# POS Management and Data Format

KAI Unified Platform can include Point of Sale (POS) data in its reports, for comparison with Video Analytics data. There are 2 ways to import your POS data into your KAI Unified Platform account:

1. Automatically via FTP file upload
2. Manual insertion

# Aggregation Using Labels

A typical retail store has multiple cameras and multiple point of sale terminals. This data is more meaningful when aggregated for the whole store. KAI UP supports aggregation of video analysis data from multiple cameras of a store. This can be done using the Label Management module. Aggregated sales data can be viewed with the aggregated video analytics data, for better co-relation.

For example, consider a retail chain called "Alpha Retail", which has 2 retail shops called "City Hall" and "Downtown". Each shop has 2 KAI Nodes. In the customer account there would be total 4 nodes, perhaps named "CH Floor 1", "CH Floor 2", "DT East" and "DT West". "CH Floor 1" and "CH Floor 2" can be labelled together under the name "City Hall"; "DT East" and "DT West" can be labelled together under the name "Downtown" (Figure 1).
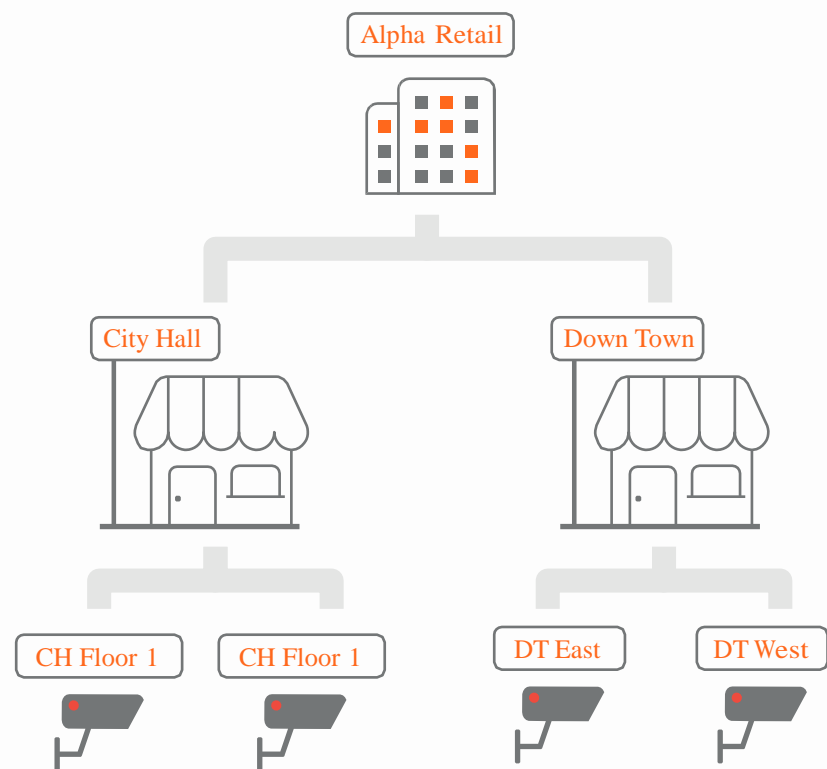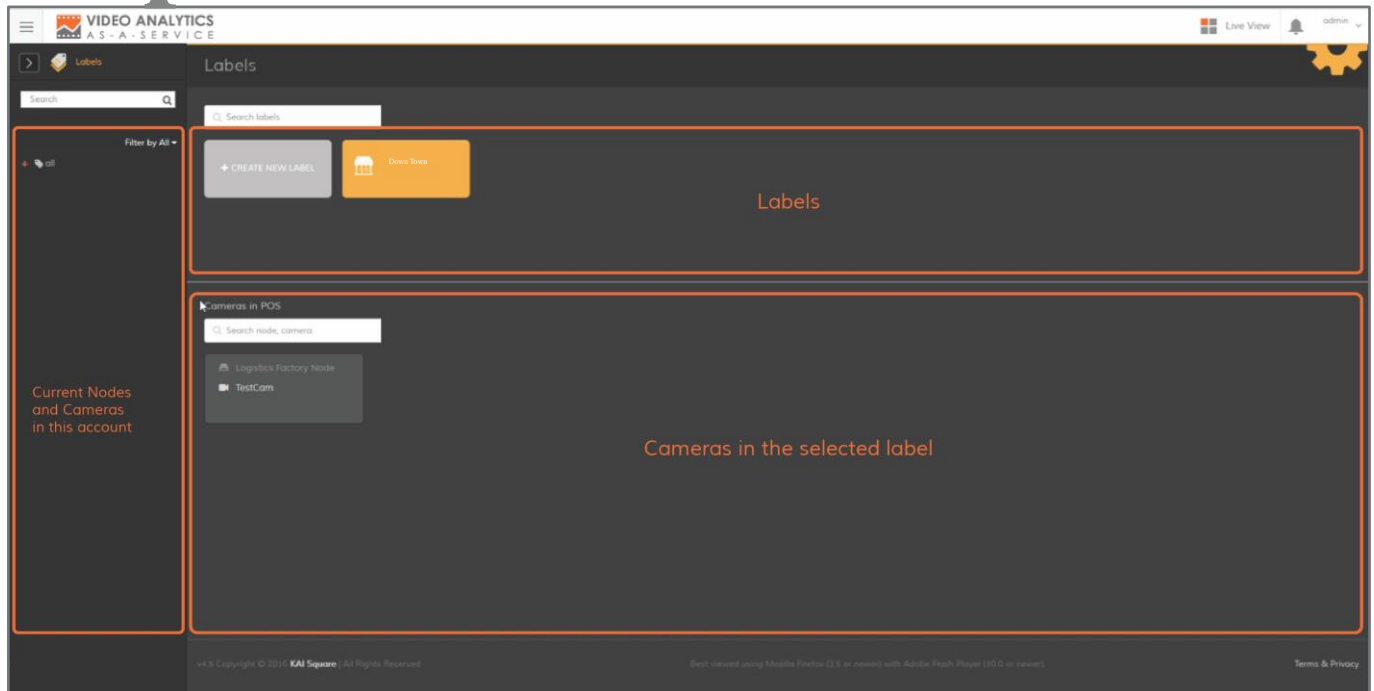


