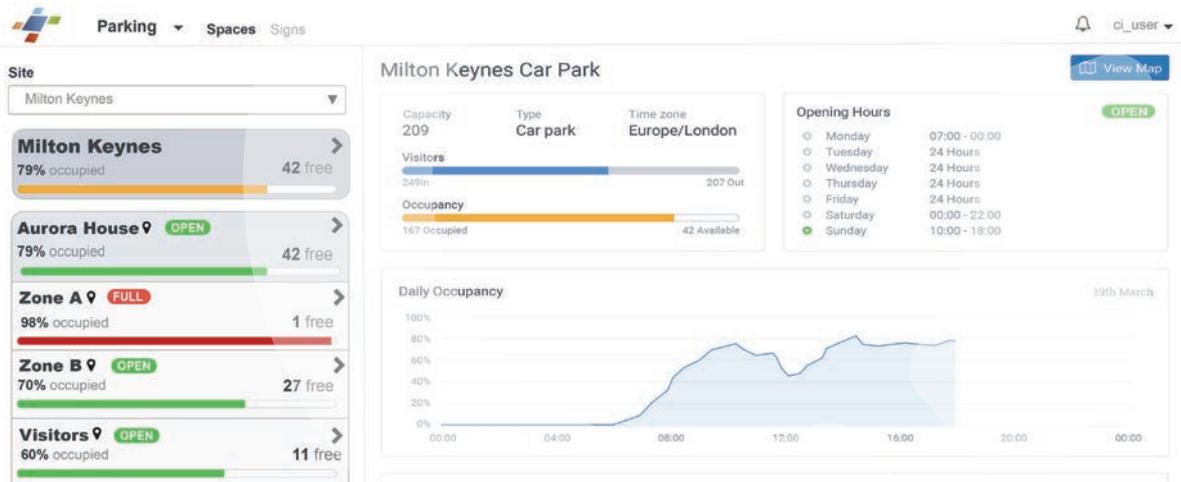


## Product Specification

Insight

Parking



Insight Parking from Clearview Intelligence is an integrated solution designed to simplify the management, monitoring and analysis of parking assets.

Combined with a range of sensors and signs, Insight Parking provides a complete solution for all types of parking operators and environments.



The Insight Data Management platform is a scalable hosted service underpinning a range of targeted applications for parking optimisation and traffic monitoring

Insight shares several tools across all applications for ease of administration and the flexibility to deploy multiple applications and modules.

Insight Parking builds on the core platform by providing a dedicated application for the management, monitoring and reporting of parking assets. Developed to meet the needs of operators in all sectors with a suite of tools designed to maximise workflows and usability.

Real-time dashboards update instantly on receipt of data from sensors and signs ensuring that the information presented is always up to date enabling informed decisions to be made.

A modular approach enables operators to scale the solution as required by adding to the core occupancy and reporting tools. Additional modules are available for bay sensors, Variable Messaging Signs (VMS) and Application Program Interfaces (API).

Designed to handle different operational roles across a multitude of locations, access to key functions and visibility of assets is controlled through a powerful permissions and roles module.

### Key Benefits

- Single solution avoids integration and support issues often associated with multi-vendor implementations
- Event driven system ensures that key decisions can be made with the latest information available
- Modular software and hardware solution provides multiple options to meet business needs and budgets
- Designed for usability and multiple operational roles aids in reducing the time spent managing assets and people
- Scalable architecture provides low cost entry point with ability to grow or large scale deployments from day one
- Cloud based solution reduces IT support overhead and provides secure access anytime

### Key Features

- Real-time application providing occupancy information for car parks and bays
- Dynamic and manual operation of Variable Messaging Signs
- Powerful roles and permissions system provides a tailored interface to a user's role and restricts access where required
- Cloud based web application designed for mobile first enables operational use in the field and in the office at anytime, anywhere
- Comprehensive set of web reports provide instant access to important data and export to Excel for further analysis
- Application Program Interfaces with built in documentation and test capabilities provide quick and easy integration with 3rd party systems such as mobile applications

### Parking Occupancy

At the heart of Insight Parking is the real-time occupancy system providing car park space availability via status bars, graphs, VMS reports and APIs.

Vehicle movements in and out of car parks are delivered by Clearview Intelligence's range of inductive loop count stations providing a cost-effective method to understanding car park usage.



### Bay Monitoring

Insight Parking combined with the M300 Bay Occupancy System is an ideal solution where accurate occupancy information is required for individual bays.

Bay sensors enable Insight Parking to display the occupancy status, number of visits and duration of stay. This level of detail is invaluable when analysing usage patterns for retail and parking operators to maximise spaces and revenues.

In addition Insight Parking can generate alerts via e-mail, XMPP and web browser to highlight occupied bays after a set time period. This feature is often used for highlighting abuse of parking spaces or to direct personnel to areas for enforcement when allocated parking times are breached.

