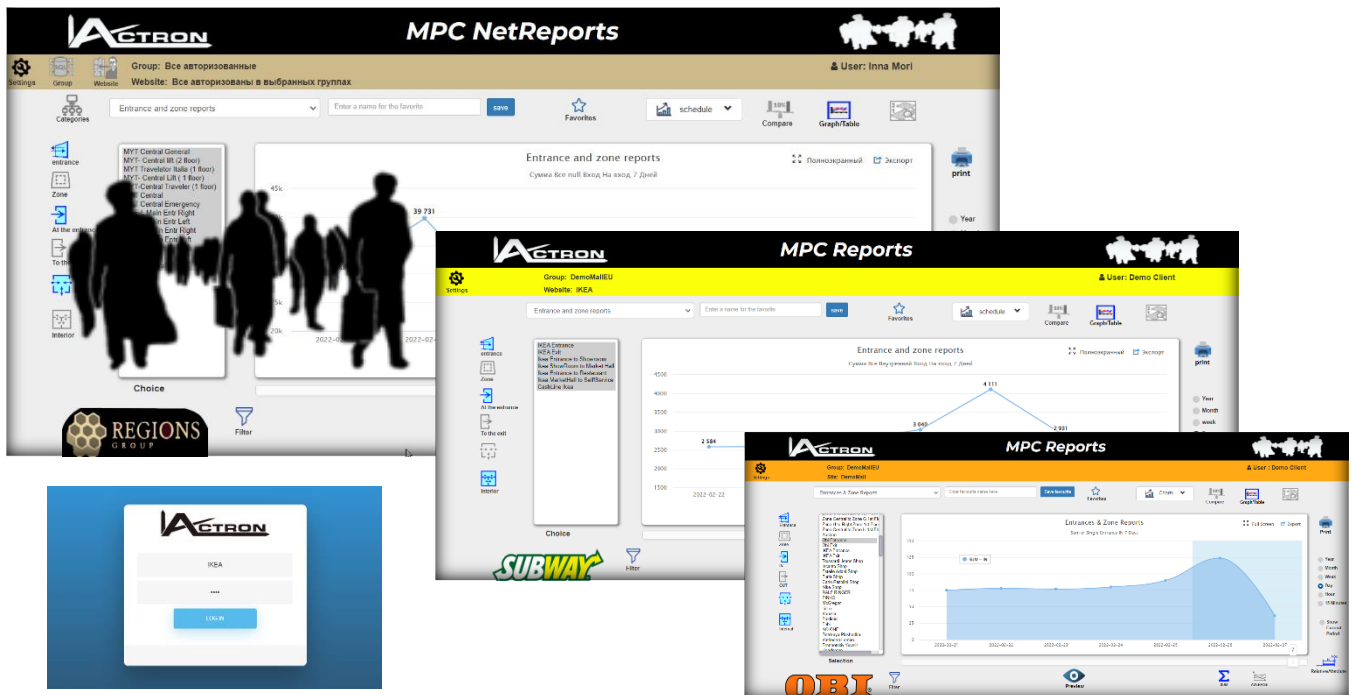




MPC Universe Web reports Highlights



Actron has been a major supplier of People Counting systems for **more than 25 Years**. This experience has made it possible to take some big steps **Today the People Counting is a part of our Visitor analytic system.**

This is a summary of some highlights in MPC Universe reporting system
The document is intended for Internal usage and for summarizing our highlights for important old and New clients. It is not a manual or leaflet.

- **Very User friendly**
- **True Cloud solution**
- **Comfortable Favourite and automated email sending handling**
- **Advanced Help functions**
- **Wide Language support**
- **Integrated Visualization**
- **Alert generation supporting Email, SMS and WhatsApp alerts**
- **Clear philosophy**
- **Flexible User administration**
- **Unique Category handling**
- **Efficient Principle for setup and development:**
- **Support of Queues and Waiting time**
- **MPC Special Reports creates any layouts and combined reports**
- **Real Time Push data**
- **Complete Backup system**
- **Data security**
- **Support of almost any sensor brand**



Very User friendly

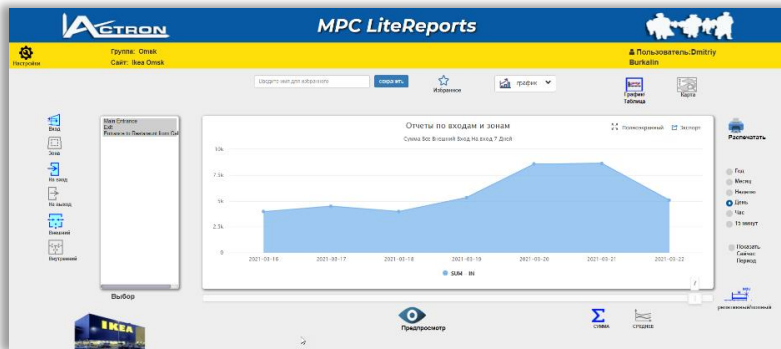
(we have studied how the clients use the system for many years)

Combination of most User friendly and most flexible User Interface MPC Web Reports are divided into 4 different levels.

The reason is that this allows us to keep the **simplest and user-friendly** user interface at the same time as this allows us to supply the **most powerful** functionality available



MPC Lite Reports and MPC Reports allows you to make reports from **One Site** (One Ikea like in this example IKEA Omsk) MPC Lite Reports is **the simplest version**. Only the most



useful functionality can be used.

The reason is to make it optimal easy to use for people, who do not need the rest of the functions. It will always start up like this, showing the Total visitation the last 7 days (Sum of External entrances In).

(This is the most common report, which is generated by clients. So it makes a quick start from where you can modify the report.)

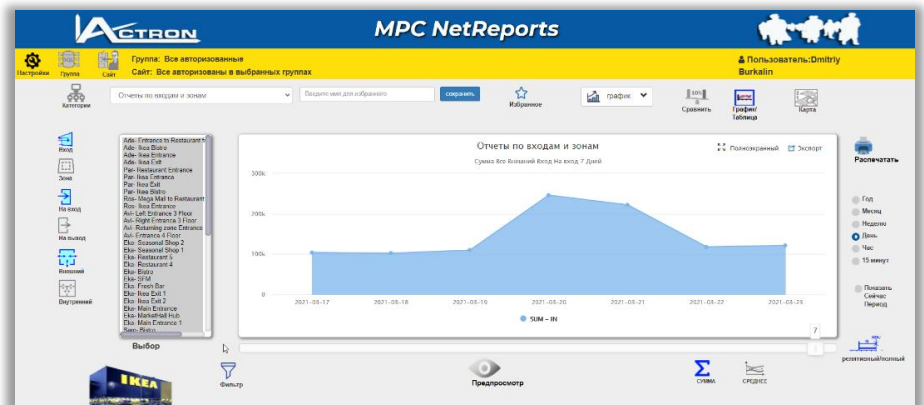
MPC Reports allows you to make reports from **One Site** (One Ikea like in this example IKEA Parnas) But it has got almost all other functionality compared to the two upper versions. But There is no possibility to make selections using the **Category functionality**

MPC Site Reports allow you to make reports from any amount of **Sites** like in this example from Ikea Parnas)

MPC NetReports has all functionality

But it can also be connected to several **different databases which we call Groups**.