Figure 1. The example of label system structure.

To do this, go to Label Management and follow the on-screen instructions or the screenshots below.

# step1 Go to Label Management.



# step2 Create new label and click next

# Aggregation Using Labels

# step3 Fill details and save



## Create New Label                                                          ×

**Location**

| Singapore | 🗺 |

**Weekend Setting**
Please select the holidays of the week

| Monday | Tuesday | Wednesday | Thrusday | Friday | Saturday | Sunday |

**Opening Hours**

- ● Everyday from  08 : 00  To  18 : 00
- ○ 24 hours, the lowest hour is at  08 : 00
- ○ Customized

[ Previous ]  [ Save ]

# step4 Assign Node or Camera to a Label by dropping on the desired Label



VIDEO ANALYTICS
AS-A-SERVICE                                         Live View    admin ▾

Labels

Labels

Search

Filter by All ▾

● all
  🏭 Logistics Factory Node ⊗
    📷 TestCam

**①** Click to view Nodes & Cameras assigned to a label.

**②**

Cameras in CH Floor 1

Search node, camera

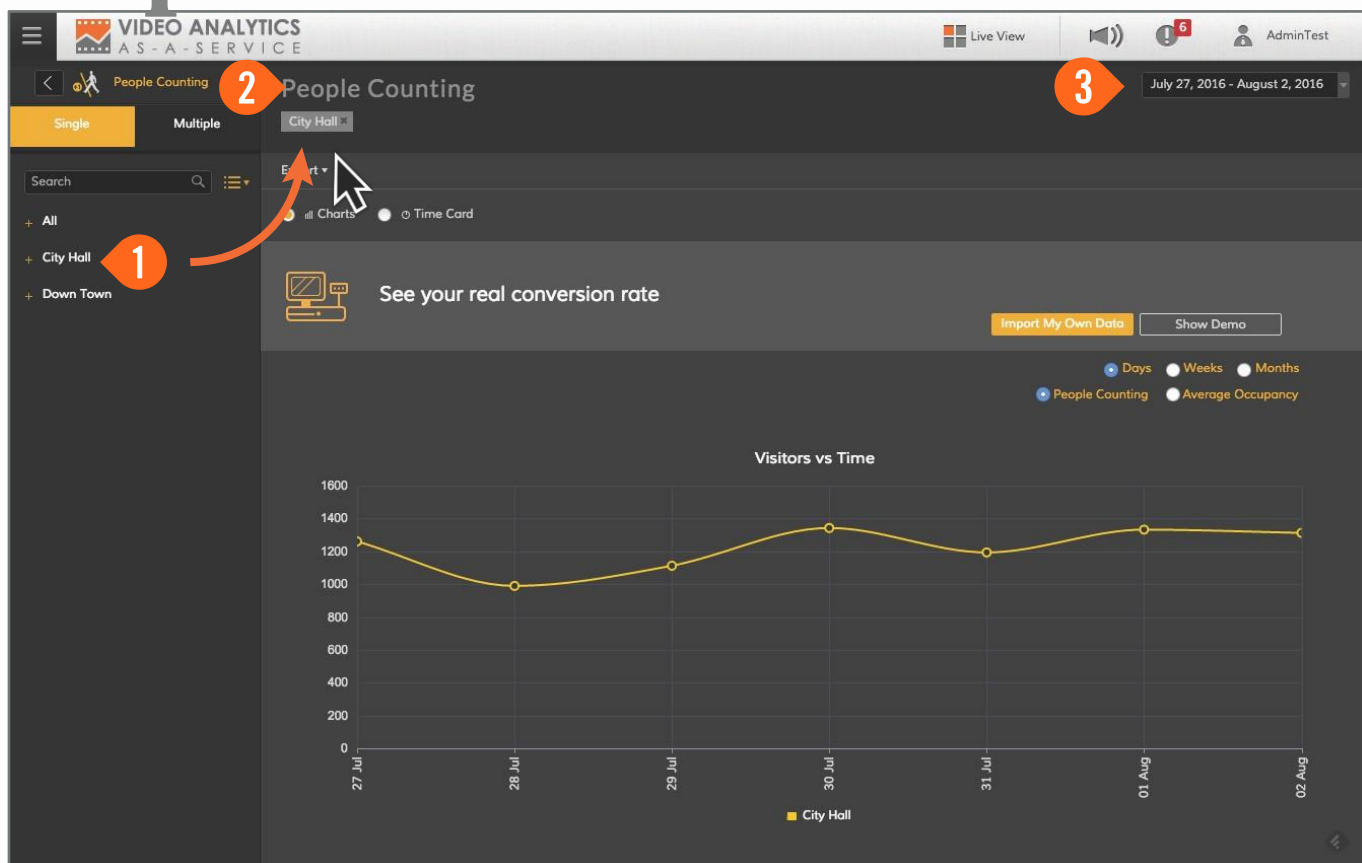+ Logistics Factory Node ⊗

Drop on the desired label.

