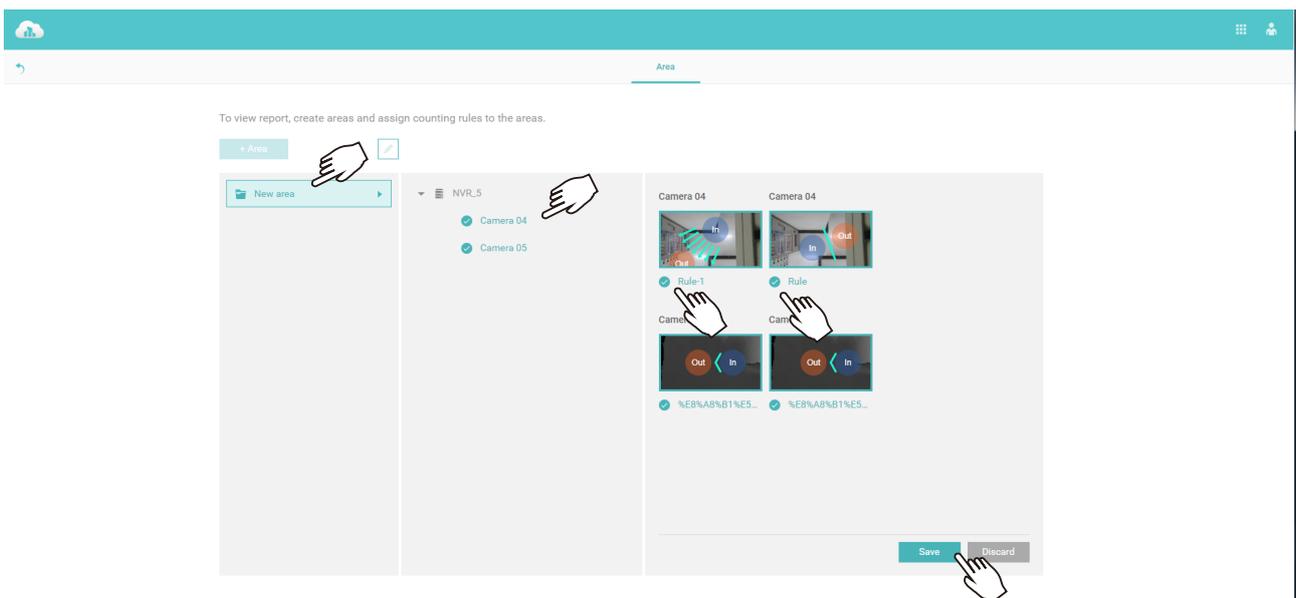
6. The configured areas will appear on each Dashboard, showing the current counting results. Repeat the above process to create counting charts (cards) for the display of People in, Remaining people, or the People out data.
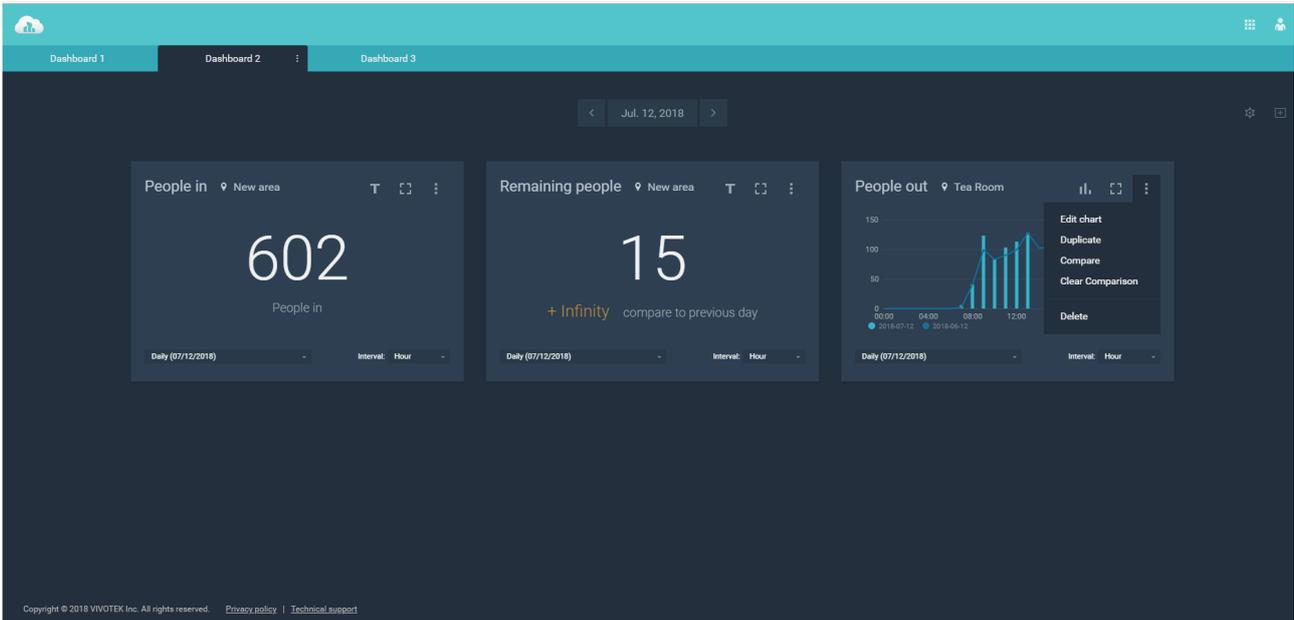
7. Use the tool bar to edit the display of counting results. You can edit the display chart, duplicate the current chart, compare the current result with another day, week, or month in history, etc. When comparison is done, you can clear the comparison or delete the counting card.