In this example we connect all Ikeas in Russia into one application.





True Cloud solution

Many suppliers say that they have a Cloud solution 3ven if the reports still are dependent of the server time.



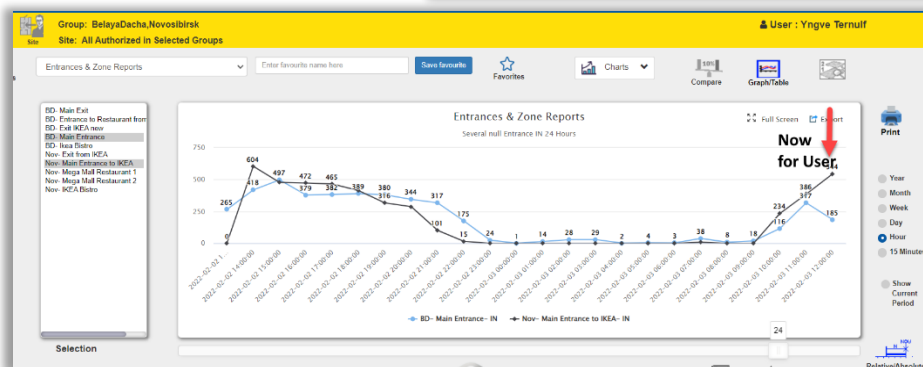
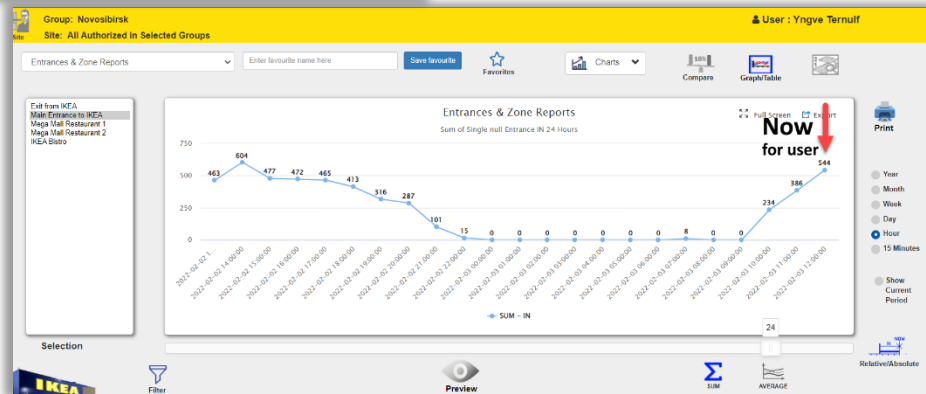
MPC Universe is a true cloud solution.

Therefore, there are no time references to the physical servers in the cloud.

The only time references are the **time zone of the physical sensors and the time zone of the user.**

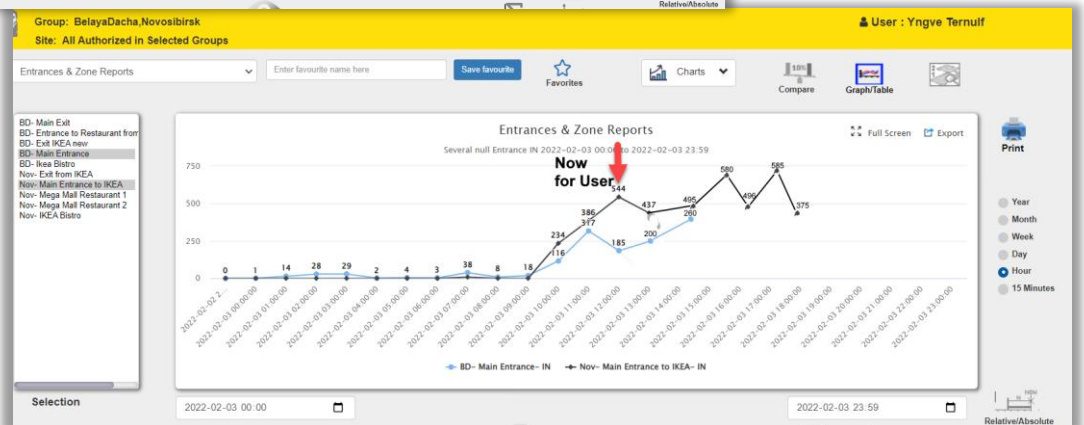
The Time zone of the physical sensors decide the time stamps in the database. The Time zone of the User decides the time the relative reports show as **NOW**.

E.g. The user is in central Europe where the time is 12:00 and looks at an Entrance in another time zone e.g. Novosibirsk it will be 6 hours difference. So, the time in Novosibirsk is 18:00 at this moment



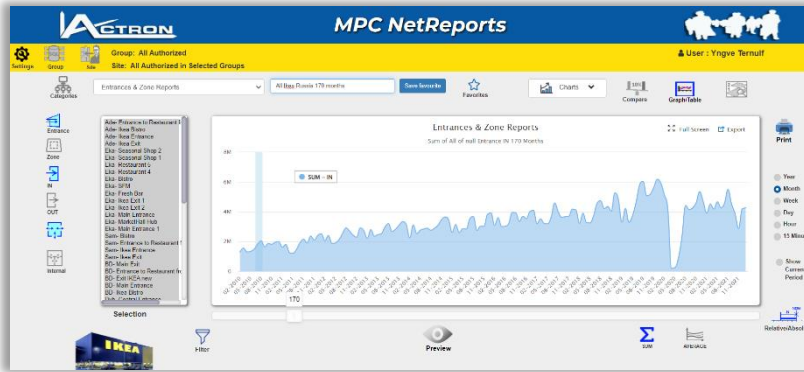
If the user wants to see full time stamped data then either the user must have an **additional Login** with the time zone covering the sensor time stamps