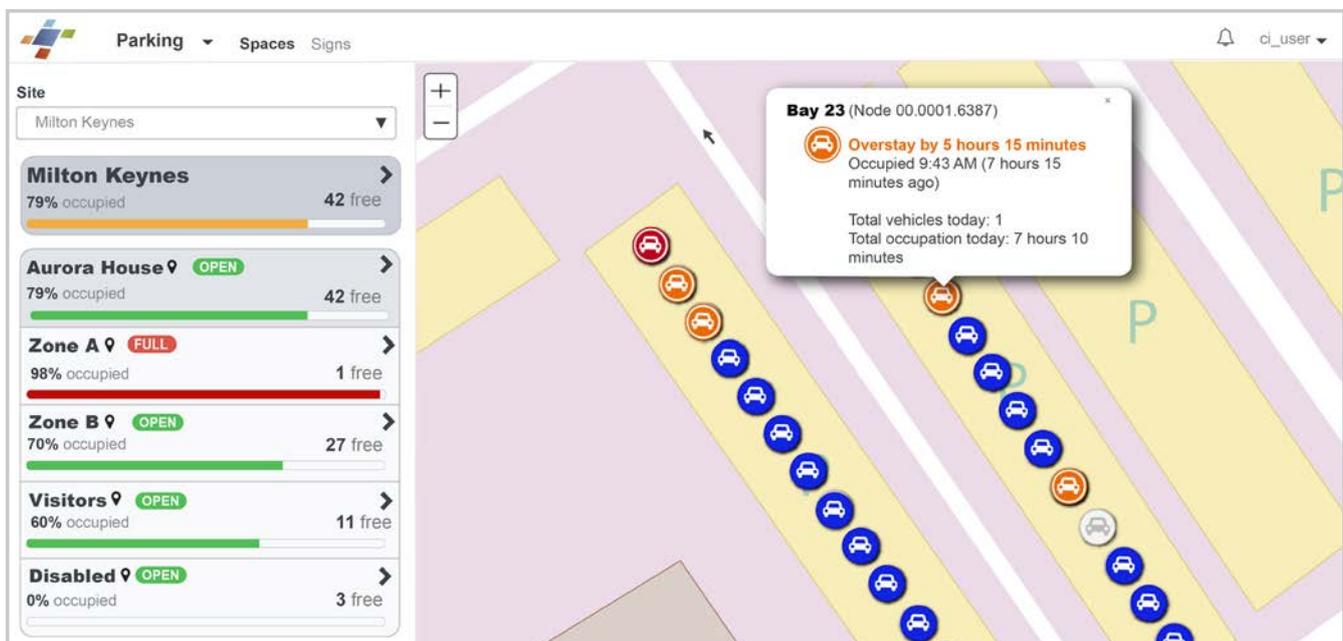
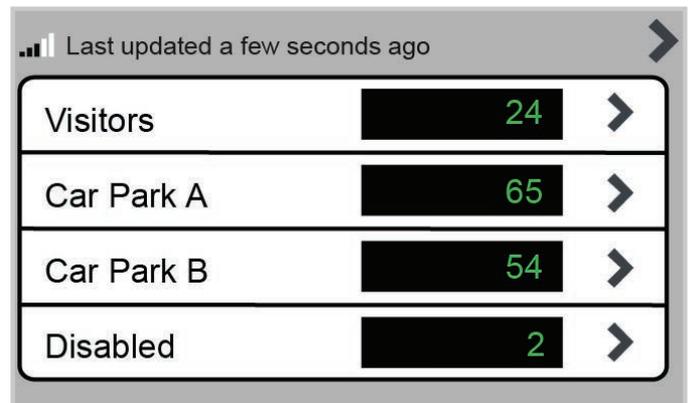
### Variable Message Sign Management

The ability to feed occupancy data and information to Variable Message Signs provides several benefits for both the operator and customer.

- Reduce the amount of time and congestion caused by drivers looking for spaces by providing clear direction on space availability and location
- Maximise parking assets by encouraging drivers to enter Car Parks that may look full from the roadside but in fact have spaces
- Provide a better experience for your customers by reducing the stress of finding a parking space

The VMS module provides the ability to feed static and dynamic data to VMS located at the roadside or within the Car Park. The signs interface provides a live view of the display and provides confidence for the operator that what they see is being displayed.

Support for traditional LED displays and modern full-matrix signs is provided.



Dynamic space availability can be shown for single or multiple zones and the system will automatically handle zone opening hours. A priority system is used to control when status, counts and messages are displayed and this can be configured for each display area.

Manual override is available and can be used to display text and numbers in situations where the default mode of operation needs to be changed on a temporary basis. Overrides are highlighted to draw attention to other operators that the default state has been changed.