# step5
Label set up complete
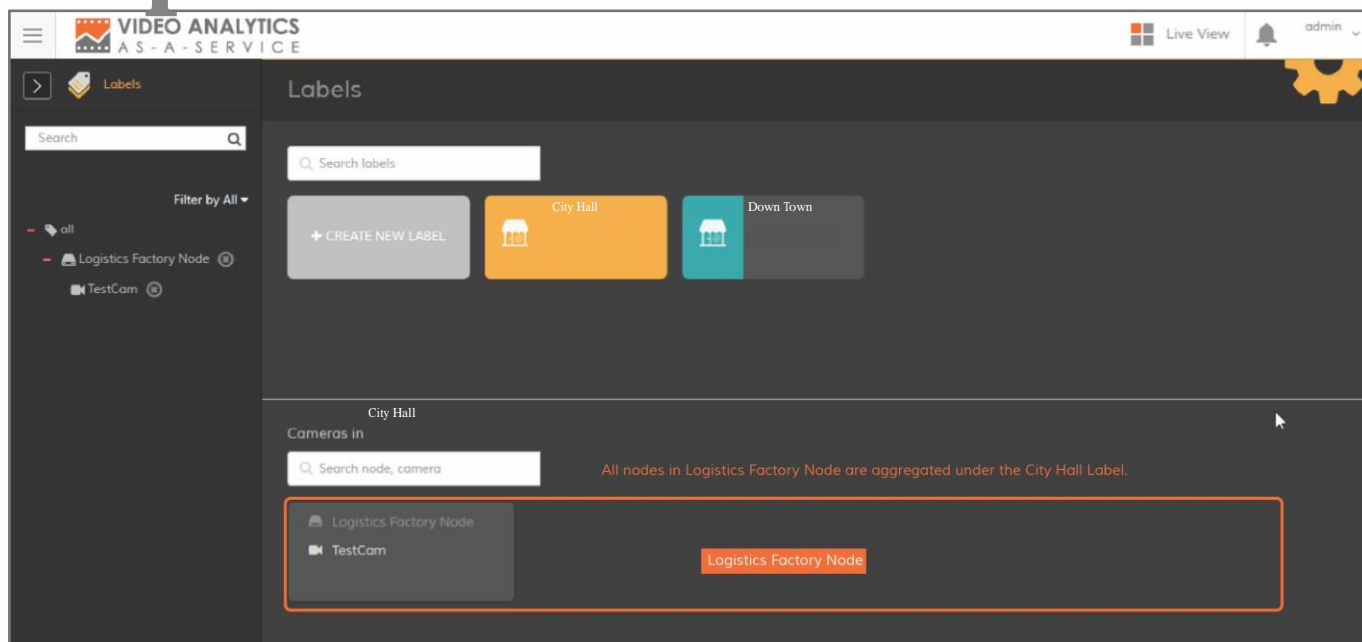


# step6
Go to People Counting, labels can be selected as data sources for generating aggregated reports

# POS Data Integration

# 1. FTP or SFTP File Upload

## File Naming Convention

Continuing with the above example, the aggregated POS data for City Hall retail shop should be in a file named "City Hall.csv". KAI UP will automatically co-relate the data by comparing POS data file name with the label name.

## Data Format

Data must be in Semi-colon Separated Values (SSV) format, which is like the commonly used CSV format, but uses semi-colon as the field delimiter.

It should have the following columns:
/ **Date** (yyyy-mm-dd)
/ **Time** (hh:mm - hh:mm)
/ **Receipt Count** (a numeric value or empty if no data, commas are allowed, leading/trailing spaces are ignored)
/ **Sales Amount** (a numeric value or empty if no data, commas are allowed, dot is allowed for decimal point, leading/trailing spaces are ignored)

Each row should be consolidated sales data of 1 hour, in multiples of 1 hour. The following are valid:
/ **10:01 - 11:00**
/ **16:01 - 18:00**
/ **00:00 - 09:00**

Example rows
/ **2014-06-11;10:01 - 11:00;31 ;25943.80**
/ **2014-06-11;00:00 - 08:00;;**
/ **2014-06-11;20:01 - 21:00;98 ;227,937.75**

Sample file
/ **City Hall. csv download**

# Configuration of Automatic FTP Download

To set up automatic integration between your POS data and KAI UP, place your POS data file(s) on an FTP or SFTP Server and then configure your KAI UP account to download and import this data periodically.



## / Protocol

Type in the customer's server protocol e.g. ftp or sftp

## / FTP Server

Type in the customer's FTP or SFTP server hostname e.g. ftp.alpharetail.com

## / Port Number

The FTP or SFTP server port number

## / Username

The username to be used for logging in to customer's FTP or SFTP server

## / Password

The password to be used for logging in to customer's FTP or SFTP server

## / Folder Name

The location on FTP or SFTP server where the POS data files are stored e.g. "/export/kaiup"

# 2. Manual Insertion

If you prefer to insert the POS data manually into KAI UP, go to "POS Management" module of your KAI UP account and follow the screenshots below.

# POS Data Co-relation in People Counting Report

Once your account has POS data, the People Counting report will display the conversion ratio.