or use **Absolute Reports** instead of relative and look into to the future



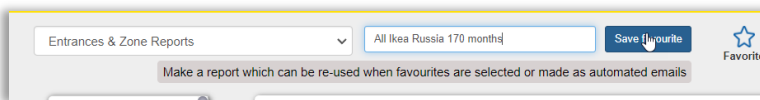


Comfortable Favourite and automated email sending



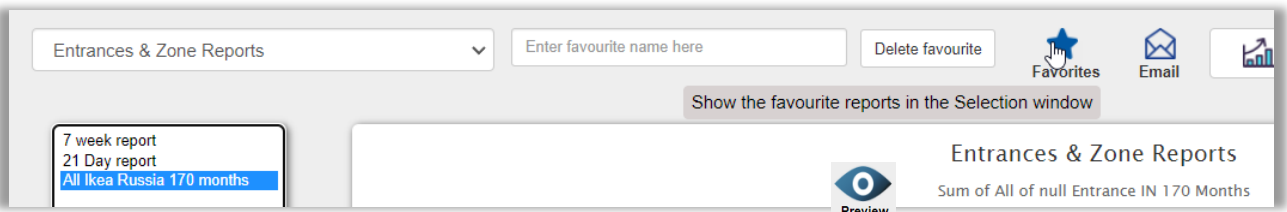
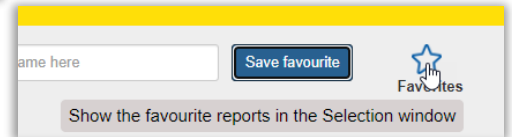
MPC web reports has a **very comfortable way to create your own favourite reports**, which you can use whenever you want without any effort.

Generate the report once and then press Save Report.



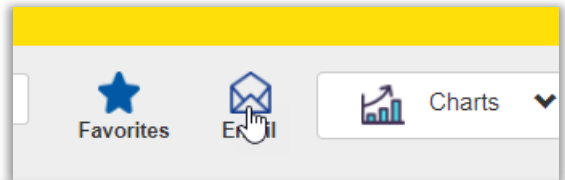
Select a favourite

Then You can anytime press the Favourite button and select the favourite you want to show. You can add any favourite and remove them if .



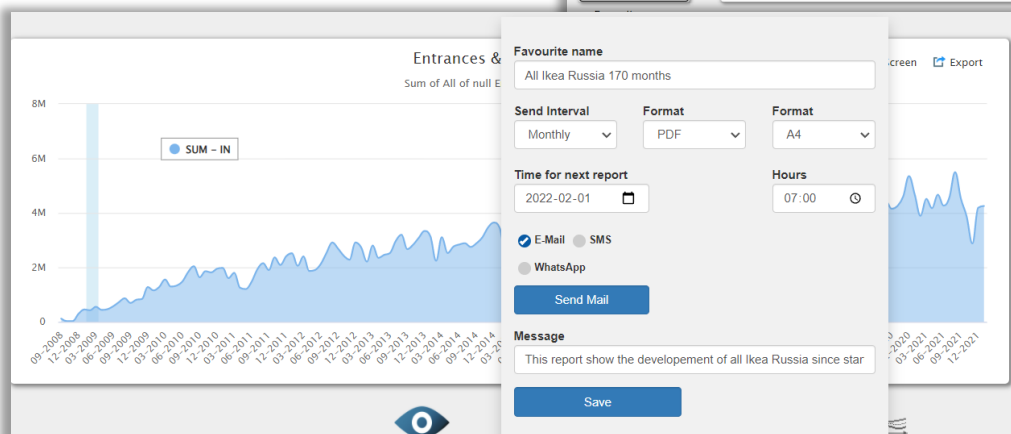
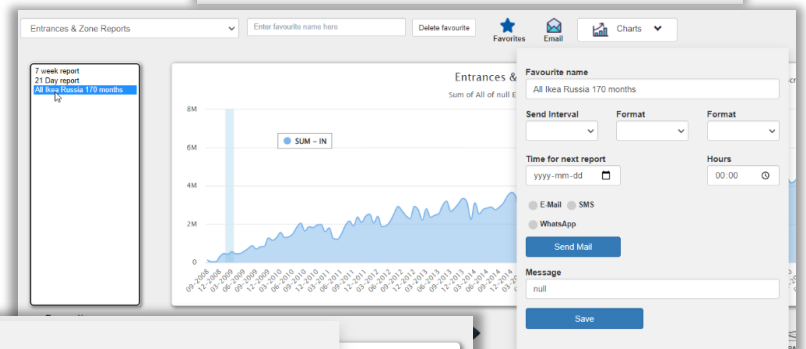
You can easily make the Favourite email enabled

Press the Email symbol



Now you can administrate your Favourite and make it email enabled.

(Later you will be able to make it SMS or WhatsApp enabled too)



Set the parameters for the email

In this case make a monthly sending on the first day of each month.

You can test the report immediately through pressing "Send Report"

Advanced Help functions

There is a complete set of manuals which is suitable for each level of usage. From **Simple instructions for simple usage** to **detailed manual for advanced usage**.

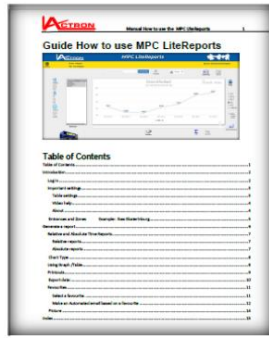
1

Simple instructions for simple usage



2

Manual for MPC LiteReports



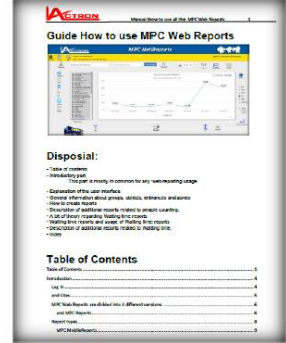
3

Manual for MPC Reports (including LiteReports)



4

Manual for full usage from MPC NetReports and downwards

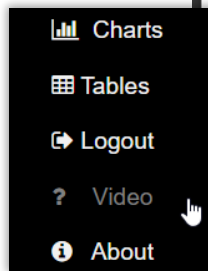


But as mentioned before the user interface makes the usage **extremely intuitive**. So, normally manuals are **even not needed**.

There are even some very useful **help functions directly in the User interface**

Video help

Context assistance



Choose a language: English, English, Russian, Swedish

This video shows the new updated user interface especially for waiting time reports. It brings more comfort. It is quicker and more flexible.

This video shows You the different report types and goes deep into People Counting related reports like Occupancy, Dwell Time etc..

