THIS DOCUMENT DESCRIBES THE REPORTS YOU CAN MAKE IN AN INDECT SYSTEM.

For more information about the INDECT database and how data is stored, please refer to the fact sheet ICOM Database.

For even more advanced and easy reports please refer to the fact sheet **Web Report**.

Report Types

The following historical data can be retrieved from the system:

- Occupancy (minimum, average and maximum) in percent and figures
- Free spaces (minimum, average and maximum) in percent and figures
- Number of entries to space(s)
- Number of exits of space(s)
- Average parking duration
- Number of spaces
- Turnover (number of entries divided through capacity)
- Parking duration according to an interval (example: interval = 30 minutes: how many cars parked for up to 30 minutes, 60 minutes, 90 minutes etc.)
- Entries and exits through passage counters (such as barriers, loops etc.)
- Sensor state history: historical status changes of one or several sensors {free, occupied, longterm (= overstayer), reserved, error}
- Long-term parkers: which sensors have been occupied longer than the selected period of time

- Sensor occupation rate: "thermal map" of usage intensity of all individual bays
- Playback: go back in time to see the occupancy situation as it was on the car park drawings and the site structure

Also mixed reports can be created, for example, showing a daily report including the number of entries, the average parking duration and the maximum occupancy in a single report.
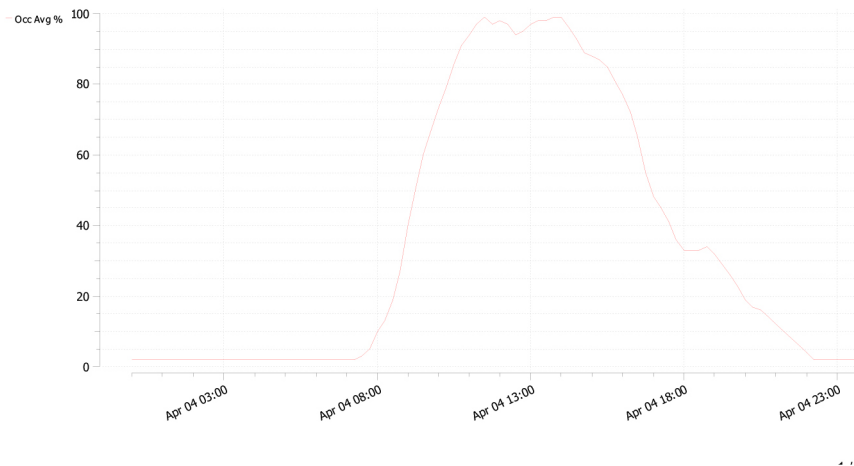
Occupancy and Free Spaces Report

This report shows the number or percentage of occupied or free spaces in the car park, level or zones.

It can be retrieved in the following formats: CSV, HTML, PDF table, PDF graph.

Daily Average Occupancy

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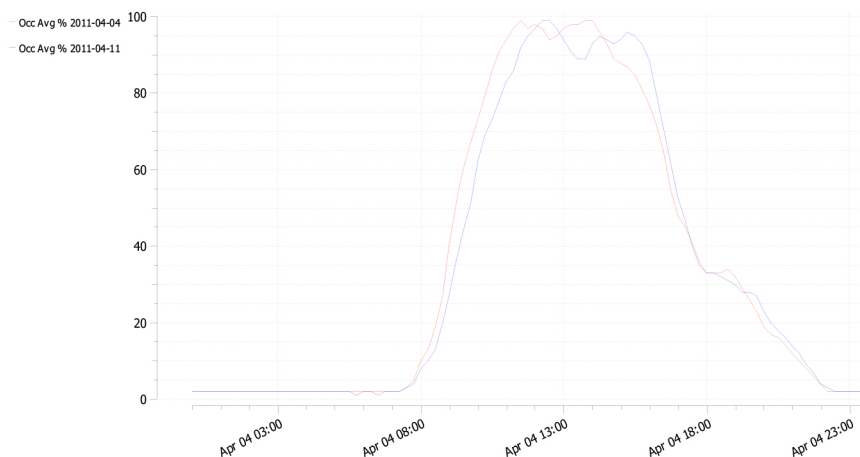| Report Type:	Statistic graph	Date from ... to ... :	2011-04-04 - 2011-04-04
Report Template:		Time from ... to ... :	00:00 - 24:00
Created on:	2011-04-21 | 00:43:19	Interval:	00:15 (hh:mm)
Created by:	klaus	Weekdays:	Su,Mo,Tu,We,Th,Fr,Sa
Comparison Date Start:		Minimum Parking Duration:	00:05 (hh:mm)

Sample graph of occupancy in % over the day.