Where VMS are connected by mobile communications then the signal strength is indicated along with the last update. Timeouts are configurable to show when a connection has been lost to aid in monitoring the VMS network. E-mail alerts can be configured to inform when connections have been lost ensuring that even when the system is not being monitored any issues arising can be notified to the appropriate person.

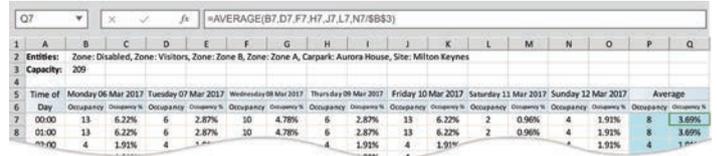
## Reporting

Insight Parking includes a set of core reports designed to enable quick and easy access to vital parking management data.

A simple interface means in a few clicks reports can be generated on screen and exported to Excel in seconds.

The Excel exported reports includes formatting and formulas reducing the time spent in making data easily digested and presentable. The inclusion of exported formulas provides an easy way to further analyse the data by automatically re-calculating any changes to the data. This can be of benefit when changing the

capacity values of Car Parks to see what impact expansion or loss of spaces would cause.



Reports are available for Site, Car Parks and Zones enabling managers to see performance from the top level and drill down into the detail where required.

Access to report data is controlled by the Insight Permission and Roles module. Only users who have permission to access reports can view report data. Users can be limited to only report on the Sites and Car Parks an administrator has given them access to ensuring that access to data is only available to those who are authorised.

Reports such as Occupancy and Visitors provide day to day management information on parking assets utilising both loop count and bay sensor technologies. Additional reports such as Average Stays and Overstays take advantage of bay sensors to provide a level of detail not available with Global Counting.

- Milton Keynes [S]
- Aurora House [C]
  - Zone A [Z]
  - Zone B [Z]
  - Visitors [Z]
  - Disabled [Z]