This video shows how to use Categories in a Large Retail Chain in order to make selection of sites comfortable and realistic even if there are several 1000 sites

Wide Language support

There is now support for **17 different languages**. Examples

| Language | |
|----------|------------|
| 1 | English |
| 2 | Russian |
| 3 | German |
| 4 | Swedish |
| 5 | Spanish |
| 6 | Arabic |
| 7 | Chinese |
| 8 | Portuguese |
| 9 | Hindi |
| 10 | Dutch |
| 11 | Slovene |
| 12 | French |
| 13 | Italian |
| 14 | Danish |
| 15 | Polish |
| 16 | Japanese |

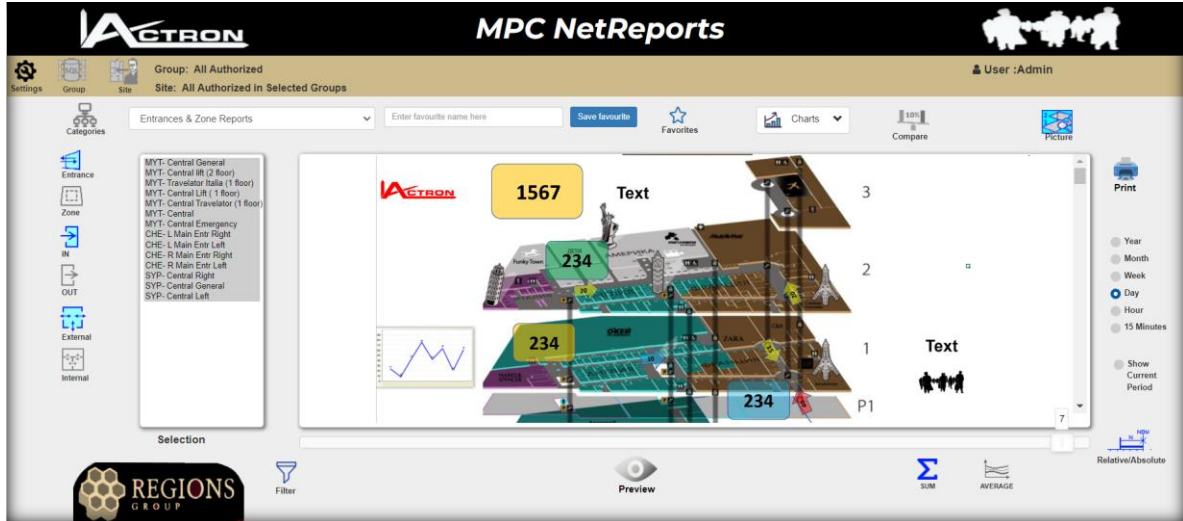


Integrated Visualization

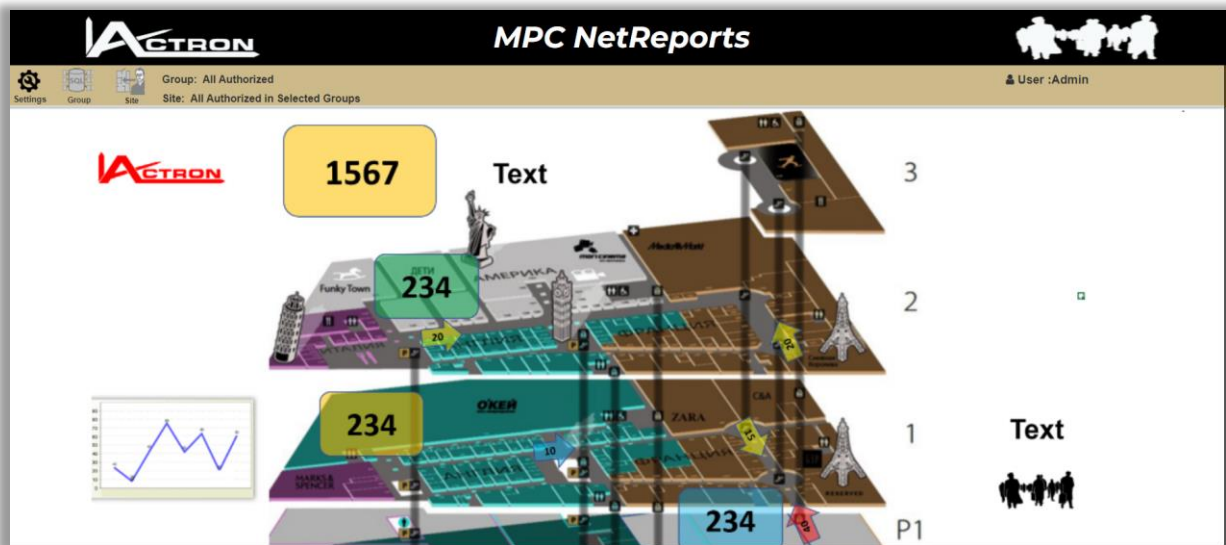
(to be launces spring 2022)

The visualisation will be integrated in the MPC web reports

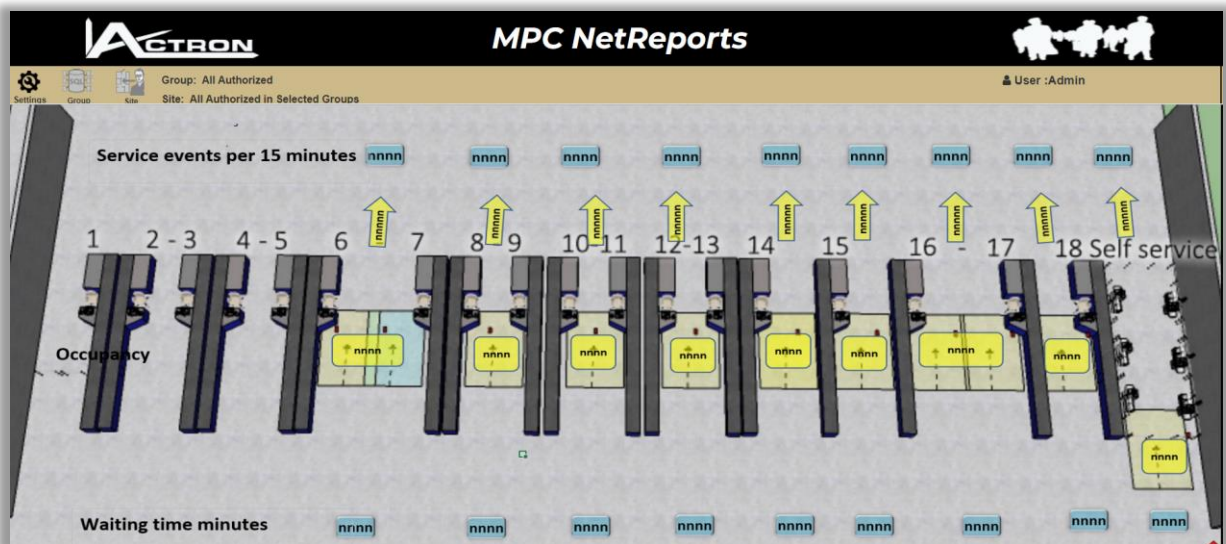
This means that when map is shown it will get animation if it is animated.