2 Days Comparison Average Occup

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Report Type:	Statistic graph	Date from ... to ... :	2011-04-04 - 2011-04-04
Report Template:		Time from ... to ... :	00:00 - 24:00
Created on:	2011-04-21 | 00:45:55	Interval:	00:15 (hh:mm)
Created by:	klaus	Weekdays:	Su,Mo,Tu,We,Th,Fr,Sa
Comparison Date Start:	2011-04-11	Minimum Parking Duration:	00:05 (hh:mm)

Sample graph of 2 days compared to each other.

Number of Entries and Exits Report

To see how many cars have parked and left the spaces in the selected car parks, levels or zones.

Statistic report

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Report Type:	Statistic report	Date from ... to ... :	2012-09-04 - 2012-09-04
Report Template:		Time from ... to ... :	00:00 - 24:00
Created on:	2012-09-13 | 15:12:09	Interval:	24:00 (hh:mm)
Created by:	Indect	Weekdays:	Sun,Mon,Tue,Wed,Thu,Fri,Sat
Comparison Date Start:		Minimum Parking Duration:	00:05 (hh:mm)

2012-09-04 00:00

	# ↓	# ↑
███████████	929	959
Ebene 0	63	62
Ebene 1	157	167
Ebene 2	50	57
Ebene 3	13	15
Ebene 4	3	2
Ebene 5	17	17
Ebene 6	102	115
Ebene 7	260	263
Ebene 8	246	242
Behindertenplätze	18	19

Sample PDF report on Entries and Exits of the car park and the levels.

Report

Time	Time2	Node	Exits	Entries
2012-09-04 00:00			929	959
2012-09-04 00:00		.Ebene 0	63	62
2012-09-04 00:00		.Ebene 1	157	167
2012-09-04 00:00		.Ebene 2	50	57
2012-09-04 00:00		.Ebene 3	13	15
2012-09-04 00:00		.Ebene 4	3	2
2012-09-04 00:00		.Ebene 5	17	17
2012-09-04 00:00		.Ebene 6	102	115
2012-09-04 00:00		.Ebene 7	260	263
2012-09-04 00:00		.Ebene 8	246	242
2012-09-04 00:00		.Behindertenplätze	18	19

Sample HTML report on Entries and Exits of the car park and the levels.

	A	B	C	D	E
1	Date/Time	Time2	Node	Entries	Exits
2	04/09/2012 00:00		East Car Park	929	959
3	04/09/2012 00:00		East Car Park.Level 0	63	62
4	04/09/2012 00:00		East Car Park.Level 1	157	167
5	04/09/2012 00:00		East Car Park.Level 2	50	57
6	04/09/2012 00:00		East Car Park.Level 3	13	15
7	04/09/2012 00:00		East Car Park.Level 4	3	2
8	04/09/2012 00:00		East Car Park.Level 5	17	17
9	04/09/2012 00:00		East Car Park.Level 6	102	115
10	04/09/2012 00:00		East Car Park.Level 7	260	263
11	04/09/2012 00:00		East Car Park.Level 8	246	242
12	04/09/2012 00:00		East Car Park.Disabled Spaces	18	19
13					

Sample CSV report on Entries and Exits of the car park and the levels.

Average Parking Duration Report

To show the average parking duration of the respective car parks, levels and zones.