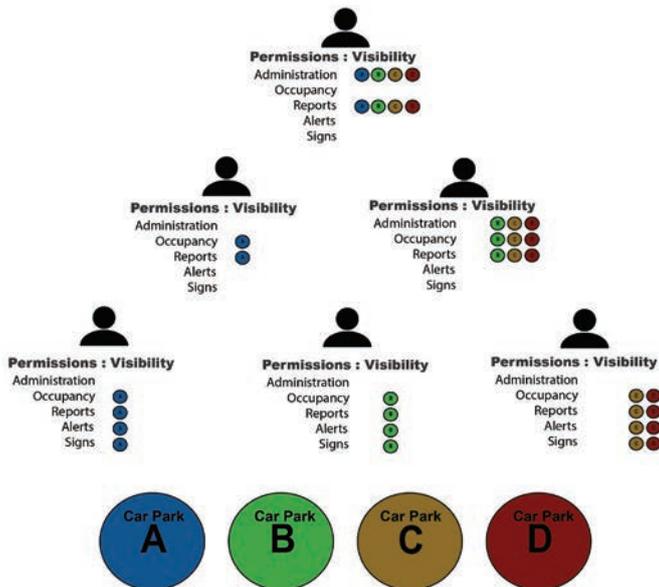
Reports		View		Create																ci_user	
Parking Sites Report		Groups:		Milton Keynes																2/6/17 - 12/6/17	
Template		Sites		Aurora House																	
Daily Occupancy Report		Car Parks		Zone A, Zone B, Visitors, Disabled																	
Groups		Capacity: 209																			
<input checked="" type="checkbox"/> Milton Keynes [S] <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Aurora House [C]               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Zone A [Z]</li> <li><input checked="" type="checkbox"/> Zone B [Z]</li> <li><input checked="" type="checkbox"/> Visitors [Z]</li> <li><input checked="" type="checkbox"/> Disabled [Z]</li> </ul> </li> </ul>																					
Report Title																					
Start Date		06/02/2017																			
End Date		12/02/2017																			
Interval		1 hour																			
View Report																					
Time of Day	Mon 06 Feb 2017	Tues 07 Feb 2017	Wed 08 Feb 2017	Thur 09 Feb 2017	Fri 10 Feb 2017	Sat 11 Feb 2017	Sun 12 Feb 2017	Average													
Day	Occupancy	Occupancy %	Occupancy	Occupancy %	Occupancy	Occupancy %	Occupancy	Occupancy %	Occupancy	Occupancy %	Occupancy	Occupancy %	Occupancy	Occupancy %	Occupancy	Occupancy %					
00:00	0	0.00%	2	0.96%	11	5.26%	10	4.78%	10	4.78%	6	2.87%	1	0.48%	6	2.73%					
01:00	0	0.00%	1	0.48%	11	5.26%	10	4.78%	10	4.78%	6	2.87%	1	0.48%	6	2.67%					
02:00	4	1.91%	5	2.39%	15	7.18%	14	6.70%	14	6.70%	0	0.00%	0	0.00%	7	3.55%					
03:00	4	1.91%	5	2.39%	15	7.18%	14	6.70%	14	6.70%	0	0.00%	0	0.00%	7	3.55%					
04:00	4	1.91%	5	2.39%	15	7.18%	14	6.70%	14	6.70%	0	0.00%	0	0.00%	7	3.55%					
05:00	4	1.91%	5	2.39%	15	7.18%	14	6.70%	14	6.70%	0	0.00%	0	0.00%	7	3.55%					
06:00	7	3.35%	8	3.83%	18	8.61%	17	8.13%	17	8.13%	0	0.00%	0	0.00%	10	4.58%					
07:00	29	13.88%	27	12.92%	41	19.62%	33	15.79%	34	16.27%	0	0.00%	0	0.00%	23	11.21%					
08:00	121	57.89%	111	53.11%	134	64.11%	114	54.55%	113	54.07%	0	0.00%	8	3.83%	86	41.08%					
09:00	164	78.47%	152	72.73%	158	75.60%	145	69.38%	146	69.86%	1	0.48%	40	19.14%	115	55.09%					
10:00	167	79.90%	154	73.68%	165	78.95%	151	72.25%	144	68.90%	2	0.96%	71	33.97%	122	58.37%					
11:00	159	76.08%	151	72.25%	163	77.99%	148	70.81%	136	65.07%	3	1.44%	78	37.32%	120	57.28%					
12:00	150	71.77%	143	68.42%	150	71.77%	145	69.38%	130	62.20%	2	0.96%	33	15.79%	108	51.47%					
13:00	157	75.12%	152	72.73%	155	74.16%	148	70.81%	130	62.20%	1	0.48%	12	5.74%	108	51.61%					
14:00	153	73.21%	149	71.29%	154	73.68%	138	66.03%	112	53.59%	1	0.48%	11	5.26%	103	49.08%					
15:00	142	67.94%	132	63.16%	144	68.90%	128	61.24%	104	49.76%	1	0.48%	6	2.87%	94	44.91%					
16:00	103	49.28%	96	45.93%	108	51.67%	98	46.89%	75	35.89%	1	0.48%	6	2.87%	70	33.29%					
17:00	33	15.79%	43	20.57%	44	21.05%	48	22.97%	30	14.35%	1	0.48%	6	2.87%	29	14.01%					
18:00	10	4.78%	19	9.09%	18	8.61%	23	11.00%	14	6.70%	1	0.48%	6	2.87%	13	6.22%					
19:00	3	1.44%	13	6.22%	12	5.74%	22	10.53%	10	4.78%	1	0.48%	6	2.87%	10	4.58%					
20:00	2	0.96%	11	5.26%	10	4.78%	10	4.78%	7	3.35%	1	0.48%	6	2.87%	7	3.21%					
21:00	2	0.96%	11	5.26%	10	4.78%	10	4.78%	7	3.35%	1	0.48%	6	2.87%	7	3.21%					
22:00	2	0.96%	11	5.26%	10	4.78%	10	4.78%	7	3.35%	1	0.48%	6	2.87%	7	3.21%					
23:00	2	0.96%	11	5.26%	10	4.78%	10	4.78%	7	3.35%	1	0.48%	6	2.87%	7	3.21%					
Average	59	28.35%	59	28.25%	66	31.62%	61	29.39%	54	25.90%	1	0.62%	13	6.16%							

### Permission and Roles

Insight Parking includes a powerful permissions and roles module that in addition to providing secure access can also be used to customise elements of the interface by removing certain modules. This way a user is only presented with the information they need to perform their roles and within the constraints of the locations they need to manage.

The diagram below shows multiple users with different roles such as the ability to edit VMS or run reports. This is controlled by the permissions feature.

The visibility feature allows users to only see Car Park data they have been given access to as shown below. This allows operators with multiple locations or customers to use a single system and control access to a very fine level.



### Application Program Interface

Sharing your data with other systems is easily achieved using the Insight API module. The API module can provide event driven data that is pushed to an external system or data that can be pulled from Insight at the required frequency.

An online documentation system enables developers to not just view calls and responses but to test the API in their browser. Data is delivered in the industry standard formats of XML and JSON in a simple and clear structure.

The API module enables quick and cost effective integration by providing the ability for developers to test online and use open standard formats.

### Web browser platform independent

Insight Parking has been designed to comply with the latest standards of cross browser compatibility and as such the system will work across many different web browser platforms including:

- Firefox 5 or above
- Safari 5 or above
- Chrome 13 or above
- IE 10 or above
- Opera 12 or above