

Reporting, analysis and alerting of visitor density in a Healthcare environment

28-09-2020, Björn van Beek



What are Picopoint Solutions?

Picopoint is specialized in delivering digital marketing services based on the smartphone of your visitors. Our platform enables you to monitor, analyze and engage your visitors at a specific time and location. Our services can usually be integrated on top of existing hardware infrastructures, keeping the investment required to a minimum.

The opportunity: using existing hardware to generate valuable insights

Public Healthcare facilities often need to have an indication of the visitor density in their venue. This information is useful for crowd control, to find 'pinch points' in the building or to calculate strategically important metrics like visitor density. Picopoint Solutions has engineered a cost-effective way to monitor visitor density intelligently and continuously.

The **COVID19 pandemic** makes these services invaluable for you as a public Healthcare provider.

How does it work?

At present, most public Healthcare facilities provide Guest Wi-Fi as a service for visitors while they wait. The facility will be equipped with guest hotspot equipment such as Access Points and routers.

All phones, tablets, laptops etc. that have Wi-Fi enabled, will regularly scan for possible nearby Wi-Fi access points. Picopoint collects these probes from the on-board Access Points and the retrieved data is used to create 5-minute interval snapshots counting all seen devices. We can leverage this data to give insights and indications of current and historical visitor density.

Picopoint Solutions are fully compatible with multiple hardware brands and can often be adapted for the existing hardware infrastructure. It keeps the privacy of users safe and is built on a fully scalable cloud-based infrastructure.

Richness of data

The valuable information is presented in a private online dashboard, giving clear insights in:

- Quick overview of the current visitor density per facility in the last 5-10 minutes;
- Overview of average visitor density per facility over longer periods (hours, days, months);
- Detailed overview of last hour and historical density over time;
- Heatmapping of visitor density over time in a facility;
- Status benchmarks over time of the average visitor density per hour of the day / day of the week.

Be notified on high density

It is possible to setup alerts for high density situations through mail and SMS. Alerts can be individually tailored for specific time periods, facilities, density thresholds etc.

Flexible setup

All data can be grouped if required in different segments, benchmarked and focused on specific periods of time. All displayed metrics can be exported to CSV and Excel. Additionally, Picopoint has a fully documented API to quickly share the data with existing data management platforms.

Device Health monitoring

Stay in control of your hardware infrastructure by connecting your devices to our platform. This will enable you to monitor uptime, load, connection speed of all Access Points in your network to maintain a stable service. Stay one step ahead and be the first to know if your network has outages.

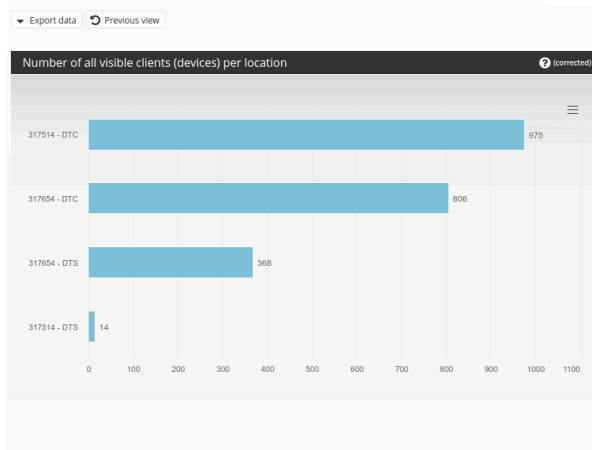
COVID19 Crowd control, alerting and background investigation

During the COVID19 pandemic these are all great tools to have available.

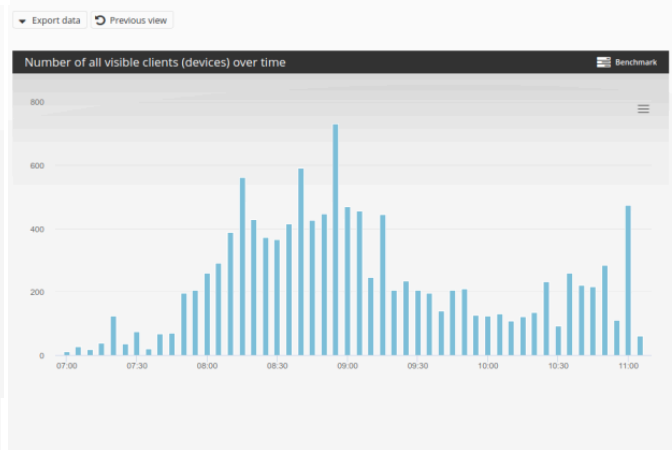
- Realtime crowd control information can help you to gain insight in visitor density to structurally improve social distancing in a facility.
- Alerting can be enabled to receive notifications via SMS or E-mail, so you can act if it is too crowded at a certain location.
- Guest Wi-Fi can be deployed to collect information to contribute to visitor registration and background investigation.

Visualization

Client tracking - count per location

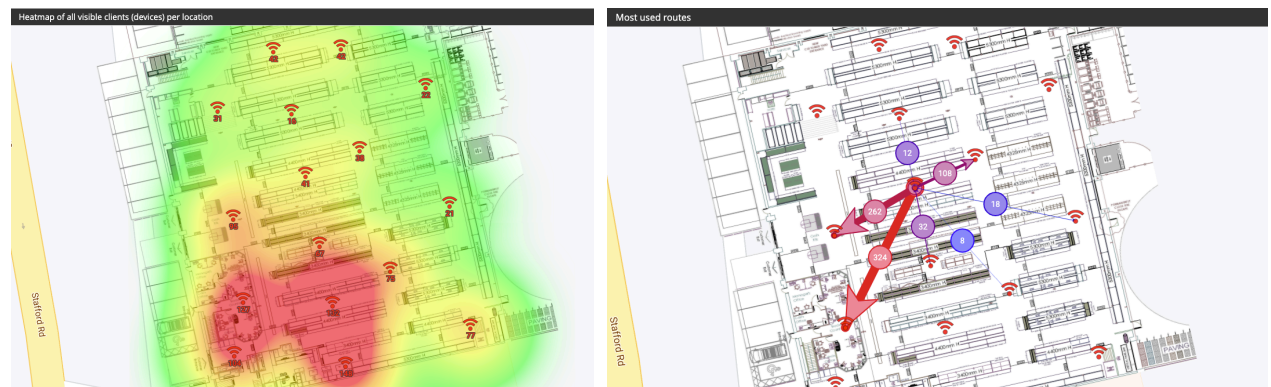


Client tracking - count over time



Overview of visitor density over multiple Access Points in the last 10 minutes, and a detailed view of visitor density of a facility during the morning.

Heatmapping



Example heatmap showing density in a facility, and a screenshot displaying the most travelled paths from a specific point inside the facility.

Notifications

Alert on client tracking activity in-/decrease

Save Delete Cancel

Active

Active * ☒

WSP	UR Group	urgroup
Group	UR Group - AGA	urAGA
Location	(none)	

Conditions

Alert on less activity [no alert]

Alert on more activity [no alert]

Compare with * the average for the last 3 months for the same weekday/hour

Only trigger if client count at location is higher than * 600

Time

Active on days Mon Tue Wed Thu Fri

From * 06:00

To * 22:00

Notification

Notify via e-mail test@picopoint.com

Notify via SMS

Minimum time between notifications 1 hour(s)

Setting up an alert for high density situations during weekdays.