Example. Full screen.



Example Queue waiting time visulatization



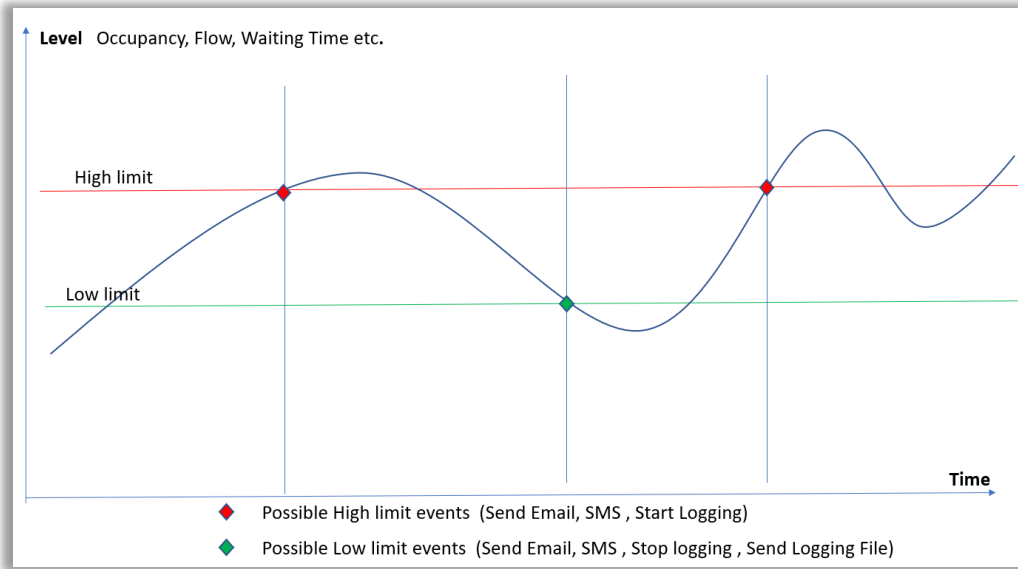


Automated Alert generation Email, SMS and WhatsApp alerts

(to be launched soon)

There will be alerts through either Email, SMS or WhatsApp to selected users **triggered by certain levels of either Occupancy, Flow or waiting time etc.**

The supplier will **on request from the clients** set up what alerts will be generated and when



This is done through a very flexible setup application

Alert Definition

Client:

User:

Group:

RT Table:

Entrances Zones Queues

>=Level

Send Text >=

WhatsApp message
 Email Start Logging
 SMS

<=Level

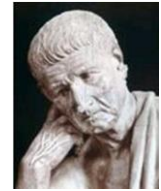
Send Text <=

WhatsApp message
 Email Attach Logfile
 SMS

8 New Record

| No | User | DB Name | RT Table | Element | TableColumn | >=Email | >=SMS | <=Email | <=SMS | >=Wapp | <=Wapp | >=Level | <=Level | Logging | Att | Logfile | Text Positive | Text Negative | PassedPlus |
|----|----------------------|----------------------|----------|-----------------------|--------------------|---------|-------|---------|-------|--------|--------|---------|---------|---------|-------|---------|------------------------------|--------------------------------|------------|
| 1 | Denis Barelyuk | RegionsGroup_Mytishi | RT_occ | Total Zone | Occupancy | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 2100 | 1800 | TRUE | TRUE | TRUE | Too High occupancy | Occupancy is OK again | |
| 2 | Maria Zaykova | RegionsGroup_Mytishi | RT_Occ | Market hall | Occupancy | TRUE | TRUE | TRUE | TRUE | TRUE | TRUE | 2100 | 1800 | TRUE | TRUE | TRUE | Too High occupancy | Occupancy is OK again | |
| 3 | Maria Zaykova | RegionsGroup_Mytishi | RT_Entr | Main Entrance | Flow In 15 Minutes | TRUE | FALSE | FALSE | FALSE | TRUE | TRUE | 150 | 100 | FALSE | FALSE | FALSE | High Flow in last 15 minutes | | |
| 4 | Maria Shestakova | RegionsGroup_Mytishi | RT_Queue | Total zone | Cashier 9-10 | TRUE | TRUE | FALSE | FALSE | FALSE | FALSE | 600 | 300 | TRUE | TRUE | TRUE | Long waiting time Cashline 3 | Normal Waiting time Cashline 3 | |
| 5 | Maria Shestakova | RegionsGroup_Mytishi | RT_Queue | Total zone | Cashier 9-10 | TRUE | TRUE | TRUE | TRUE | FALSE | TRUE | 600 | 300 | TRUE | TRUE | TRUE | Long waiting time Cashline 5 | Normal Waiting time Cashline 5 | |
| 6 | Alexandra Shestakova | IkealRussia_Omsk | RT_Queue | shortout to Restaraun | Flow In Minute | TRUE | TRUE | TRUE | TRUE | FALSE | TRUE | 600 | 300 | TRUE | TRUE | TRUE | Long waiting time Cashline 9 | Normal Waiting time Cashline 9 | |
| 7 | Yngve Ternulf | Hines_Pulkovo | RT_Entr | Floor3 | Occupancy | TRUE | TRUE | TRUE | TRUE | FALSE | TRUE | 600 | 300 | TRUE | TRUE | TRUE | High Occupancy Floor 3 | Normal Occupancy Floor 3 | |

Beside getting text messages there is also an option to get an automated **Log file in Excel** via email when certain criteria's are fulfilled. This will **graphically show what happened** and the time how it developed during the critical period.



Clear philosophy

E.g. Group and Site definition

There is a **well-defined philosophy** behind the structure of setup and the authorization of the users.

It is normally practical to divide a Client into Groups.

Each Group can consist of one to several sites. A group is only logical. It does not need to be associated to Geography.

In many cases it is still practical to define a mall etc as a group.

In this case each Ikea is a group.

| ClientID | GroupId | Name | Shortname | TCP/Opti |
|----------|---------|-----------------|-----------|-----------|
| 1 | 1 | Adegeya | Ade | 212.119.2 |
| | 2 | Ekaterinburg | Eka | 212.119.2 |
| | 3 | Samara | Sam | 212.119.2 |
| | 4 | Belaya Dacha | BD | 217.112. |
| | 5 | Dybenko | Dyb | 195.190.1 |
| | 6 | Kazan | Kaz | 195.239.1 |
| | 7 | Nishny Novgorod | NN | 89.189. |
| | 8 | Novosibirsk | Nov | 195.222.1 |
| | 9 | Omsk | Oms | 82.200. |
| | 10 | Parnas | Par | 194.186. |
| | 11 | Rostov | Ros | 194.154. |
| | 12 | Avia Park | Avi | 62.231. |
| | 13 | Atlantic City | Atl | |

A group consists of Sensors, Entrances, Zones, Queues and **Sites**

| SiteID | Total | 1 | 2 | 3 | 4 | 5 | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 |
|--------|-------------------------|---|---|---|---|---|----|----|----|----|----|----|----|----|----|-----|-----|-----|
| 1 | Total Ikea Ekaterinburg | | | | | | | | | | | | | | | | | |
| 2 | Ikea Tyumen | | 3 | | | | | | | | | | | | | | | |
| 3 | External shops | | 4 | | | | | | | | | | | | | | | |

A site is what a user has authorization to see and get reports from.

