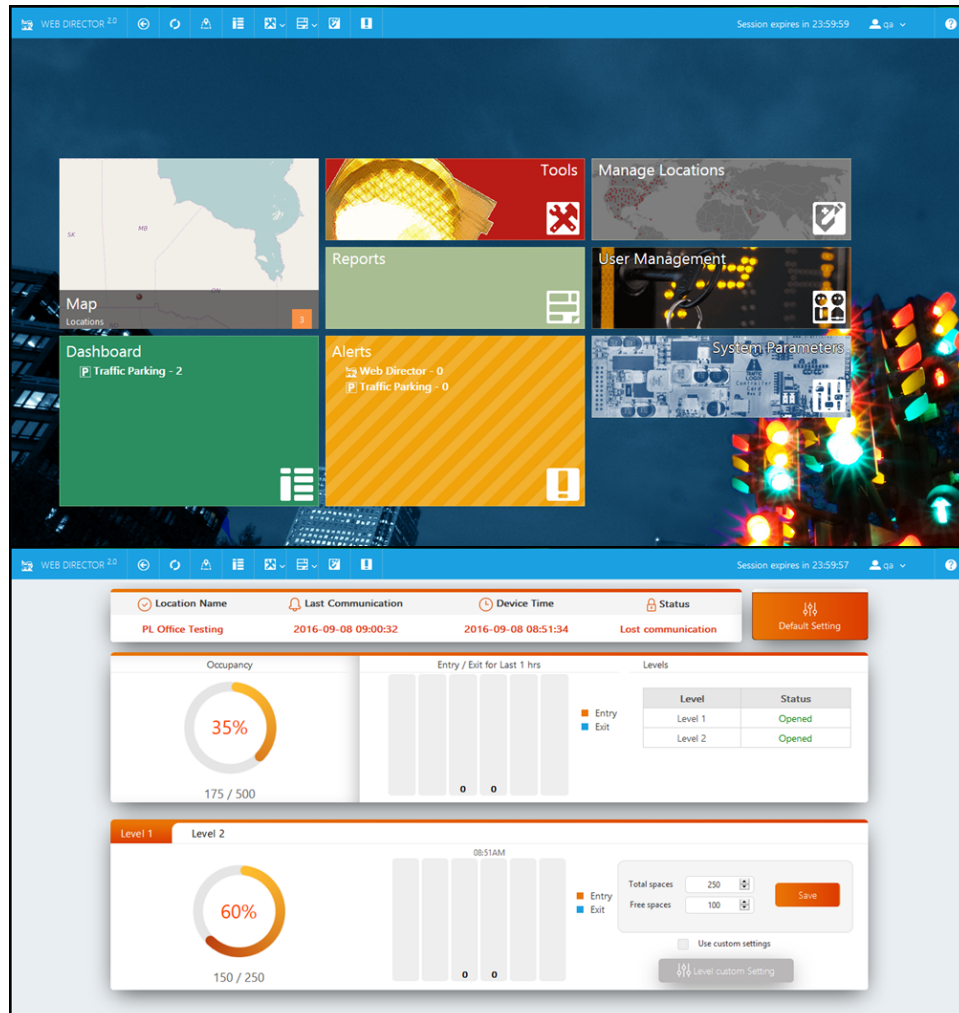


# PARKING LOGIX™

## OPENSOURCE™ CLOUD API REFERENCE GUIDE



## **OpenSpace™ Cloud API Reference Guide**

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**INTRODUCTION**

## Overview

OpenSpace is designed to alert passing motorists of available parking spaces in your (nearby) facility. The OpenSpace Cloud API is an API that allows you to extend that visibility to the web. It allows you to access occupancy levels and location information for your parking lots in Web Director.

For example, you can use this API to display the address of your facility along with the number of free parking spaces available.

## About this Guide

The OpenSpace™ Cloud API Reference Guide describes an API that allows you to automate the retrieval of occupancy levels and location information from your parking lots in Web Director. It is intended for developers who would like to access this information programmatically. This guide does the following:

- » Describes the API calls
- » Provides the proper URL/Syntax for each call
- » Identifies and describes the required and optional parameters
- » Describes the return values
- » Provides examples of the output

## Documentation Conventions

This document uses the following formatting conventions:

Format	Description
<b>Bold Gray</b>	Used in procedures to indicate menu commands, interface controls and dialog box options.
<i>Italics</i>	Used to place emphasis on certain words.
Monospace text	Used for code samples and any information that the user enters.
<i>Italicized monospace text</i>	Used to indicate text that you should replace with your own. For example: In the Save As text box, enter c:\ <i>filename.ext</i> where <i>filename.ext</i> is the name of the file you want to save.
>	Used to indicate a sequence of commands (and sub commands) to be carried out in the displayed order. For example <b>File &gt; Exit</b> means to open the File menu then choose the Exit command. This applies to menus from the main menu bar, context menus that appear when you right-click on the interface, and tiles in a tiled interface.



**NOTE:** Notes are used as reminders or to provide information of interest that supplements or emphasizes important points of the main text.



**TIP:** Tips are used to suggest alternative methods, workarounds and/or shortcuts that are not essential but that you may find useful in a given situation.



**CAUTION:** Cautions are used to advise users of specific actions that could result in a loss of data.



**WARNING:** Warnings are used to advise users of specific actions that could result in personal physical injury or damage to equipment.

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## GETTING STARTED WITH OPENSOURCE CLOUD API

## About API Key Usage

Every API request must be accompanied by an API key or token. This token is a unique identifier, associated with the API client. The token is case sensitive and it must be placed in an HTTP header named `x-api-key`.