	A	B	C	D
35	06/09/2012 00:00		East Car Park	09:44
36	06/09/2012 00:00		East Car Park.Level 0	14:28
37	06/09/2012 00:00		East Car Park.Level 1	08:50
38	06/09/2012 00:00		East Car Park.Level 2	04:09
39	06/09/2012 00:00		East Car Park.Level 3	05:50
40	06/09/2012 00:00		East Car Park.Level 4	04:15
41	06/09/2012 00:00		East Car Park.Level 5	08:45
42	06/09/2012 00:00		East Car Park.Level 6	08:04
43	06/09/2012 00:00		East Car Park.Level 7	12:37
44	06/09/2012 00:00		East Car Park.Level 8	10:09
45	06/09/2012 00:00		East Car Park.Disabled Spaces	09:00
46	07/09/2012 00:00		East Car Park	12:26
47	07/09/2012 00:00		East Car Park.Level 0	09:09
48	07/09/2012 00:00		East Car Park.Level 1	12:56
49	07/09/2012 00:00		East Car Park.Level 2	08:11
50	07/09/2012 00:00		East Car Park.Level 3	14:01
51	07/09/2012 00:00		East Car Park.Level 4	20:00
52	07/09/2012 00:00		East Car Park.Level 5	13:36
53	07/09/2012 00:00		East Car Park.Level 6	14:35
54	07/09/2012 00:00		East Car Park.Level 7	10:29
55	07/09/2012 00:00		East Car Park.Level 8	15:40
56	07/09/2012 00:00		East Car Park.Disabled Spaces	05:49

Sample CSV report on Average Parking Duration of the car park and the levels.
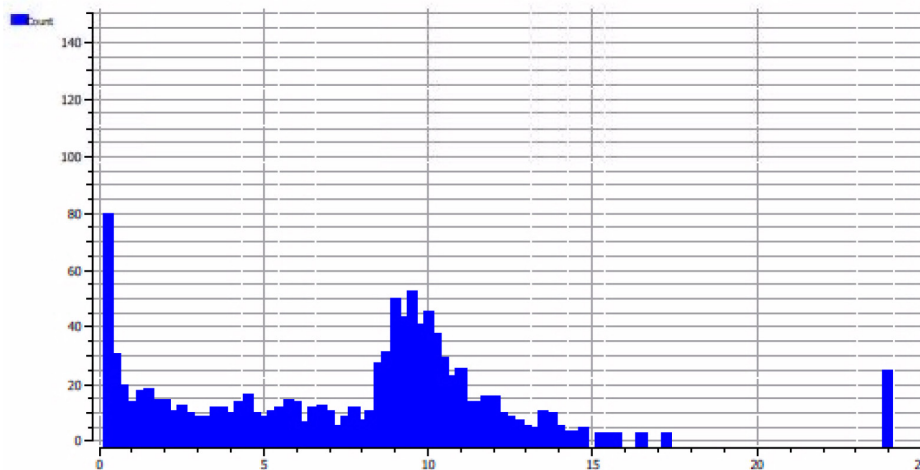*This report is also available in HTML and PDF format.*

Parking Duration Report

This report delivers information about how many cars parked up to a certain time and can be retrieved in HTML, CSV and PDF format and as a graph.

Parking duration graph

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Report Type:	Parking duration graph	Date from ... to ... :	2012-09-03 – 2012-09-03
Report Template:		Time from ... to ... :	00:00 – 24:00
Created on:	2012-09-13 | 15:31:41	Interval:	00:15 (hh:mm)
Created by:	Indect	Weekdays:	Sun,Mon,Tue,Wed,Thu,Fri,Sat
Comparison Date Start:		Minimum Parking Duration:	00:05 (hh:mm)

Sample graph report on Parking Duration of the car park, interval: 15 minutes.

	A	B
1	Parking duration	Count
2	00:15	78
3	00:30	29
4	00:45	18
5	01:00	12
6	01:15	16
7	01:30	17
8	01:45	13
9	02:00	13
10	02:15	9
11	02:30	11
12	02:45	8
13	03:00	7
14	03:15	7
15	03:30	10
16	03:45	10
17	04:00	8
18	04:15	12
19	04:30	15
20	04:45	8
21	05:00	7

Same report as above in CSV format, opened in Excel.

Entries and Exits of Zone-Counted Sections

This report serves for showing the traffic between levels (if counting devices are installed there) or to show which entries and exits are used most often (if these are connected to the INDECT system).