It consist of a combination of Zones, Entrances (and Queues)

E.g. a retail chain could consist of one group with several sites all around the world. Each store could theoretically be a group with one site each.

But the most practical is to divide the retail chain into a number of groups with a number of stores in each group. They should logically belong together. E.g. Stores belonging to a region.

A User can have authority to one or more **Groups** and one or more **sites** in each group.

Flexible User administration



Users have different **authority to different Sites**

E.g. for a retail chain the central managers normally have got the right to watch all regions and **all sites worldwide**, while a regional manager will have the right to all **sites in his/her region** and a store manager has the **right to his/her store**.

Any combination of authority is possible

Unique Category handling



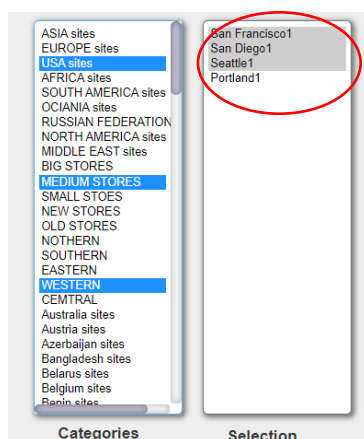
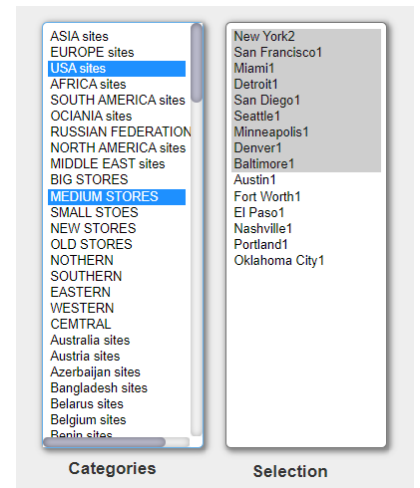
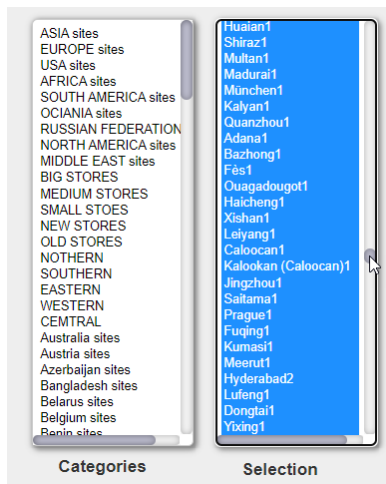
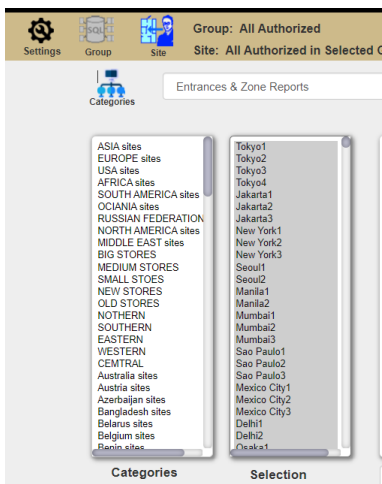
Select Category



The category handling in MPC web reports allows the user to make **quick, flexible and easy selections of categories for the reports**

The categories can be selected by Group, Site, Entrances, Zones Queues etc.

The unique way of doing this is maybe **most valuable in Large retail chains** where the user wants to study the trend in a specific group of stores.



In this example the user wants to see the trend in the **MEDIUM STORES** in **WESTERN USA**.

There could be thousands of stores in the list.

Three quick selections will narrow the report selection down to the stores SanFrancisco1, SanDiego1, Seattle1 and Portland1



General Principle for setup development:

This might not be directly important for the user. But indirectly it leads to a much more flexible and quicker setup of the system, which gives a lot of benefits for the user.

Everything, which the users shall do must be web enabled.

| ClientID | GroupID | Name | Shortname | TCP/IP Option | Computer Name Option | Database Name | Password Option |
|----------|--------------|------|-----------------|------------------|-------------------------|---------------|--------------------|
| 1 | Adigra | Afg | 212.119.224.250 | pasche-wk111 | IEA Russia_Adigra | | pasche |
| 2 | Katernburg | Kfa | 212.119.224.250 | WIN-QK677MGPYM | IEA Russia_Katernburg | | pasche |
| 3 | Samaru | Sfm | 212.119.216.276 | pasche-wk111 | IEA Russia_Samaru | | pasche |
| 4 | Beluga Ducha | Bfd | 212.112.28.234 | WIN-BL877MAG08 | IEA Russia_Beluga Ducha | | pasche |
| 5 | Dydenio | Dyb | 195.100.109.174 | WIN-CQ5277440 | IEA Russia_Dydenio | | pasche |
| 6 | Kazan | Kaz | 195.239.129.178 | pasche-wk111 | IEA Russia_Kazan | | pasche |
| 7 | Novosibirsk | Nfn | 89.109.0.85 | pasche-wk111 | IEA Russia_Novosibirsk | | pasche |
| 8 | Novosibirsk | Nfn | 195.222.180.230 | pasche-wk111 | IEA Russia_Novosibirsk | | pasche |
| 9 | Omsk | Oms | 84.200.37.21 | pasche-wk111 | IEA Russia_Omsk | | pasche |
| 10 | Perm | Per | 194.196.122.14 | Computer10 | IEA Russia_Perm | | pasche |
| 11 | Rostov | Ros | 194.154.84.182 | Computer11 | IEA Russia_Rostov | | pasche |
| 12 | Alma Park | Alp | 62.231.5.219 | Computer12 | IEA Russia_Alma Park | | pasche |
| 13 | Atlanta City | Atl | | Computer13 | IEA Russia_Atlanta City | | pasche |
| 14 | New Ul'iana | Nul | | | IEA Russia_New Ul'iana | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
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| 35 | | | | | | | |
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| 38 | | | | | | | |
| 39 | | | | | | | |
| 40 | | | | | | | |