For example, you can compare the different numbers of visitors at different days as shown below. The total number of visitors and the average number by hour are shown in the lower screen. The Peak hour in history is shown on the lower right.
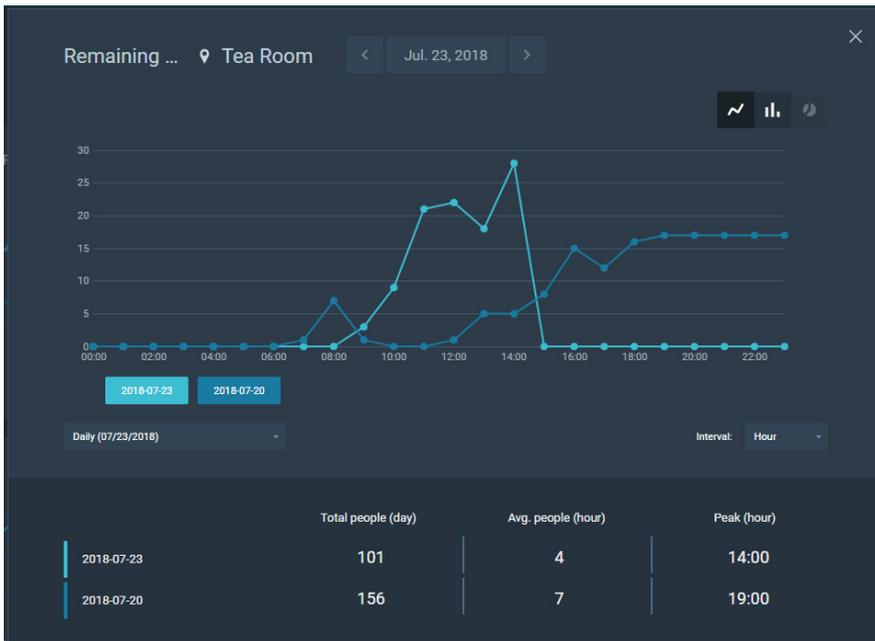
8. Use the tool bar buttons to change the display mode, or bring up a detailed view. The buttons on the right allow you to Edit, Duplicate, Compare, or de-compare the counting results.