	A	B	C	D	E	F
1	Time	Time2	From	To	entries	exits
2	03/09/2012 07:45		East Car Park.Level 3	East Car Park.Level 4	37	0
3	03/09/2012 07:45		East Car Park.Level 7	East Car Park.Level 8	10	0
4	03/09/2012 08:00			East Car Park.Level 0	6	0
5	03/09/2012 08:00			East Car Park.Level 1	6	0
6	03/09/2012 08:00		East Car Park.Level 3	East Car Park.Level 4	51	0
7	03/09/2012 08:00		East Car Park.Level 7	East Car Park.Level 8	15	0
8	03/09/2012 08:15			East Car Park.Level 0	7	0
9	03/09/2012 08:15			East Car Park.Level 1	5	0
10	03/09/2012 08:15		East Car Park.Level 3	East Car Park.Level 4	68	0
11	03/09/2012 08:15		East Car Park.Level 7	East Car Park.Level 8	23	0
12	03/09/2012 08:30			East Car Park.Level 0	6	0
13	03/09/2012 08:30			East Car Park.Level 1	1	0
14	03/09/2012 08:30		East Car Park.Level 3	East Car Park.Level 4	61	0
15	03/09/2012 08:30		East Car Park.Level 7	East Car Park.Level 8	31	0
16	03/09/2012 08:45			East Car Park.Level 0	7	0
17	03/09/2012 08:45			East Car Park.Level 1	3	0
18	03/09/2012 08:45		East Car Park.Level 3	East Car Park.Level 4	89	0
19	03/09/2012 08:45		East Car Park.Level 7	East Car Park.Level 8	49	0
20	03/09/2012 09:00			East Car Park.Level 0	8	0
21	03/09/2012 09:00			East Car Park.Level 1	5	0
22	03/09/2012 09:00		East Car Park.Level 3	East Car Park.Level 4	69	0
23	03/09/2012 09:00		East Car Park.Level 7	East Car Park.Level 8	39	0
24	03/09/2012 09:15			East Car Park.Level 0	2	0
25	03/09/2012 09:15			East Car Park.Level 1	3	0

This report is also available in PDF, CSV or HTML format.

Sensor State History

This report serves for learning about the status changes of diverse sensors.

```
┌ Settings ──────────────────────────────────────────────────────────────────┐
│                                                                              │
│  Start Date/Time:  [2012-09-10 15:48]  📅      Legend:                        │
│  End Date/Time:    [2012-09-13 15:48]  📅      Free..........0                │
│  [ HTML ]             [ CSV ]                  Occupied......1                │
│                                                Error.........2                │
│                                                                              │
├ Sensor State History ────────────────────────────────────────────────────────
│                                                                              │
│  Sensor        Bay Number  Display            Date/Time            State      │
│  ICOM1/18/082  7-40        ████████.Ebene 7.Display_0  2012-09-10 18:52:31  Free     │
│                                               2012-09-11 07:46:59  Occupied  │
│                                               2012-09-11 19:20:23  Free      │
│                                               2012-09-12 08:16:05  Occupied  │
│                                               2012-09-12 17:44:10  Free      │
│                                               2012-09-13 08:06:36  Occupied  │
│                                                                              │
└──────────────────────────────────────────────────────────────────────────────
```

This report is also available in CSV format.

Longterm Parkers - Overstayers

This report serves for showing the spaces that have been occupied longer than a defineable time.

```
┌ Settings ──────────────────────────────────────────────────────────────────┐
│  Show Long-Term Parker over:  [08:00]          [hh:mm]                        │
│  [ HTML ]                  [ CSV ]                                            │
└──────────────────────────────────────────────────────────────────────────────
```

```
┌ Long-Term Parker List ─────────────────────────────────────────────────────┐
```

Section	Device ID	Bay Number	Duration
Ebene 3.Zone 3	ICOM1.COM_09.UMS_001	3-282	2116:58
Ebene 0.Zone 2	ICOM1.COM_03.UMS_111	- -	528:50
Ebene 0.Zone 3	ICOM1.COM_03.UMS_001	0256	08:05
Ebene 1.Zone 2	ICOM1.COM_05.UMS_123	1-164	478:14
Ebene 0.Zone 3	ICOM1.COM_03.UMS_005	0-252	79:47
Ebene 1.Zone 1	ICOM1.COM_06.UMS_031	1-31	631:59
Ebene 0.Zone 3	ICOM1.COM_03.UMS_013	0-244	25:00
Ebene 1.Zone 2	ICOM1.COM_06.UMS_133	1-129	476:49
Ebene 0.Zone 3	ICOM1.COM_03.UMS_014	0-243	78:24
Ebene 2.Zone 1	ICOM1.COM_08.UMS_042	2-80	622:53
Ebene 0.Zone 3	ICOM1.COM_03.UMS_069	0-207	195:50
Ebene 2.Zone 2	ICOM1.COM_08.UMS_089	2-88	598:41
Ebene 0.Zone 2	ICOM1.COM_03.UMS_092	- -	19:33
Ebene 5.Zone 1	ICOM1.COM_14.UMS_041	5-81	474:51
Ebene 0.Zone 2	ICOM1.COM_03.UMS_093	- -	81:03
Ebene 7.Zone 3	ICOM1.COM_17.UMS_009	7-274	705:07