The way you send the token depends on the programming language you use. For example, in PHP you can use the following call to get the location information and occupancy data for your locations:

```
$request_url = 'https://api.streetsoncloud.com/pl1/multi-lot-info';  
//get the location info and occupancy data for your locations  
$context = stream_context_create(array(  
    'http' => array(  
        'method' => 'GET', //can be GET or POST  
        'header' => 'x-api-key: VRRiUcZEk9aocdfc41190e21934a3601ce' . "\r\n"  
    )  
));  
$json_string = file_get_contents($request_url, false, $context);
```



**NOTE:** The API key used in the above example is an example used for the purpose of demonstration. It is not a valid key for this API call.

### Things to be aware of:

You should be aware of the following with regards to the use of API keys:

- » There may be more than one API key assigned for each company.
- » The API keys assigned to a company can each have different levels of access. As a result some requests may not work because the key provided does not have the proper access.
- » For OpenSpace Cloud, you need to generate the API key you need for each call.

## Getting an API Key for OpenSpace Cloud

Contact your Parking Logix technical support representative to obtain an API Key.



## Get Lot Information

Returns information about the parking lot at a particular location.

### URL

`https://api.streetsoncloud.com/pl1/location-info`

### Description

This API call returns information about the parking lot at the location associated with the token used. The information returned includes the following:

- » Location details like name, address, etc.
- » Occupancy details for each level of the parking lot
- » Occupancy details for the whole parking lot

### HTTP Method

GET

### Required Parameters

None

### Optional Parameters

None

### Data Parameters

None

### Return Values: Success

- » **Status:** 200 OK

**Content:** JSON string in the following format:

```
[
  {
    "location_name": <location_name>,
    "default_free": "<default_free>",
    "location_address": "<location_address>",
    "timezone": "<timezone>",
    "data": [
      {
        "total_spaces": "<level_total_spaces>",
```

```
        "free_spaces": "<level_free_spaces>",
        "level": "<level_id>",
        "date_time": "<time_and_date>"
    },
    ...
],
"total_spaces": "<lot_total_spaces>",
"free_spaces": "<lot_free_spaces>",
"date_time": "<time_and_date>"
}
]
```

» **Status:** 200 OK

```
{
  "status": "ERROR",
  "result": "<Error code>"
}
```

### Return Values: Errors

- » **Status:** 401 Unauthorized
- » **Status:** 403 Forbidden
- » **Status:** 422 Unprocessable Entry

### Notes

- » Level 0 - 9 indicates the # of the level.
- » Level 10 provides a summary of all levels.
- » This call requires the use of a token. Use the Widget Settings page in Web Director to generate the token you need.

### Example

The following is an example of the output from this call:

```
[
  {
    "location_name": "HSBC - Tech Lot",
    "default_free": "0",
    "location_address": "2910 Virtual Way",
    "timezone": "-7:00",
    "data": [
      {
        "total_spaces": "496",
        "free_spaces": "47",
        "level": "0",
        "date_time": "2017-06-14 12:38:34 -7:00"
      }
    ]
  }
]
```

```
    },  
    {  
      "total_spaces": "496",  
      "free_spaces": "47",  
      "level": "10",  
      "date_time": "2017-06-14 12:38:34 -7:00"  
    }  
  ],  
  "total_spaces": "496",  
  "free_spaces": "47",  
  "date_time": "2017-06-14 12:38:34 -7:00"  
}  
]
```

### See Also

» *Get Multi-Lot Information* on the next page

## Get Multi-Lot Information

Returns information about a group of parking lots.

### URL

`https://api.streetsoncloud.com/pl1/multi-lot-info`

### Description

This API call returns information about the parking lots at all of your locations. The information returned includes the following:

- » Location details like name, address, etc.
- » Occupancy details for the whole parking lot

### HTTP Method

GET

### Required Parameters

None

### Optional Parameters

None

### Data Parameters

None

### Return Values: Success

- » **Status:** 200 OK

**Content:** JSON string in the following format:

```
[
  [
    {
      "location_name": "<location_name>",
      "geocode": "(<location_lat>,<location_long>)",
      "location_address": "<location_address>",
      "total_spaces": <lot_total_spaces>,
      "free_spaces": <lot_free_spaces>,
      "occupancy": <lot_occupancy_percentage>
    },
    ...
  ]
]
```

```
]
]
```

» **Status:** 200 OK

```
{
  "status": "ERROR",
  "result": "<Error code>"
}
```

### Return Values: Errors

» **Status:** 401 Unauthorized

» **Status:** 403 Forbidden

» **Status:** 422 Unprocessable Entry

### Notes

This call requires the use of a multi-lot token. Use the Widget Settings page in Web Director to generate the token you need.

### Example

The following is an example of the output from this call:

```
[
  [
    {
      "location_name": "Lot A",
      "geocode": "(34.968397917198175,-116.33429014682869)",
      "location_address": "Alpha Ave.",
      "total_spaces": 4380,
      "free_spaces": 3410,
      "occupancy": 22
    },
    {
      "location_name": "Lot B",
      "geocode": "(34.9813700890786,-116.33547031879215)",
      "location_address": "Boulder Blvd.",
      "total_spaces": 872,
      "free_spaces": 728,
      "occupancy": 17
    },
    {
      "location_name": "Lot C",
      "geocode": "(34.977682385600644,-116.33111977576849)",
      "location_address": "Canyon Crescent",
      "total_spaces": 768,
```

```
        "free_spaces": 324,  
        "occupancy": 58  
      }  
    ]  
  ]
```

### **See Also**

» *Get Lot Information* on page 9

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## CONTACTING TECHNICAL SUPPORT

If you have questions or comments regarding this document or OpenSpace Cloud API, please feel free to contact our technical support center by phone: 1 (877) 727-5423, or by email: [support@parkinglogix.com](mailto:support@parkinglogix.com)