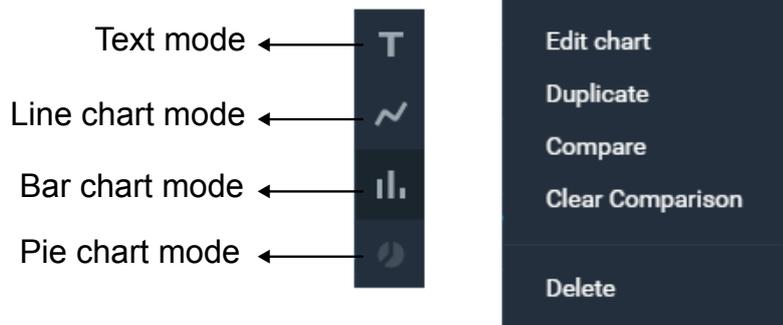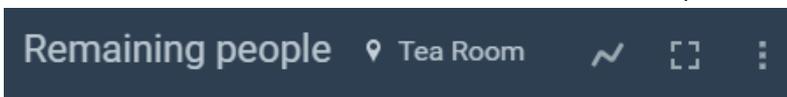
Use the forward and backward buttons on the upper screen to move to the previous or next day, week, or month.

Time unit can be selected if the counting card shows a longer span of time. For example, in a monthy report, the week, day, or hour time unit can be selected. In an annual report, quater, month, or week can be selected as the time unit.
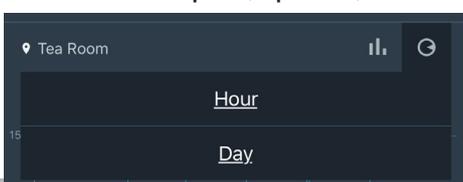
You can mouse over the chart to display the specific count numbers. You can also change the display option for the Weekly, Monthly, Quarterly, or Annual data.

Note that when you select the Weekly display, you can use the day selector on the top to move back to review the number of a past week.
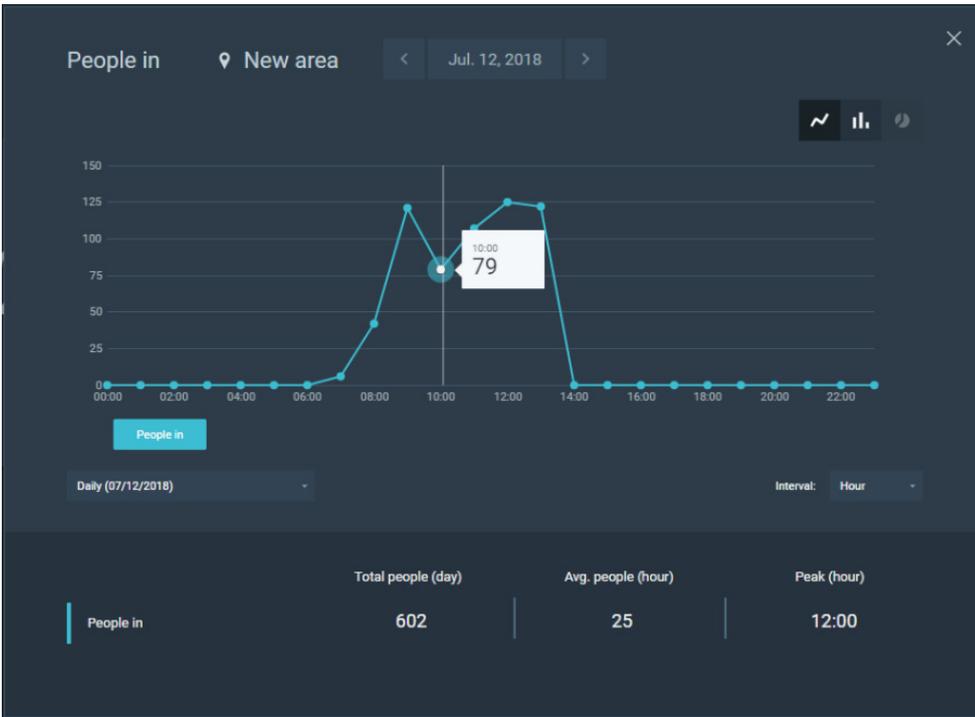
9. For viewing results on a cell phone, visit the app store and download the VIVOCloud Retail app.

Enter your VIVOCloud account credentials to log in.