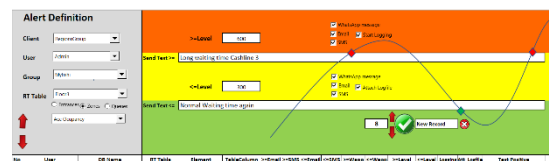
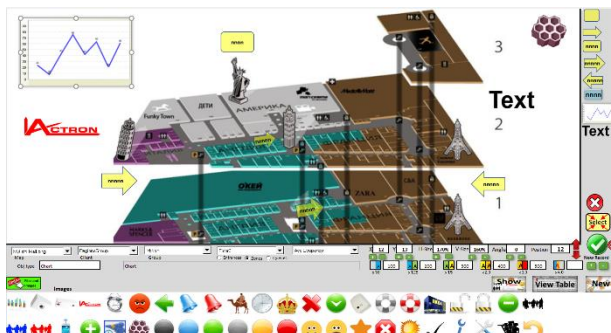
| Entrance name | 1 | 3 | 7 | 8 | 1 | 2 | 18 | Mapimage | Category Name |
|-----------------------|---|-----|-----|---|---|---|----|--------------------------|----------------|
| Total Zone | | | | | | | | Sam.jpg | Total Zone |
| Market Hall Self serv | 2 | -10 | -15 | 2 | 3 | 4 | 10 | Sam Market Hall Zone.jpg | Big Zone |
| Shopkeepers | 1 | 4 | | | 2 | 4 | 10 | Sam Shopkeepers Zone.jpg | Small Zone |
| Restaurant | 3 | 4 | 5 | | 5 | 3 | 18 | Sam Restaurant Zone.jpg | Medium Zone |
| | | | | | | | | | Restaurant |
| | | | | | | | | | Market Hall |
| | | | | | | | | | Show Room |
| | | | | | | | | | Customer |
| | | | | | | | | | Waiting area |
| | | | | | | | | | Bus |
| | | | | | | | | | Reception area |

But development which only the supplier shall do has no real advantage of being web enabled. We have turned this into offline development mainly based on VBA and where the platform normally is based on Excel.

This gives very good advantages.

It gives much more flexibility and overview. It enables the usage of many comfortable function and it is easier to upgrade. So we have left the old web-based administration and base the central setup on this practical environment.

Even if the comfort and flexibility of the development process makes the development very quick there is a very quick way for the skilled developer to use the standard Excel Copy/Paste and modify possibilities



This makes the development cycle unbeatable quick with maximum overview



Real Time applications to be used by PC or smartphone

MPC RealTime allows the users to see the **most important information and trends in the stores in “real time”**

Today it is very important to know how the performance of the store is in Real time.

That is how the user can optimize the result.

Today it is also very important to watch the

Occupancy in real time

The **pandemic makes this extra important** these days

But also other important parameters are shown in real time, e.g.

-Dwell time

-People flow

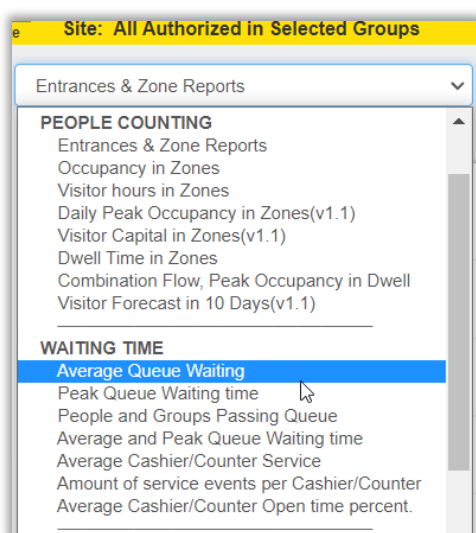
It is well known that it is very much more difficult to present occupancy with high accuracy compared to e.g. people flow.

But we have based on >25 years of experience succeeded to reach a very high and unique real time accuracy also for occupancy.

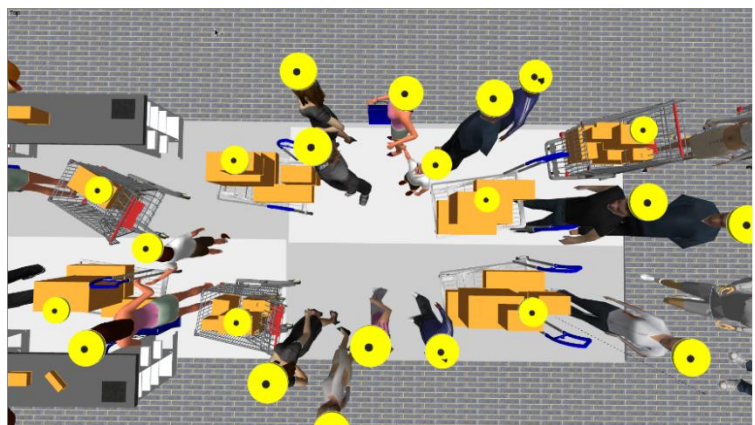


Support of queues and waiting time

Thanks to a unique way of using TOF (Time Of Flight) technology we have succeeded to reach a **very high accuracy of waiting time etc. for more complicated queues.**



Traditional (normally Video based) Queue systems are OK when the queues are well organized. (e.g. in front of security in an airport)



But in hypermarkets (and Typical

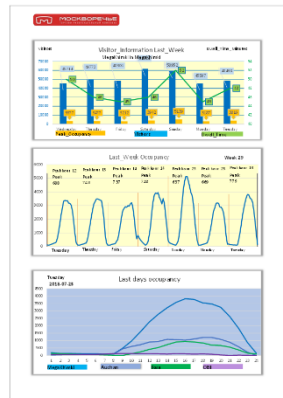
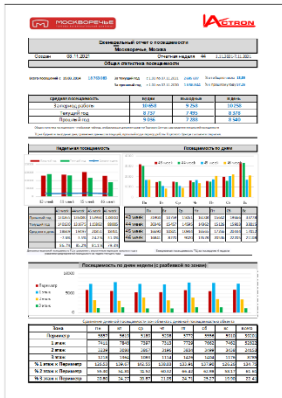
Ikeas) where there are lots of trolleys and different group sizes (families and single people etc.) the accuracy is far from acceptable.

We present a **high accuracy** even in the cases taking the **mix of visitor groups, trolleys with lots of load etc. in consideration.** We also track the people when they temporarily disappear.

The system presents the result in **real time visualization, analytic reports and alerts.**



MPC Special Reports



This is a **unique product, which will generate any kind of reports to the customers.**

It makes any layout of reports in .pdf or Excel and sends it to our customers via automated emails.