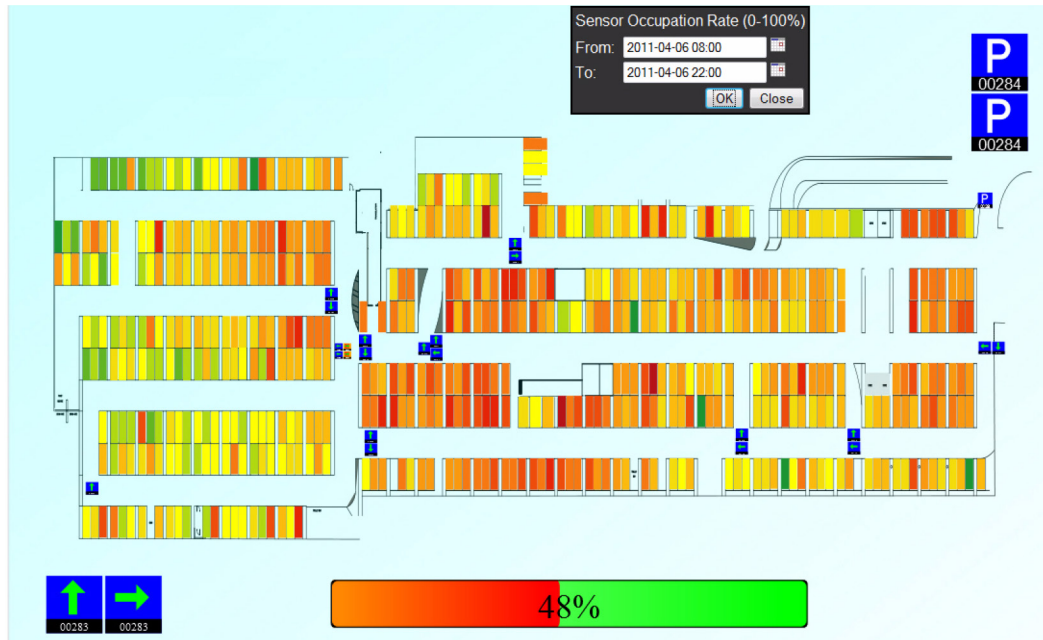*This report is also available in CSV format.*

Sensor Occupation Rate

This report serves for showing the "hot spots" and the lesser used areas in the car park or level.

Playback

The playback allows for rewinding the time to see the car park occupancy situation at that time.

Report Generation and Automatic Reports

Reports can be defined in the report tool in IVIS.

- In order to make generation easier, defined reports can be saved. If they are to be generated at a later point of time, they can be opened, modified (for example, date, time, sections etc.) and generated.
- Defined reports can also be generated automatically – to this end, the optional software module **Automatic Reports** is required. A defined and saved report is added in the Schedule in IVIS, and generated and saved automatically in a folder on the ICOM PC (called \report_data) in the ICOM root.
- Automatic reports can also be automatically sent via email to defined email addresses.

Quickreports

Quickreports operate like automatic reports: predefined reports are automatically generated. In contrast to automatic reports, quickreports can be opened directly in IVIS, where they are listed. For each quickreport it can be specified how many of them shall be kept. Older quickreports are automatically deleted.

Examples:
- current day report (generated every hour with the data of the current day)
- previous day
- previous week
- previous month

Quickreports are saved in the folder \quick_report in the ICOM root. They can be generated in PDF (table or graph).

Quickreports can also be accessed via the **Dashboard** (optional software module for overview of all registered sites via the Internet).