The counting charts you configured on the VIVOCloud web console will be displayed on the Retail app.
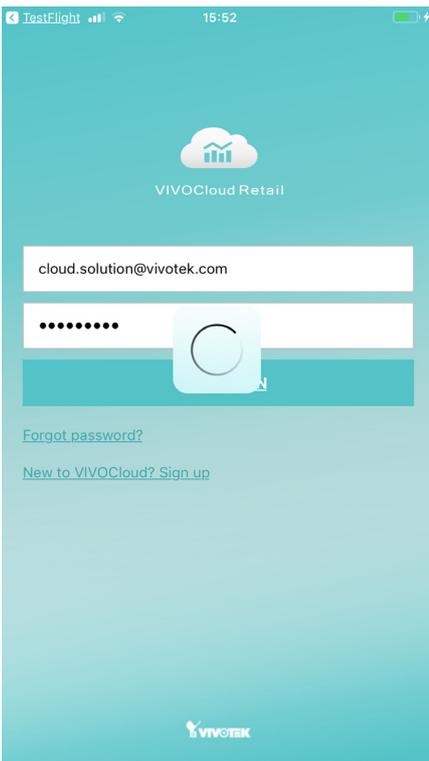
Swipe right or left to move to a different Dashboard. The counting charts (cards) you configured on the web console will display accordingly.

The functional buttons on the tool bar are similar to those on the web console.

You can also edit the counting charts. Note that you must first configure the counting detection areas in the web console.
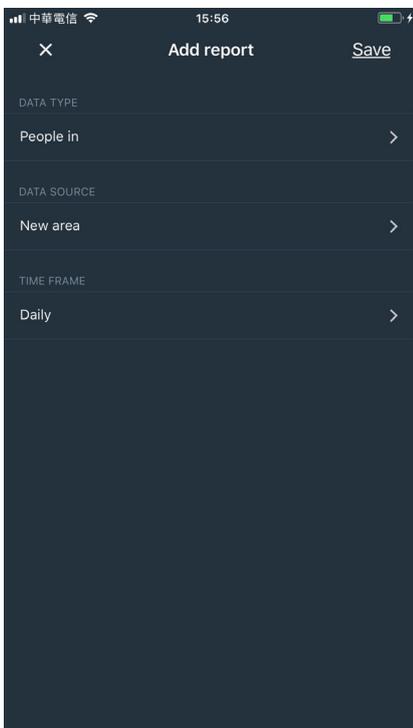
You can single tap to open a detailed view of a count chart. Tap on its date to open a month, a week, or a day selector.