It is possible to combine Charts, tables, text, pictures and logos etc. exactly like the customer wants.

It will take the data from MPC Universe database (or from other databases) It will also be possible to take data from any Excel, CSV, TXT file etc.

It is to take data from any web page too.

All necessary calculations are made in the product.

Then it will send emails to the users, who are specified in the setup table in any frequency with any attachments.

It is possible to integrate data from external systems. And one of the really unique reports is **Visitor forecast**, which in an optimal way take all parameters like history, weather, season etc into consideration and generate a far more accurate forecast than any humans can do. This is **very important for the planning of staff and product display.**

Only some manual work is needed to design the layout of the reports, make suitable references in Excel and if necessary, calculations. But once this is made **everything is automatic.** Some reports are identical are similar from customer to customer.

Some examples:

A conversion rate report needs to combine data from another source (e.g. a POS system)

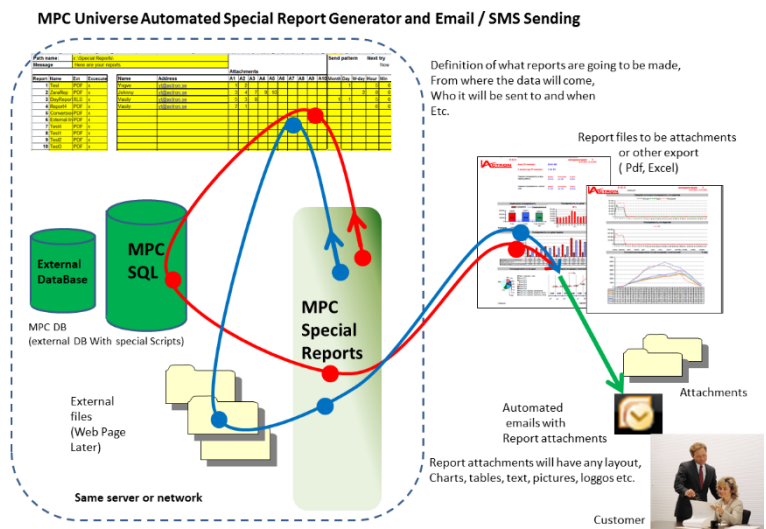
This data is normally available in a file or in the POS database.

Many times the customer also want their own specific layout and combine with other data.

A report, which will be sent in many versions built from the same layout only needs to be created once.

It will send in any frequency.

Monthly, Weekly, Daily, Hourly etc.

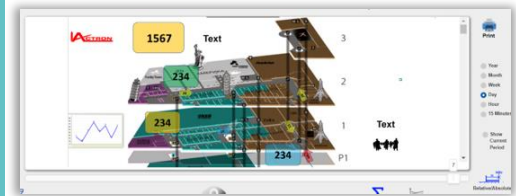


Real Time Push data

The sensors push the data to the cloud in principle in real time



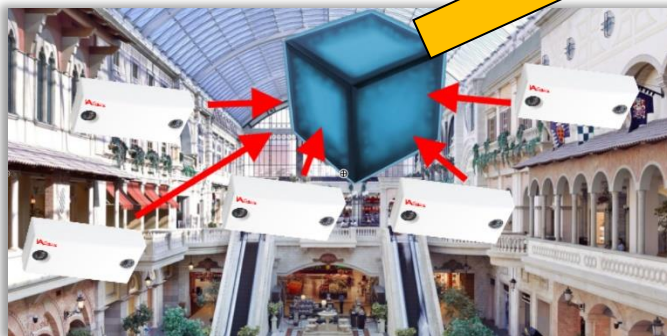
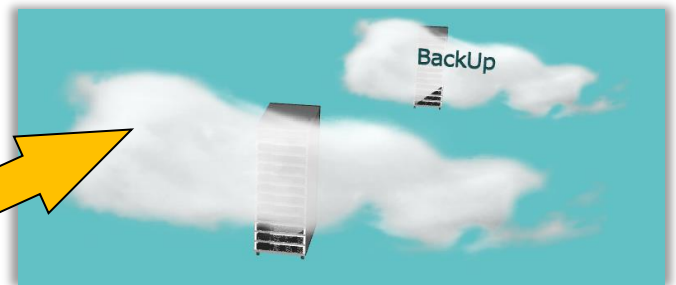
This creates a great flexibility to use **Real time applications, Visualization, Real time alerts, etc.**



Complete Backup system

The sensors send the data in almost real time via VPN
 The VPN can be arranged via a local router.
 But we have also have an alternative solution.
 We can supply our **local quality but low cost device**, which arrange the VPN connection and let us connect. This device also takes care of **local storage**.
 So, this will enable two levels of local backu

Cloud storage and extra Cloud backup



1. Many sensors have local backup inside the sensor itself.
2. Our local device stores the data long term in local CSV files, which is easy retrieve.

So the backup in this case will be in four levels.

This has one more advantage:

Some clients have an internal policy saying that they must have full control of the data and then avoid Cloud solutions. This problem is completely avoided in this case.

Data security



data is extremely confidential.

We can provide the Conversion Rate reports in many ways.

The simplest is of course to handle this via NDA agreements. But still there are clients which hesitates this.

We have solutions where we can provide these reports to the clients without having availability to the clients POS data.

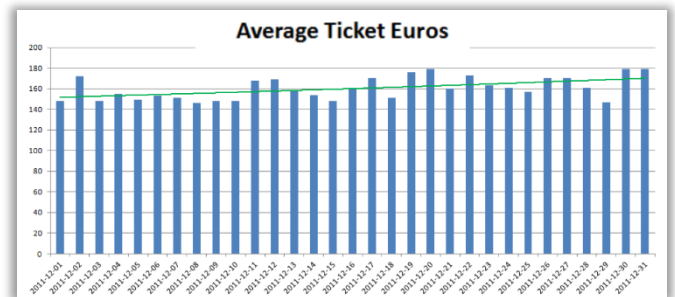
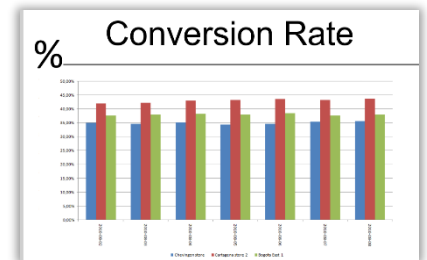
& Conversion Rate

There are many cases when the data is confidential.

Especially in retail solutions there is a **key information** which is called **Conversion rate**.

This is a combination between the POS data and the visitor information.

For many clients the POS



Support of almost any sensor brand

All sensors, which can Push data via Json or XML files etc are supported
Beside that several other sensors are also supported.

This means that MPC Universe can **easily take over old installations**
made by other suppliers and **enhance the flexibility and reporting quality**