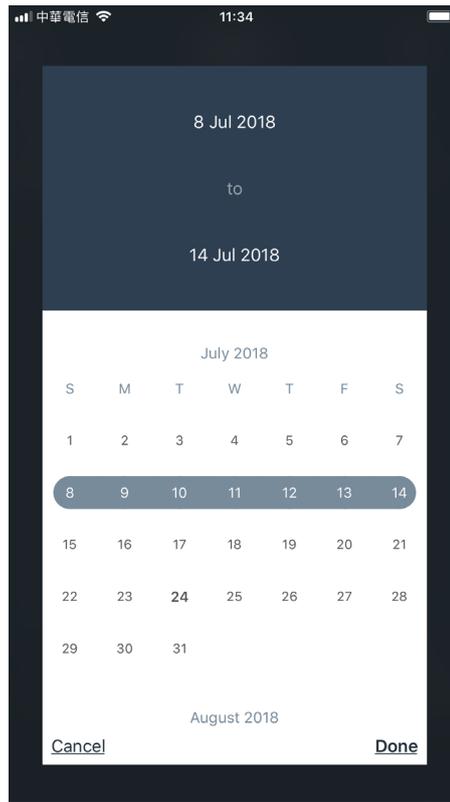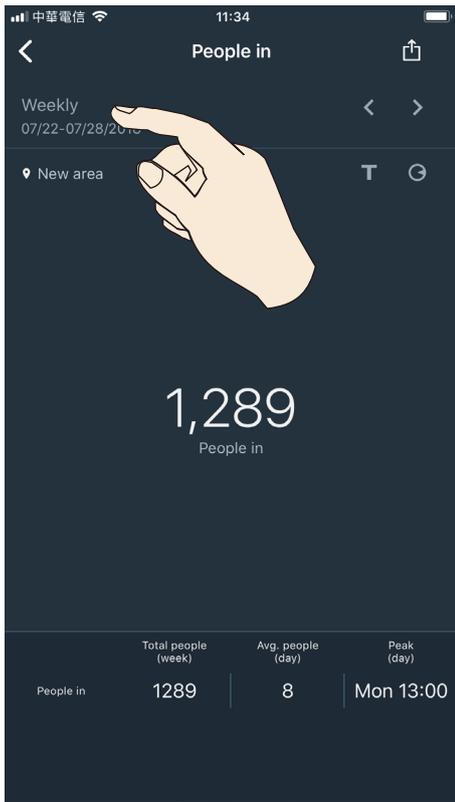
You can tap on the time line to display the count result generated at a specific point in time. You can also zoom in or out by snatching fingers.
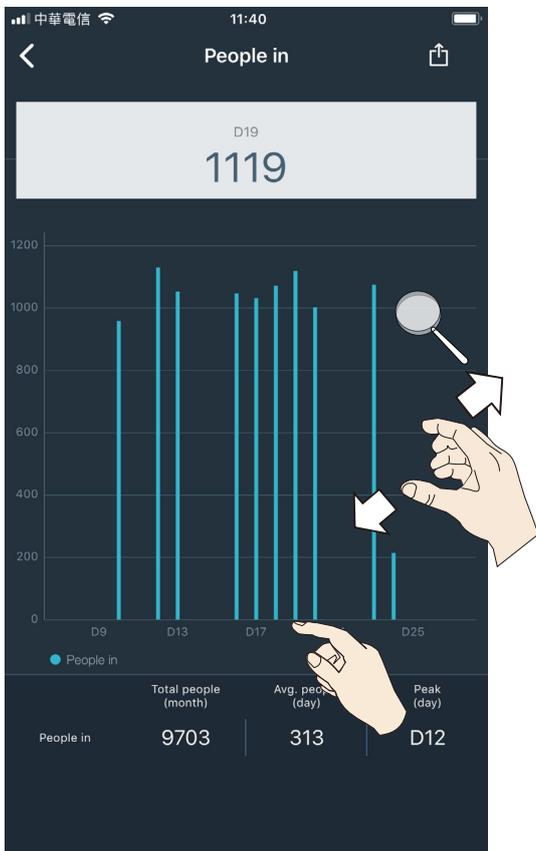
Tap on the number pane again to cancel the display.

10. If you find an interesting count result that worth sharing or preserving, tap the Export button . You can then select the app or utility through which you want to share the count result, such as Email, Dropbox, etc. The count result is sent as a PDF file.
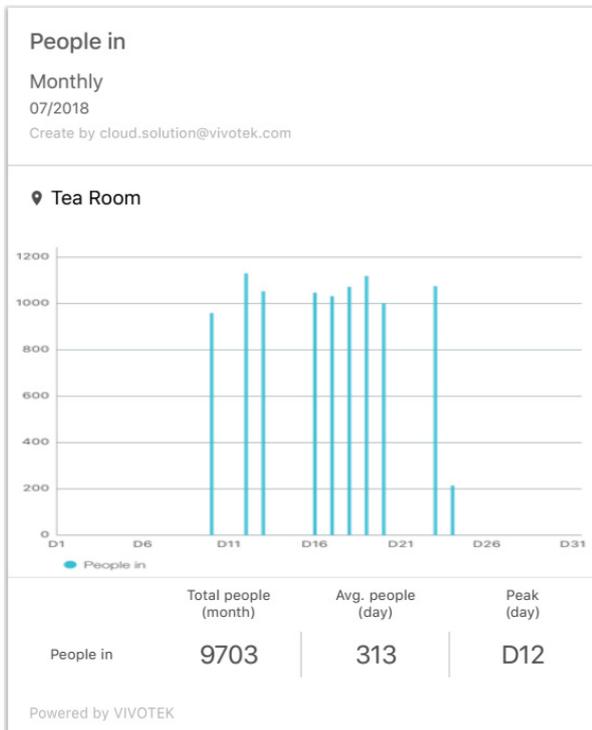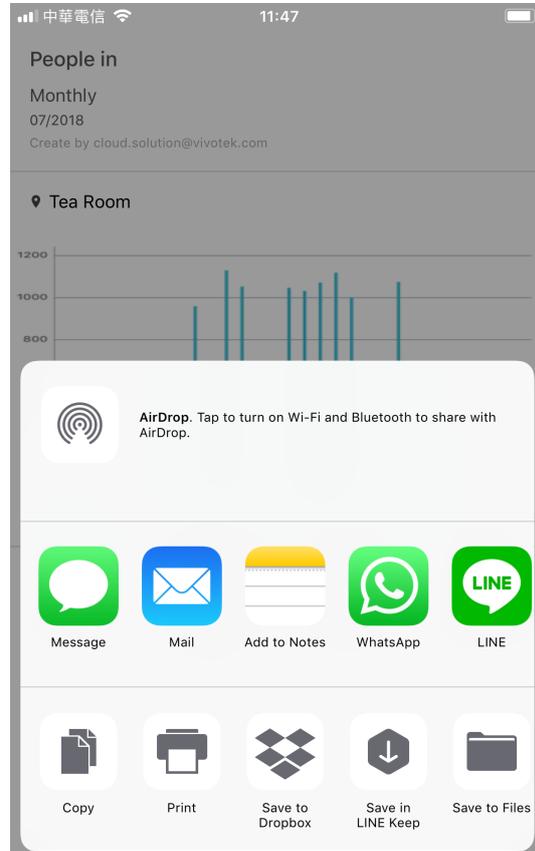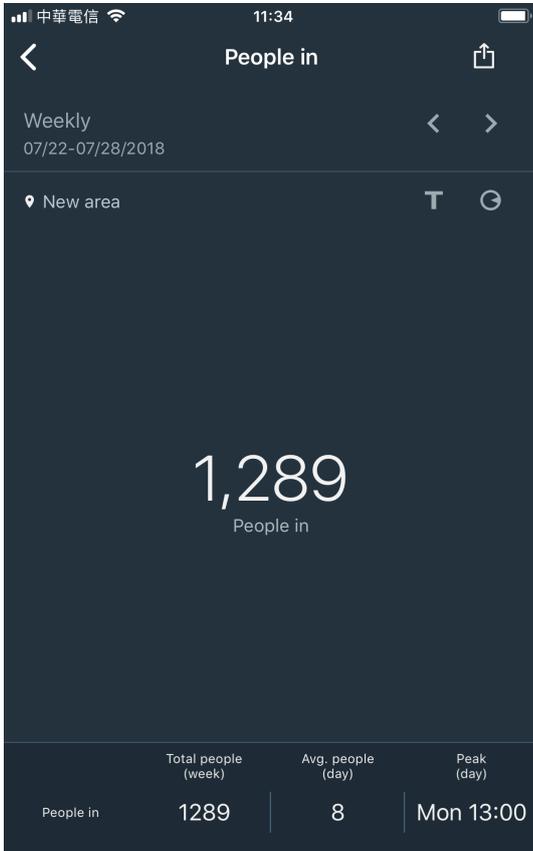
Although it is presumed that most configurations are made via the web console with the VIVOCloud server, you can still create a report from within the app. You can tap the Add report button to create a counting card.

Please note that the count number will be 0 when a new counting rule has just been started. For a counting rule that has already been running for days, the count results should display after a short delay.